

INDIAN ACADEMY

Degree College - Autonomous

Institution's Innovation Council (IIC)

Institution's Innovation Council (IIC) is an initiative under the mentorship of MHRD, Ministry of Education, Government of India. Our College has started its chapter of IIC on 04.08.2021.

Council members @ IADCA-IIC chapter

S.No	Name of the Member	Member type (Teaching / Non teaching member)	Key role assigned in IIC
1	Dr. Srinidhi.K.Parthasarathi	Teaching	Head of the Institution (HOI)
2	Dr. Ananda Vardhan H	Teaching	President
3	Prof. Geetha Ravi	Teaching	Vice-President
4	Mrs. Shobha. S	Teaching	Convener, Startup activity coordinator
5	Dr. Malaiyarasa Pandian.P	Teaching	IPR / Technology Transfer Cell
6	Ms. Bhargavi.L	Non - Teaching	Social Media
7	Dr. Amrita Roy	Teaching	Innovation Activity
8	Mrs. Jaisy Jacob	Teaching	Internship Activity
9	Prof. Sangeetha Annie George	Teaching	NIRF Coordinator
10	Dr. Jeelan Basha	Teaching	Member
11	Mrs. Dilshad Begum	Teaching	Member



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Hennur Cross, Kalyan Nagar
Bangalore - 560043

Activities conducted under the IADCA-IIC chapter

1. Ambassador training programme:

As per the announcement from IIC-MHRD, IADCA-IIC chapter enrolled all the council members for the Ambassador training programme and all the members successfully completed all the training sessions by attending 16 online sessions, accounting for 30 contact hours.

2. Guest Lecture:

The following guest lectures are being conducted so far under the banner of IADCA-IIC chapter, based upon the theme mentioned under IIC guidelines.

S.No	Topic Of Lecture	Resource Person	Date Of The Event
1	Research, Entrepreneurial & Job Opportunities In Life Sciences	Dr. H. G. Nagendra Professor & Head, Department Of Biotechnology Engineering Sir M. Visvesvaraya Institute Of Technology, Bengaluru Dr. Pratima Khandelwal Founder, Flyhigh Educational Excellence Services, Bengaluru. Dr. Ananda Vardhan H Professor & Head, Department Of Biochemistry Indian Academy Degree College – Autonomous	25 th August 2021
2	Changing Trends Towards Innovation And Entrepreneurship	Dr.T.P.Sethumadhavan Director (Products, Research & Development) At Skill Favs, Coimbatore. Visiting Professor At Trans-Disciplinary University, Bengaluru.	29 th December 2021
3	Anticancer Drugs From Mother Nature:	Dr. C. D. Mohan, Nasi Young Scientist,	4 th February 2022

	Ancient Solutions For Modern Problems	Assistant Professor, Department Of Studies In Molecular Biology, University Of Mysore, Manasagangotri Campus, Mysuru.	
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INTELLECTUAL PROPERTY RIGHTS CELL

STANDARD OPERATING PROCEDURES (SOPs)

Recognizing the importance of Intellectual Property Rights (IPRs) amongst innovators, researchers, industries, etc. is an important mandate of the National IPR Policy, 2016. The foundation of this has to be laid at the grass-root level by initiating programs for the youth, especially in academic institutions. In order to engage students/ personnel and motivate them to work in the field of IPRs, a first step would be through the creation of “IP cells” in the academic institution.

The Intellectual Property Rights (IPR) cell is focused to recognize the importance of generation of intellectual property by faculty and students. The cell needs to encourage the creativity and innovations of its people which lead to generation of Intellectual Property (IP). The cell is committed to support and guide the students and staff not only in protecting their innovative and creative ideas but also in safeguarding the interests of inventor in creation and commercialization of intellectual property with legal support, wherever necessary. They also envision creating an environment for acquiring new knowledge through innovation, developing an attitude of prudent IP management practices and promoting an IPR culture compatible with the educational mission of the academic institution.

IP cell functions with the prime focus of enabling students, researchers and professors to identify, generate and protect their intellectual property through filing procedures for rights like patents, copyrights, trademarks, designs, etc. It will also cater to commercialization of intellectual property, which will further foster the creation of a fruitful dynamic system between universities, investors and industries.

This document provides guidelines as regards the roles, responsibilities and functioning of the IP cells in the academic institution. The ultimate goal these guidelines propose to achieve is to promote student-led startups and entrepreneurial ventures that protect and respect intellectual property. The use of these guidelines is intended to complement the existing intellectual property laws of India.

OBJECTIVES:

- To create an awareness about IPR for faculties and students of the Institution.
- To conduct workshops, seminars and training programs on IPR and patent filing processes.
- To disseminate knowledge on patents and registration methods in India and abroad.
- To encourage faculty members and scholars towards patentable works and innovation.
- To coordinate between Inventors, IP consultants, Attorneys and PEC authorities for filing and managing patents.
- To educate the faculty on obtaining copyrights for their publications.
- To provide awareness to the public through IP Road Shows, IP Street Play and various competitions.

WORKING OF THE CELL

- The IPR Cell will report to Principal of the Institution. It will seek the guidance of IQAC in discharging its responsibilities
- The Intellectual Property Rights Cell arranges for the speedy processing and filling of applications for patents and to effectively implement the policy and guidelines of the Institute in respect of Intellectual Property Rights
- Strategic perspective plans need to be submitted by the committee along with estimated budget or event based budget prior to the commencement of the academic year
- The Coordinator along with the committee members will take the necessary steps to implement the proposed list of activities for the academic year.
- The necessary preparations for the execution of the programs/activities are made in consultation with the Head of the institution.
- The committee may also suggest improvements in the existing research policy, to enhance the research output.

MEETINGS

- The committee would formally meet at the start of the academic year to plan for the year's activities and submit a strategic perspective plan.
- There would be a meeting at the end of the academic year to review the activities facilitated and the progress of the committee.

- The committee would formally and informally meet as many times as required depending on the need or in emergency situations.
- Minutes of informal meetings will be maintained.

RESPONSIBILITIES OF THE COORDINATOR

- The Coordinator of the committee is expected to convene the meetings and set an agenda for the discussion.
- The Coordinator of the committee is responsible for ensuring that each member has submitted and has maintained the relevant documents.
- Cell coordinator should submit proposal to the Principal and IQAC/Principal for the approval of cell activities for the academic year.

IPR CELL ACTIVITIES

The IPR activities are organized to introduce the principal areas of Intellectual Property (IP) such as Patents, Copyright, and Trademark among students and staff members.

- IPR seminars
- IPR competitions (eg. Quiz)
- IPR FDPs
- IPR awareness programmes

DOCUMENTS MAINTAINED BY THE IPR CELL

- Copy of strategic perspective plans submitted
- Minutes of meetings of meetings for every formal meeting
- Circulars sent by the Cell
- Circulars from IQAC/Principal/HODs linked to events organized
- All documents generated by the IPR Cell
- Brochures / Invitations
- Annual/ Individual event budget submitted
- Report on every event/activity conducted (minimum 500 words)
- Photographs of the event
- Certificates issued (if any)
- Copy / Photos of press release



A handwritten signature in green ink, appearing to be "S. J. Srinivas", written over a horizontal line.

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MoE's
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(GOVERNMENT OF INDIA)



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of Education Initiative)



This is to certify that

Dr. H. Ananda Vardhan

of

Indian Academy Degree College-Autonomous, Karnataka

has undergone Innovation Ambassador training (Foundation Level, Total 16 Sessions of 30 contract hours) conducted by MoE's Innovation Cell & AICTE during the period from 30th June - 30th July 2021 in online mode.

S.D.S.

Prof. Anil D. S. Salunke
Chairman



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Abhay Jere

Dr. Abhay Jere
Chief Innovation Officer
MoE's Innovation Cell

Date of Issue: 30-07-2021

E-certificate No : 10849



Ministry of Education
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Sahadev

Prof. Anil D. Sahadev

Chairman
AICTE

Abhay Jere

Dr. Abhay Jere

Chief Innovation Officer
Indian Academy Degree College, MoE's Innovation Cell



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Prof. Anil D. Sahasrabudhe
Chairman
AICTE

Dr. Abhay Jere
Chief Innovation Officer
MoE's Innovation Cell



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Saharabudhe

Prof. Anil D. Sahasrabudhe
Chairman



Abhay Jere

Dr. Abhay Jere
Chief Innovation Officer
MoE's Innovation Cell

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Saharabudhe

Prof. Anil D. Sahasrabudhe
Chairman



Date of Issue: 30-07/2021

Abhay Jere

Dr. Abhay Jere
Chief Innovation Officer
MoE's Innovation Cell

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This is to certify that
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of

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Sahay

Prof. Anil D. Sahasrabudhe
Chairman
AICTE



Abhay Jere

Dr. Abhay Jere
Chief Innovation Officer
MoE's Innovation Cell

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DEPARTMENT OF BIOCHEMISTRY

In association with Institution's Innovation Council, MHRD, Govt. of India

Organises

Students Awareness Webinar on

RESEARCH, ENTREPRENEURIAL & JOB OPPORTUNITIES IN LIFE SCIENCES



Dr. H. G. Nagendra

Professor & Head, Department of Biotechnology Engineering
Sir M. Visvesvaraya Institute of Technology, Bengaluru



Dr. Pratima Khandelwal

Founder, FlyHigh Educational Excellence
Services, Bengaluru.



Dr. Ananda Vardhan H

Professor & Head, Department of Biochemistry
Indian Academy Degree College - Autonomous

Session 1 : 09.40 am to 10.40 am

"Innovations & Market Trends in Biological Research"

Session 2 : 10.50 am to 11.50 am

"Essentials of Biopreneurship"

Session 3 : 12.00 pm to 01.00 pm

"In-Demand Bioscience Job opportunities"



09.30 am - 01.00 pm



Wednesday, 25 August 2021

- **Target Audience - UG and PG Life Science Students**
- **Login details will be communicated to the registered WhatsApp Number / email id**
- **Participants will receive e-certificates on submission of feedback forms at the end of the webinar**

REGISTER FOR FREE VIA THE LINK BELOW:

<https://docs.google.com/forms/d/1EgxsqZ6KXb-1xiUHpfJmRIZx4Q3Thz6zX1COKwvZZqY/edit?ts=6114f0ea>

Organising Committee

Dr. Srinidhi K Parthasarathi

Principal
Indian Academy Degree College - Autonomous

Head & Faculty Members

Department of Biochemistry
Indian Academy Degree College - Autonomous

Event Coordinators

Mrs. Dilshad Begum

Assistant Professor
Department of Biochemistry

Dr. C. Naveenkumar

Assistant Professor
Department of Biochemistry

FOR QUERIES, PLEASE CONTACT : **EVENT COORDINATORS** | indbiochemclub@gmail.com

Institution's Innovation Council of IADCA

&

Indian Academy Centre for Students' Placement Services

Invites you for an expert talk on

“Changing Trends towards Innovation & Entrepreneurship”

By



Dr. T P Sethumadhavan

Director (Products, Research & Development) at Skill FAVS, Coimbatore.
Visiting Professor at Trans-Disciplinary University, Bengaluru.

&

Former Director, Entrepreneurship at Kerala Veterinary & Animal Sciences University, Director at UL Education, Kerala.



WEDNESDAY, 29TH DECEMBER 2021



11:00AM - 12:30PM



Venue: Seminar Hall II

Chief Patrons:

Dr. T Somasekhar

Chairman,
Indian Academy Education Trust

Patrons:

Dr. Srinidhi K Parthasarathi

Principal,
Indian Academy Degree College (Autonomous)

Organizing Committee:

Dr. H Ananda Vardhan

President – IIC
Professor & Head, Department of Biochemistry
Indian Academy Degree College (Autonomous)

Mrs. Jaisy Jacob

Member – IIC
Placement Officer,
Indian Academy Group of Institutions

DEPARTMENT OF BIOCHEMISTRY

In association with Institution's Innovation Council, MHRD, Govt. of India

Organizes

CANCER AWARENESS WEBINAR ON

“Anticancer Drugs from Mother Nature: Ancient Solutions for Modern Problems”



FRIDAY, 04TH FEBRUARY 2022



10:30AM - 12:00PM



Dr. C D Mohan

NASI Young Scientist, Assistant Professor,
Department of Studies in Molecular Biology,
University of Mysore, Manasagangotri Campus, Mysuru.

*Beneficiaries - Faculties, UG & PG Life Science Students

FREE REGISTRATION

Register Online at <https://forms.lge/indbiochemclub>

ZOOM WEBINAR ID: 875 7033 9922 and PASSCODE: UeEq9x

✓ Participants will receive e-certificates on submission of feedback after attending the the webinar.

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Chairman, Indian Academy Education Trust

Mrs. Bharathi T

Secretary, Indian Academy Education Trust

Organizing Committee:

Dr. H Ananda Vardhan

Prof. & Head, Department of Biochemistry,
Indian Academy Degree College - Autonomous

Dr. Srinidhi K Parthasarathi

Principal,
Indian Academy Degree College - Autonomous

Event Coordinator:

Dr. C Naveenkumar

Assistant Professor, Department of Biochemistry,
IADC-A, Email: indbiochemclub@gmail.com

Cerium oxide nanoparticles induced physio-biochemical, neurochemical, and morphological responses in *Cirrhinus mrigala* during short term exposure

Kalpesh Swamy^a, Naveenkumar Chandrashekar^b, Raghunandhakumar Subramanian^c, Sandya Sukumaran^d, Sharath Chandra SP^{e*}

^aDepartment of Biotechnology, Government Science College, Hassan, Karnataka, India

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^cDepartment of Pharmacology, Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences, Chennai, India

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Received 25th May 2020 / Accepted 2nd May 2021

Abstract. Cerium oxide nanoparticle (CeO₂NPs) has wide applications in pharmaceutical, biomedical and chemical industries. Albeit of their uses, bioavailability followed by toxicity of CeO₂NPs in fresh water fishes, are yet to be understood in detail. In this evaluation, we have synthesized, characterized and assessed the biological effects (hematology, ionoregulatory, oxidative stress, histological and glutamate indices) of CeO₂NPs at different doses (2.5mg/L and 25mg/L based on 1/10th LC₅₀) on freshwater carps *Cirrhinus mrigala*, for short term exposure of 96 h. Impact of CeO₂NPs at low concentration (2.5mg/L) confirmed a significant decrease in hematological parameters and also affecting serum Na⁺, Cl⁻, K⁺ levels along with gill Na⁺/K⁺-ATPase activity. The indicated variations oxidative stress enzymes superoxide dismutase, Catalase, glutathione peroxidase with relative elevation in lipid peroxidation (LPO) (22.47±0.198) compared to control groups. CeO₂NPs at high concentration (25mg/L) revealed the alterations in neurotransmitter glutamate levels compared to control groups. Rise in glucose and decrease in plasma protein levels in response to both the concentrations was noted. Microscopic observations confirmed the tissue damages and alterations in gill architecture. By integrating all results obtained by short term exposure of juvenile carps to CeO₂NPs at different doses, we reported nanoparticles have considerable deleterious effects on physiological and morphological condition of fishes.

Keywords: cerium oxide nanoparticles, *Cirrhinus mrigala*, neurotransmitter, oxidative stress

INTRODUCTION

Over the last decades, nanoparticles have become crucial scientific tool that have found application in diverse fields like nanotechnology, biotechnology, pharmacology and many others which has been owed to their potential to bridge molecular or atomic structures to vast materials (Rashmi *et al.*, 2019). This has led to unforeseen increase in engineered nanoparticles, thus raised

concerns over their deleterious effects when interacted with ecosystem at large. Cerium oxide (CeO₂)/ cerium oxide nanoparticles (CeO₂NPs) are comprehensively used as additives in diesel fuel (Hendren *et al.*, 2011). However extensive use of CeO₂NPs result in no point source water pollution, leading to moderate level diverse

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REVIEW

Open Access



Effects of D-pinitol on diabetes mellitus: an updated review

Anandakumar Pandi^{1*}, Vanitha Manickam Kalappan² and Naveenkumar Chandrashekar³

Abstract

Background: The awareness in the consumption of plant-based food has gained attention in the recent years. Phytochemicals are thought to play a critical role in health promotion and in the prevention and management of chronic diseases. These compounds have reported to produce little or no side effects and are thus significantly used in treating various ailments. D-Pinitol is the chief active compound found in soy and soy products. Several studies have shown the health benefits of D-pinitol such as antioxidant, anti-diabetic, anti-inflammatory and anticancer properties. In this review, an attempt has been made to review the effects of D-pinitol against diabetes mellitus in pre-clinical and clinical studies.

Methodology: Journal articles were sourced and filtered with relevant keywords on "D-pinitol and diabetes mellitus". Scientific databases, including PubMed, NCBI, Google Scholar, Science Direct, SciFinder and Web of Science, were accessed to identify the most relevant articles on the effect of D-pinitol in diabetes mellitus. The study duration was from September 2021 to February 2022.

Results: This comprehensive review demonstrates the application of D-pinitol against diabetes mellitus. Most of the animal and clinical studies included in this review reported that D-pinitol treatment effectively regulated hyperglycemia and prevented insulin resistance.

Conclusions: D-Pinitol could serve as an effective anti-hyperglycemic agent for the treatment of diabetes mellitus. Further research to study its safety and mechanism of action is recommended in order to employ this compound for clinical trials.

Keywords: D-Pinitol, Antioxidant, Glucose, Insulin, HbA1C

Background

Diabetes mellitus is one of the most common non-communicable diseases. It is group of metabolic disorders in which hyperglycemia lasts over a longer period leading to several other complications (Toi et al. 2020). It is characterized by supraphysiological glucose due to the deficiency in insulin secretion or insulin receptor or post-receptor events that results in the disturbances in the biochemical pathways of carbohydrates, fats and protein (Ruiz 2012). Moreover, the impaired metabolism leads

to the progression and aggravation of oxidative stress through different mechanisms like glucose autoxidation, protein glycation, etc. (Dos Santos et al. 2019). The total number of people with diabetes is predicted to increase from 171 million in 2000 to 366 million in 2030 (Tao et al. 2015). Studies direct that the incidence of diabetes will continue to rise in the future due to growing prevalence of obesity, accelerating aging populations, environmental factors and sedentary lifestyles (Piché et al. 2020). Chronic blood sugar level and insulin resistance may in turn lead to severe impairment and dysfunction of heart, kidney, liver, eye, nerves, etc., which predominantly lead to mortality (Kautzky-Willer et al. 2016). At present, there is no known cure approaches for diabetes mellitus except in some very specific cases. Several efforts are

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REVIEW

Open Access



Cardioprotective effects of Ferulic acid against various drugs and toxic agents

Anandakumar Pandi^{1*}, Mahto Hemanti Raghu¹, Naveenkumar Chandrashekar² and Vanitha Manickam Kalappan³

Abstract

Background: Homeostatic regulation of cardiomyocytes is indispensable in maintaining the normal physiological activity of cardiac tissue. Cardiotoxicity induced by drugs may lead to cardiac abnormalities such as arrhythmia, myocardial infarction and myocardial hypertrophy. Moreover, drug-induced cardiotoxicity confines the additional use of the implicated drugs. Several studies have reported that consumption of phytochemicals on regular intervals shall protect humans against numerous diseases such as diabetes, cardiovascular disease, inflammatory diseases and cancer.

Main body: Ferulic acid (FA) is a plant derived polyphenol abundantly found in vegetables, fruits and grains. FA is widely known for its antioxidant, anti-inflammatory, anticancer, nephroprotective and hepatoprotective effects. FA has been well documented for its cardioprotective activity against various drugs and toxic agents as well. However, the cardioprotective action of FA have remained a challenge with regard to understanding its mechanism in health and diseases.

Conclusion: The main purpose of this review is to explore the cardioprotective mechanisms of FA against several drugs and chemicals to recommend further studies to investigate the potential protective effect of FA.

Keywords: Ferulic acid, Antioxidant, Cardioprotective, Preclinical, Cell line, Human health

1 Background

Cardiotoxicity usually denotes toxicity that has a harmful effect on the heart, which may ultimately result in myocardial pathology such as arrhythmia, myocardial infarction and myocardial hypertrophy [1, 2]. In the last few years, more than 20% of clinical drugs were forced out of the market because of cardiovascular side effects, which hampered the drug development and extremely affected the improvement in patient health [3]. Several studies have showed that drug-induced cardiac dysfunction may be a stepwise process accompanied by the increase of cardiac biomarkers and structural myocardial deformation,

finally resulting in reduced left ventricular ejection fraction (LVEF) [4, 5]. Recently, the most accepted term for cardiotoxicity is the reduction in LVEF of at least 10% to less than 55% [6]. Studies show that cardiac cell death or damage concurrently occurs with the progression of cardiotoxicity, demonstrating that drug-induced cardiomyocyte death may be the major for cardiotoxicity [7].

In the recent years, extensive research has been undertaken to investigate the action of phytochemical compounds found in the diet [8]. The reason commonly found in fruits, vegetables, beverages and herbal remedies [9]. These alkaloid compounds contain numerous active substances like flavonoids, polyphenols, indoles and sulfur containing elements [10]. These phytochemicals have the tendency to safeguard humans against diabetes mellitus, hepatic disorders, cardiovascular disease, cancer, arthritis, and Alzheimer's disease and many more [11, 12]. Findings from numerous studies have demonstrated that

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JOURNAL OF
BIOCHEMICAL AND MOLECULAR TOXICOLOGY

RESEARCH ARTICLE

Baicalein inhibits cell proliferation and enhances apoptosis in human A549 cells and benzo(a)pyrene-induced pulmonary carcinogenesis in mice

Naveenkumar Chandrasekar Raghunandhakumar Subramanian, Devaki Thiruvengadam

First published: 25 March 2022 | <https://doi.org/10.1002/jbt.23053>

Read the full text >

DOI TOOLS SHARE

Abstract

Our current study is done to explore the possible mechanisms to elaborate on the growth inhibitory effect of baicalein (BC) in human lung carcinoma. Initially, BC (25 and 50 μ M) treatment for 24 h, suppressed the viability and inhibited population growth in A549 cells. BC upholds the production of reactive oxygen species (ROS) with concomitant replenishment of glutathione, catalase, and glutathione peroxidase activity. The expression level of nuclear factor erythroid 2-related factor 2 and heme oxygenase-1 markedly increased after BC treatment will intimidate A549 cells proliferation by the ROS-independent pathway via the antioxidant pathway. In vivo investigations were carried out on BC (12 mg/kg, oral) in benzo(a)pyrene (B(a)P; 50 mg/kg, oral) induced lung carcinogenesis in mice. BC induces caspase-dependent apoptosis by increasing the levels of cytosolic cytochrome c accompanied by upregulating the outflow of p53, Bax, and caspase-3 with a concomitant abatement in the outflow of Bcl-2 in both in vitro and in vivo. In the murine model, BC treatment hindered the countenance of proliferation-related proteins (argyrophilic nucleolar organizing regions and proliferating cell nuclear antigen). Additionally, appraisal of the cell nucleus by transmission electron microscopic assessment uncovered that BC treatment adequately counteracts B(a)P-induced lung cancer cell survival. During the transition of the G₀/G₁ phase, BC is arrested in the cell cycle process. This might be the cause of a substantial increase in the appearance of p21^{Cip1} with concomitant downregulating the expressions of CDK4, cyclin D, and cyclin E both in vitro and in vivo. The results conclude that BC treatment induced apoptosis and repressed proliferation in vitro and in vivo of human lung carcinoma.



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COVID-19: comprehensive review on mutations and current vaccines

Ananda Vardhan Hebbani¹ · Swetha Pulakuntla² · Padmavathi Pannuru³ · Sreelatha Aramgam^{2,4} · Kameswara Rao Badri^{5,6} · Vaddi Damodara Reddy²

Received: 3 August 2021 / Revised: 9 November 2021 / Accepted: 22 November 2021 / Published online: 6 December 2021
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Abstract

Viral outbreaks had been a threat for the human race for a long time. Several epidemics and pandemics have been reported in the past with serious consequences on human health and subsequent social and economic aspects. According to WHO, viral infections continue to be a major health concern globally. Novel coronavirus, SARS-CoV-2 (Severe acute respiratory syndrome coronavirus-2) causes the most recent infectious pandemic disease, COVID-19 (Coronavirus disease-19). As of now, there were 249 million infections of COVID-19 worldwide with a high mortality of more than 5 million deaths reported; and the number of new additional cases is drastically increasing. Development of therapies to treat the infected cases and prophylactic agents including vaccines that are effective towards different variants are crucial to curtail the COVID-19 pandemic. Owing to the fact that there is a high mortality and morbidity rate along with the risk of virus causing further epidemic outbursts, development of additional effective therapeutic and preventive strategies are highly warranted. Prevention, early detection and treatment will reduce the spread of COVID-19 pandemic. The present review highlights the novel mutations and therapeutic updates associated with coronaviruses along with the clinical manifestations—diagnosis, clinical management and, prophylactic and therapeutic strategies of COVID-19 infection.

Keywords SARS-CoV-2 · Mutations · COVID-19 · Clinical management · Therapeutic strategies

Communicated by Erko Stackebrandt.

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Introduction

An incidence of unidentified pneumonia caused by 2019-nCoV/SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus-2) was reported in the Wuhan city, China in the final months of 2019 (Zhou et al. 2020). The unidentified pneumonia was termed as COVID-19 (Coronavirus disease-19) considered to have spread from bats to humans. The mode of spreading from human to human is predominantly, through airborne respiratory droplet contact. The basic reproduction number (R_0) of the virus is analyzed to be in between 1.4 and 6.47 across different countries, which is not just of wider range when compared to the other corona viral infections, but also stands at a position very near after the other well-known infectious diseases such as Measles, Chickenpox, Mumps, Polio and Rubella (Liu et al. 2020; Tang et al. 2020). Genetic and phylogenetic analysis revealed that SARS-CoV-2 belongs to β -coronaviruses along with the other two predominant members, i.e., MERS-CoV (Middle East respiratory syndrome-related coronavirus) and SARS-CoV (severe acute respiratory syndrome coronavirus) (Leao et al. 2020). All the recent viral infection



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Evaluation of Phytochemicals and Antimicrobial Activity of Piper Betle Leaf from Three Different Regions of Karnataka

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ABSTRACT

The objective of the present study was to evaluate the phytochemical constituents and antibacterial activities of three varieties of Piper betle leaf extracts. In the study undertaken, three different extracts (Cold aqueous, ethyl acetate and ethanol) of betel leaves collected from three different regions of Karnataka were tested against three different pathogenic bacterial species namely *Bacillus cereus*, *Streptococcus pyogenes*, and *Escherichia coli* using agar well diffusion method. Preliminary phytochemical screening was also done to test the presence of bioactive components namely phenolics, tannins, saponins, alkaloids etc. The in-vitro antibacterial assay showed an excellent zone of inhibition against all bacterial species in ethyl acetate and ethanol extracts compared to the aqueous extracts. Considering antimicrobial activities, it was found that all gram positive and negative bacteria were inhibited by all the 3 betel leaf extracts. The antibacterial properties and phytochemical profiling of betel leaves firmly support their application in the development of various products, especially in the food and pharmaceutical industries.

Keywords: antibacterial activity, betel leaf, phytochemicals, zone of inhibition

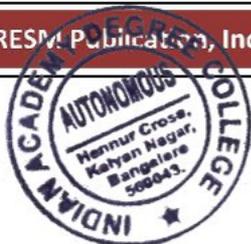
INTRODUCTION

Piper betle (L) belongs to the family Piperaceae and is commonly known as betel vine. Piperaceae is largely distributed in tropical and subtropical regions of the world. Over 700 species of Piper Betle has been distributed in the world and of these, 30 species have been recorded in India, 18 in Srilanka and 3 are endemic. Piper betle is a perennial creeping trailing plant with semi-hard stem and short adventitious roots grown in hotter and damper parts [1]. The parts of betel utilized are leaves, roots, stems, stalks and fruits. The plant has light yellow aromatic essential oil, with sharp burning taste. Leaf possesses antidiabetic, antiulcer, antifertility, cardiogenic, antitumor, antimutagenic, respiratory depressant and antihelminthic activity.

A large number of natural products are being used in the treatment of many diseases as a traditional medicine in several countries. The term "medicinal plant" includes various types of plants used in herbalism ("herbology" or "herbal medicine") [2]. According to the Indian ancient books of Ayurveda, Charaka, Sushruta Samhitas, and Kashyapa Bhojanakalpa, the practice of using betel leaves was common between 75 AD and 300 AD. Piper betle originated from Malaysia and is distributed extensively in South and Southwest China [3]. According to the review studies conducted by Madhumita et al. [4] over 700 species of betel have been distributed in both of the hemispheres of the world.

Piper betle includes a large amount of phytochemicals depending on its botanical origin and the solvent used for extraction. A preliminary phytochemical analysis of betel leaves from different parts of countries in Asia showed that alkaloids, tannins, glycosides, reducing sugars, and saponins were found in the water extracts and phenol, flavonoid, and tannin in water, ethanol, ethyl acetate, acetone of betel leaves [5]. The aroma of betel leaf is due to the presence of essential oils, consisting of phenols and terpenes.

The fresh betel leaves have been wrapped together with the areca nut, mineral slaked lime, catechu, flavoring substances, and spices have been chewed since ancient times. The leaf produces an aromatic volatile oil that contains the effects of betel chewing included the abundant flow of saliva, temporary dulling of taste perception, and stimulation of muscular and



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A Review on Polycystic Ovarian Syndrome in Relation to Insulin Resistance Pathogenesis

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Abstract: Polycystic ovary syndrome PCOS is considered a multifactorial disorder with various genetic, metabolic, endocrine and environmental abnormalities. In women with PCOS, insulin resistance (IR) is very common which is also related to obesity and weight gain. A literature survey was done using different search engines and databases such as and Google Scholar, PUBMED, NCBI to prepare a narrative review on this topic. PCOS is a most common endocrine disorder prevailing in reproductive age women across the world. The current review has highlighted the role of insulin resistance in the development and the pathogenesis of the disease. Hyperinsulinemia and hyperandrogenemia are two principle factors of PCOS and their cause and effect is still vague. Based on the various data, a positive correlation was also observed between oxidative stress and insulin resistance.

Key words: Insulin Resistance • Hyperinsulinemia • HOMA • BMI • Hyperandrogenemia

INTRODUCTION

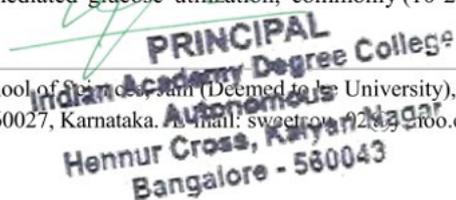
Polycystic ovarian syndrome (PCOS) is a heterogeneous endocrine disorder differentiated by the expression of ovarian cysts, anovulation and endocrine variation that impact the life of a woman severely. According to data provided by the World Health Organization (WHO), over 116 million women (3.4%) are affected by PCOS all over the world. Hyperandrogenism, oligo-anovulation and polycystic morphology of at least one ovary lead to PCOS. A significant role is played by Insulin resistance (IR), hyperinsulinemia and associated metabolic abnormalities including metabolic syndrome in the development of PCOS. Increased insulin resistance (IR) is an important feature in PCOS and may play a pathogenesis role [1]. Elevated levels of insulin secretion result in weight gain, inflammation and may lead to chronic heart diseases and Type 2 Diabetes [2]. The manifestations of PCOS are not confined only to the gynecological pattern, but women suffering from this syndrome show an increased rate of various comorbidities such as obesity, hypertension, metabolic

syndrome (MS), dyslipidemia and type 2 diabetes mellitus (DM2) compared compared to women without PCOS. These characteristics, along with other alterations such as endothelial dysfunction and a chronic low-grade inflammatory state, may possibly trigger the risk of developing cardiovascular disease and increased mortality rate [3].

Although the etiology of PCOS is not completely understood yet, the disease is considered a diversified disorder through various genetic, metabolic and endocrine aspects [4]. There is increasing evidence suggesting that the lifestyle of a person also goes hand in hand as it also has a major impact on the etiology of the disease [5]. Hence the current review is focused on the role of insulin resistance (IR), variability of IR in PCOS and also to investigate the association between IR and the different clinical and para-clinical characteristics comprised in the diagnostic criteria for PCOS.

Insulin Resistance and Genetic Elements in PCOS: Insulin resistance (IR) is defined as a decrease in insulin-mediated glucose utilization, commonly (10-25%)

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The chromatin modifier MORC2 affects glucose metabolism by regulating the expression of lactate dehydrogenase A through a feed forward loop with c-Myc

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(Received 3 April 2020, revised 2 February 2021, accepted 15 February 2021, available online 12 March 2021)

doi:10.1002/1873-3468.14062

Microrchidia family CW-type zinc finger 2 (MORC2) is a recently identified chromatin modifier with an emerging role in cancer metastasis. However, its role in glucose metabolism, a hallmark of malignancy, remains to be explored. We found that MORC2 is a glucose-inducible gene and a target of c-Myc. Our meta-analysis revealed that MORC2 expression is positively correlated with the expression of enzymes involved in glucose metabolism in breast cancer patients. Furthermore, overexpression of MORC2 in MCF-7 and BT-549 cells augmented the expression and activity of a key glucose metabolism enzyme, lactate dehydrogenase A (LDHA). Conversely, selective knockdown of MORC2 by siRNA markedly decreased LDHA expression and activity and in turn reduced cancer cell migration. Collectively, these findings provide evidence that MORC2, a glucose-inducible gene, modulates the migration of breast cancer cells through the MORC2–c-Myc–LDHA axis.

Keywords: c-Myc; glucose metabolism; LDHA; MORC2

Deregulated glucose metabolism is one of the hallmarks of cancer [1,2]. Increased glycolysis and reduced oxidative phosphorylation in cancer cells, popularly known as Warburg effect, cater to the high-energy requirements of the proliferating cancer cells [3]. The Warburg effect involves the conversion of pyruvate to lactate and NADH to NAD⁺, by the enzyme lactate dehydrogenase A (LDHA), leading to cancer progression [4]. Increased LDHA expression is closely associated with cancer cell proliferation, invasion, and metastasis in diverse cancer types [5]. Moreover, LDHA expression in cancer cells is regulated by several transcription factors and coregulators including c-Myc, FOXM1, CREB, HIF1 α , KLF4, and MTA1 [6–11]. Recent studies also reported LDHA as a marker

for the diagnosis and prognosis of cancer, since its expression is positively correlated with the cancer progression [12,13].

Human MORC2, a member of the Microrchidia family CW-type zinc finger (MORC) family of proteins, is a ubiquitously expressed protein and recently identified as a chromatin modifier [14,15]. Aberrantly elevated levels of MORC2 are associated with multiple cancers [16] and contribute to chemoresistance in liver cancer [17]. MORC2 was found to promote cholangiocarcinoma proliferation and metastasis by regulating the AKT signaling and epithelial to mesenchymal transition [18]. Accumulating evidence suggests that MORC2 is an oncogene involved in gastric cell proliferation and tumorigenesis by repressing carbonic

Abbreviations: PK, hexokinase; LDHA, lactate dehydrogenase A; PFK, phosphofructokinase; qPCR, quantitative PCR



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Virtual screening of curcumin and its analogs against the spike surface glycoprotein of SARS-CoV-2 and SARS-CoV

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Communicated by Ramaswamy H. Sarma

ABSTRACT

COVID-19, a new pandemic caused by SARS-CoV-2, was first identified in 2019 in Wuhan, China. The novel corona virus SARS-CoV-2 and the 2002 SARS-CoV have 74% identity and use similar mechanisms to gain entry into the cell. Both the viruses enter the host cell by binding of the viral spike glycoprotein to the host receptor, angiotensin converting enzyme 2 (ACE2). Targeting entry of the virus has a better advantage than inhibiting the later stages of the viral life cycle. The crystal structure of the SARS-CoV (6CRV: full length S protein) and SARS-CoV-2 Spike proteins (6MOJ: Receptor binding domain, RBD) was used to determine potential small molecule inhibitors. Curcumin, a naturally occurring phytochemical in *Curcuma longa*, is known to have broad pharmacological properties. In the present study, curcumin and its derivatives were docked, using Autodock 4.2, onto the 6CRV and 6MOJ to study their capability to act as inhibitors of the spike protein and thereby, viral entry. The curcumin and its derivatives displayed binding energies, ΔG , ranging from -10.98 to -5.12 kcal/mol (6CRV) and -10.01 to -5.33 kcal/mol (6MOJ). The least binding energy was seen in bis-demethoxycurcumin with: $\Delta G = -10.98$ kcal/mol (6CRV) and -10.01 kcal/mol (6MOJ). A good binding energy, drug likeness and efficient pharmacokinetic parameters suggest the potential of curcumin and few of its derivatives as SARS-CoV-2 spike protein inhibitors. However, further research is necessary to investigate the ability of these compounds as viral entry inhibitors.

ARTICLE HISTORY

Received 18 April 2020
Accepted 18 December 2020

KEYWORDS

Curcumin; SARS-CoV-2;
SARS-CoV; spike protein

Introduction

Coronaviruses are enveloped positive-sense single stranded RNA viruses that belong to the family coronaviridae. They usually infect birds and mammals and cause mild respiratory diseases (Kahn & McIntosh, 2005). However, in the recent past, these viruses have caused lethal endemics such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) endemics (Kahn & McIntosh, 2005). In December 2019, Wuhan city in China became the centre of a surge in cases of pneumonia by an unknown cause (Zhu et al., 2020). A novel corona virus, called SARS-CoV-2, was isolated from these pneumonia patients in January 2020 and the disease was called the **Coronavirus disease 2019** (COVID-19) by the World Health Organization in February, 2020 (Gorbalenya et al., 2020; Jiang et al., 2020; Who, 2020). Even though the epidemic may have started from a zoonotic transmission in a seafood market, that also sold wild animals, it became clear that this disease was transmitted from person to person (Li et al., 2020). The clinical characteristics of this disease are broad, constituting

asymptomatic infections, mild respiratory disease, severe pneumonia with respiratory failure and even death (Chen et al., 2020; Huang et al., 2020; Wang et al., 2020). The COVID-19 pandemic poses a significant challenge to global public health (Phelan et al., 2020), appealing for the development of safe and successful prophylactics and therapies against infection of its causative agent, the SARS-CoV-2 virus.

SARS-CoV-2 has a genome of ~ 30 kilobases, which codes for multiple structural and non-structural proteins (Chan et al., 2020). The structural proteins, present on the surface of the mature virion, include the spike protein, the membrane protein, the envelope protein and the nucleocapsid protein (Chan et al., 2020). The Spike protein, of the beta coronaviruses SARS-CoV-2 and SARS-CoV, enables the attachment of the virus to the cells of the lower respiratory tract of humans to gain entry into the lung tissue (Hoffmann et al., 2020). Apart from attachment, the spike glycoprotein also appears to play a role in fusion and entry of the virus into the host (Chen et al., 2020; Hoffmann et al., 2020). The spike protein, of the novel coronavirus, utilizes the SARS-CoV receptor,



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†Supplementary data for this article can be accessed online at <https://doi.org/10.1080/07391102.2020.1868338>.

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Research Article

Physicochemical and antibacterial activities of *Apis* honey types derived from Coorg, Karnataka, India

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Article Info

<https://doi.org/10.31018/jans.v13i2.2710>

Received: May 2, 2021

Revised: June 4, 2021

Accepted: June 8, 2021

How to Cite

Bhushanam M. *et al.* (2021). Physicochemical and antibacterial activities of *Apis* honey types derived from Coorg, Karnataka, India. *Journal of Applied and Natural Science*, 13(2), 729 - 734. <https://doi.org/10.31018/jans.v13i2.2710>

Abstract

Natural honey has various ingredients in it that contribute to its incredible properties. The aim of this investigation was to evaluate the physicochemical and antibacterial activity of various *Apis* honey from Coorg, Karnataka. Four samples of *Apis* honey viz., *A. florea*, *A. mellifera*, *A. cerana* and *A. dorsata* were collected from various regions of Coorg, Karnataka. The honey samples' physicochemical properties and antibacterial activities against *Streptococcus* sp., *Staphylococcus aureus*, *Bacillus subtilis* and *Enterococcus* sp were determined in vitro. The moisture and ash content varied from 13.6 - 17.2% and 0.32 - 0.49%, respectively. Hydroxy methyl furfurals content of *A. dorsata* honey samples was highest with 9.2±0.5 mg/Kg and least was recorded with 6.8±0.4 mg/Kg for *A. florea* honey. The reducing sugar content of *A. florea* honey sample was highest with 87.5±3.2 (%) and the peroxide levels were in the range of 10.2 - 14.9 µg/g/h at 20°C. The antibacterial assay revealed that *S. aureus*, *Enterococcus* sp and *Streptococcus* sp were most susceptible against the honey varieties tested and minimum inhibitory concentration (MIC) values between 25-6.5 (%v/v) were determined. In conclusion, honey varieties from Coorg could be used in specific antibacterial prophylaxis as the activity depends on the honey bee species, their metabolism and floral sources in specific geographical regions.

Keywords: *Apis* honey, Coorg, Antibacterial, Peroxide, Physicochemical

INTRODUCTION

Honey is an easily digestible foodstuff containing a wide range of nutritiously important complementary elements. Besides the high content of a range of saccharides, there are also organic acids, amino acids, mineral matter, colouring-aromatic substances, and a trace of fats (Bogdanov *et al.*, 1999). Honey also contains very valuable but unstable compounds, such as enzymes, substances of hormonal character, vitamins, and few minor compounds (Qui *et al.*, 1999). The medicinal use of honey in wound treatment is derived from diverse ancient civilizations. A wide range of microbial species has shown to be inhibited by honey (Cooper *et*

al., 2002). Antimicrobial use of honey has been reported since ancient times but modern dressings and antibiotic therapy superseded its use as an anti-infective agent. However, the emergence of bacterial pathogens and the potential of region specific honey variety have confounded the relook of honey and its antibacterial activity. Antibacterial resistance to honey is unlikely and has not been reported in the literature (Hussain, 2018) due to its synergistic antibacterial components (Sanz *et al.*, 2005). In contrast to antibiotics, when consumed orally, beneficial gut flora is not disrupted by honey (Hussain *et al.*, 2015) and also it enhances the growth of normal flora in the gastrointestinal tract (Mohan *et al.*, 2017). Honey exhibits a unique, multifac-



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Research Article

Molecular identification of insecticide degradation by gut bacteria isolated from *Helicoverpa armigera* of Cotton plants

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Article Info

<https://doi.org/10.31018/jans.v13i2.2678>

Received: April 14, 2021

Revised: May 27, 2021

Accepted: May 29, 2021

How to Cite

Madhusudan, S. *et al.* (2021). Molecular identification of insecticide degradation by gut bacteria isolated from *Helicoverpa armigera* of Cotton plants. *Journal of Applied and Natural Science*, 13(2), 641 - 653. <https://doi.org/10.31018/jans.v13i2.2678>

Abstract

The cotton bollworm *Helicoverpa armigera* occurs as a major pest in many economically important crops, including cotton, pigeon pea, chickpea, pea, cowpea, sunflower, tomato, sorghum, pearl millet and other crops. Intestinal microorganisms play important role in the degradation of diet components of insects. In order to know the role of gut bacteria in insecticide resistance five insecticides Chlorpyrifos (20% EC), Cypermethrin (25% EC), Malathion (50% EC), Quinalphos (25% EC), Triazophos (40% EC), were selected for the insecticide degradation studies. All the bacterial isolates from the gut of lab and field populations of *H. armigera* were identified using 16S rRNA gene-based identification and tested for their growth on minimal salt medium (MSM) along with the selected insecticides. A total of 11 bacterial isolates were tested and among them, isolate CL4 (*Rhodococcus* sp.) was found to grow on minimal salt medium (MSM) and with chlorpyrifos and isolate CL2 (*Enterococcus casseliflavus*) was able to grow in MSM with chlorpyrifos (C₂₂H₁₉C₁₂NO₃) and malathion (C₁₀H₁₉O₆PS₂) and no growth was seen in MSM without insecticide (control). Gas Chromatography analysis of the positive bacterial isolate cultures in MSM showed that the isolate CL4 (*Rhodococcus* sp.) was able to utilize 43.9% of chlorpyrifos and isolate CL2 (*E. casseliflavus*) was able to utilize 26% of chlorpyrifos and 57.1% of malathion in MSM broth cultures with comparison with the respective control cultures. Findings of the current work suggested that gut bacteria in the field populations of *H. armigera* plays a role in insecticide resistance.

Keywords: Cotton plants, Gut bacteria, *Helicoverpa armigera*, Insecticide degradation, Molecular identification

INTRODUCTION

Old-World bollworm (*Helicoverpa armigera*) has attained the status of national pest owing to its devastating nature on commercial crops in India. The cotton bollworm *H. armigera* occurs as a major pest in many economically important crops, including cotton, pigeon pea, chickpea, pea, cowpea, sunflower, tomato, sorghum, pearl millet and other crops. The cotton grown in over 5% of the total cultivated area has consumed more than 55% of the total amount of pesticide used in India (Kranthi *et al.* 2001)

A robust complement of prokaryotes is harbored in in-

sects' alimentary canals, facilitating nutrient availability, utilization, and detoxification of environmental toxins. Intestinal microorganisms play important role in the degradation of diet components of insects (Hayashi *et al.*, 2007). However, the indigenous gut bacteria also play a role in withstanding and colonization of the gut by non-indigenous species including pathogens (Dillon and Dillon, 2004). Precious little is known about the microbial community inhabiting the guts of various higher organisms, though it is acknowledged that microbes play an important role in metabolism, growth, development and protection of their host. Lepidoptera species feed on plants and the biomass digestion is





Bioactive Phytochemical Compounds of *Physalis minima* L. and its Anticholinesterase and Antioxidant Activities

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Received: 16 November 2020;

Accepted: 7 January 2021;

Published online: 20 March 2021;

AJC-20275

Physalis minima Linn. was investigated for its antioxidant and acetylcholine esterase inhibition activities. The methanolic extract of the whole plant was evaluated for radical scavenging and *in vitro* hydrolysis of acetylthiocholine iodide. Inhibitory concentration (IC₅₀) of the extract exhibited IC₅₀ values of 78.6, 46.2, 76.7 and 296 µg/mL under 2,2-diphenyl-1-picrylhydrazyl (DPPH), ABTS (2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid)), hydroxyl radical scavenging and acetylcholine esterase inhibition assays. GC-MS analysis revealed the presence of 11 compounds of which most of the compounds were reported with biological activities. The study suggests further investigations of *P. minima* for isolation, purification and characterization of valuable bioactive compounds related to their radical scavenging activity and for the treatment of neurodegenerative disease.

Keywords: *Physalis minima*, Antioxidant activity, Acetylcholine esterase.

INTRODUCTION

Cholinesterase regulates the neurotransmitters in synaptic cleft thereby playing a crucial role in cholinergic transmission. Acetylcholinesterase hydrolyses the neurotransmitter into acetyl and choline groups to regulate the transmission of nerve impulses hence acetylcholinesterase has been targeted to for therapeutic interventions in several diseases. Acetylcholine esterase (AChE) inhibitors enhance cholinergic neurotransmission through inhibition of the AChE and decreasing the cleavage of acetylcholine. Based on this inhibitory mechanism, AChE inhibitors represent the first option pharmacotherapy for Alzheimer's disease, senile dementia, ataxia, myasthenia gravis and Parkinson's disease [1]. Tacrine, donepezil and rivastigmine are commonly used to treat cognitive dysfunction but their adverse effects like gastrointestinal disturbances [2] necessitate to find out alternates from natural resources. Bioactive compounds from plants are sources of acetylcholine esterase inhibitors [3] and their favourable effects in cognitive disorders makes them potential candidates for treatment of Alzheimer's disease.

Cell damages caused by free radicals poses a threat to human health [4] and antioxidants play an important role in scavenging free radicals. Synthetic antioxidants such as butylhydroxyanisole and butylhydroxytoluene are effective in reducing the oxidative stress but their toxicity at high dosages and long-term treatment led to identification of natural antioxidants from plants, in particular. Based on the potentials of bioactive compounds from plant origin by inhibiting acetyl choline esterase activity and reducing oxidative stress, this study was intended to search a plant with both AChE inhibition and antioxidant activity. To determine the antioxidant activity, both DPPH (2,2 diphenyl-1-picrylhydrazyl) and ABTS+ (2,2'-azino bis-3 ethylbenzothiazoline-6-sulfonic acid) assays were selected due to their highly stable reactions [5].

Physalis minima Linn. is an annual herbaceous plant belongs to the family Solanaceae. It is distributed in Asian countries, Africa and Australia [6]. The plants leaves are ovate, acute and shallowly toothed or lobed. Flower calyx is yellow in colour, ovary is ovoid in shape and styles are glabrous. Fruit calyx is 5 angular and berries of the plant are subglobose, reticu-

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DOCKING STUDY OF ACTIVE PHYTOCOMPOUNDS FROM METHANOLIC FLOWER EXTRACT OF *Flacourtia jangomas* AGAINST CELL WALL PROTEINS OF *Candida tropicalis*SANGEETHA ANNIE GEORGE ; SHUBHA BHADRAN; SUDHAKAR MALLA; B. P. HARINI

UTTAR PRADESH JOURNAL OF ZOOLOGY, Volume 42, Issue 19, Page 36-47

Published: 15 September 2021

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Abstract

Human fungal infections have augmented in the last few decades. *Candida tropicalis* is the most prevalent amongst the non-albican species of *Candida* causing these infections. Recent Research focuses on development of new drug leads from plant based novel molecules with potential therapeutic efficacy and lesser side effects. *Flacourtia jangomas* a common tree in South India is known for its pharmacological activities. In this study, the bioactive compounds identified from Gas Chromatography-Mass Spectrometry (GC-MS) analysis of methanolic flower extract of *Flacourtia jangomas* was subjected to molecular docking against the cell wall proteins of *Candida tropicalis*. From the *insilico* studies it was found that among all the ligands only two ligands, methyl myristate and methyl tridecanoate were best docked to the receptors, chitin deacetylase model 1 and 3 (CD1, CD3) and FET3 taking into consideration the Patchdock score. It was found that the methyl myristate was found to be the best solution towards the chitin deacetylase model 1. The patchdock score was found to be 3688 with CD1 in comparison to 1086 for methyl tridecanoate. Binding affinity was found to be -5.3Kcal/Mol for methyl myristate and CD1 complex and found almost similar when compared to the positive control Fluconazole. The thickness of the ligands using SWISS ADME showed that methyl myristate and methyl tridecanoate are highly absorbable in the gastrointestinal tract with a thickness of 140 Å; but stronger candidate drug being methyl myristate. As the findings indicated, methyl myristate showed good antifungal activity as they inhibit the cell wall protein, chitin deacetylase1 responsible for the survival of fungal organism *Candida tropicalis*; furthermore, they were suitable for the lead candidate.

Keywords: *Candida tropicalis*; *Flacourtia jangomas*; Patch Dock score; Fluconazole; chitin deacetylase1; methyl myristate



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An Interpretation of Applicability of Balanced Scorecard and Performance of It Companies in Bengaluru City

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Article Info

Volume 82

Page Number: 2911 - 2917

Publication Issue:

January - February 2020

Abstract

Balanced Scorecard (BSC) is the technique which allows organizations to overpass the space amongst strategies and operations and it is used extensively for aligning business operations with strategies and vision of companies to improve standards of business and monitor performance of companies against their stated objectives. More than two fifth of employees viewed that the level of applicability of balanced scorecard in IT companies is moderate. Significant is prevailing in applicability of balanced scorecard in IT companies and profile of employees. Applicability of balanced scorecard has positive, significant and moderate relation with performance of IT companies. Therefore, IT companies should utilize balanced scorecard for planning and they must group all perspectives of balanced scorecard for ensuring balance. Further, they should employ balanced scorecard for framing strategy and execution.

Article History

Article Received: 14 March 2019

Revised: 27 May 2019

Accepted: 16 October 2019

Publication: 18 January 2020

Keywords; Balance Scorecard, IT Companies, Performance.

I. INTRODUCTION

Conventionally, most of companies use return on capital, profit margin and earning per share as their performance assessment measures. Because of dynamics of business, these measures are considered as one-dimensional, focused narrowly, incomplete and backward viewing of companies (Hoque et al 2001). To address, these problems, Kaplan and Norton (1992) introduce the skeleton of Balanced Scorecard (BSC) that evaluates performance of company comprehensively and accurately. Balanced Scorecard (BSC) is the technique which allows organizations to overpass the space amongst strategies and operations (Anand, 2014). It includes non financial and financial components from different perspectives in to a one unique structure (Pineno and Cristini, 2003) which is used widely in private sector companies, NGOs and government

sector across the world for aligning business operations with strategies and vision of companies to improve standards of business and monitor performance of companies against their stated objectives (Singh and Kumar, 2007).

Indian Information Technology (IT) sector is playing a significant role in putting India in the global IT map and it has highest reputation across the world and it creates most valuable brand image over the period of years (Vijayasri, 2013). IT sector is a very significant contributor to Indian economy in terms of domestic income generation, employment and export earnings and it has amazing potential to accelerate economic growth of India further (Singh and Kaur, 2017). To be competitive in domestic and international IT markets, IT companies have to perform outstandingly since their brand value and profitability are highly depending



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A comprehensive insight on the biological potential of embelin and its derivatives

N. Jeelan Basha , S. M. Basavarajiah, Swathi Baskaran & Prasanna Kumar

Pages 3054-3068 | Received 31 Mar 2021, Accepted 01 Jul 2021, Published online: 26 Jul 2021

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Abstract

Naturally occurring bioactive molecules are known for their diverse biological applications such as antimicrobial, anti-inflammatory, and analgesic activities. Also, some of the natural products act as medicinal drugs. The cell-permeable molecule embelin has been reported for its diverse biological activities such as antimalarial, anticancer, and anti-inflammatory in the literature. With the continuation of our research work on biologically active molecules, based on structural activity relationship

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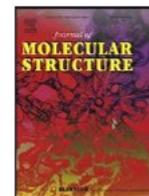
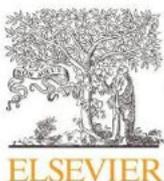
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A comprehensive review on pyrimidine analogs-versatile scaffold with medicinal and biological potential



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ARTICLE INFO

Article history:

Received 26 May 2021

Revised 14 July 2021

Accepted 21 July 2021

Available online 23 July 2021

Keywords:

Pyrimidine

Medicinal drugs

Anticancer

Antimicrobial

Antiviral

Antibiotic

Antioxidant activity

ABSTRACT

Pyrimidines are nitrogen-containing heterocycles known for anticancer, anti-HIV, antifungal, and antibacterial activities. Pyrimidines, compounds bearing this heterocycle, are common in many medicinal drugs. Based on these findings, we have also reported the synthesis and biological activities of potential pyrimidine analogs. This review article provides a comprehensive insight into clinically approved pyrimidine-containing drugs and recent reports based on the broad-spectrum activities of pyrimidine analogs. Further, this review highlights the main aspects of pyrimidine analogs such as anticancer, sedative, antibiotic, antiviral, anti-inflammatory, analgesics, and anti-microbial activities, that make this molecule a more attractive scaffold for the discovery of newer drugs.

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1. Introduction

Six membered nitrogen-containing pyrimidine and its derivatives exhibit therapeutic applications such as antibacterial, antifungal, anticancer, anti-HIV [1–4]. Also, pyrimidine-containing nucleosides are clinically applicable for the treatment of retroviral infections [5–8]. Mainly, 5-substituted uracil nucleosides are the important class of anti-herpetic nucleosides such as series of (E)-5-(2-bromovinyl)-2'-deoxyuridine (BVdu) showed specific Anti-Varicella-Zoster Virus (VZV) activity [9]. Furthermore, many 5-substituted pyrimidines possess antithyroid activity [10]. In addition, 5-alkyl or 5-aryl-substituted pyrimidine nucleosides have inhibitory activity against *Streptococcus faecalis* R growth [11,12]. Specifically, 5-phenylselenenyl pyrimidines were an inhibitor of dihydrouracil dehydrogenase and uridine phosphorylase [13]. Further, reports suggest that 5-iodo pyrimidine analogs have antiviral activity [14–16]. Based on structural-activity relationship studies, we have reported the synthesis and biological activities of novel pyrimidines starting from thiouracil by different synthetic routes [17–20]. This review covers the clinical significance of pyrimidine analogs. Also, this review mainly highlights recent reports on the synthesis and biological potential of pyrimidine analogs [21–24].

2. Clinical significance of pyrimidine analogs

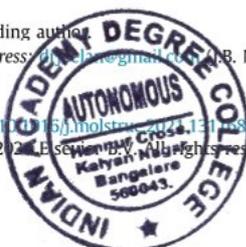
Pyrimidine analogues are well known in medicinal chemistry for their therapeutic properties [25]. Also, several pyrimidine analogs have developed as chemotherapeutic agents [26,27]. In addition, it has been reported in the literature that pyrimidine nucleosides and nucleotides substituted at the 5-position are analogs of natural components of nucleic acids and coenzymes [28]. Clinically applicable substituted/fused pyrimidines are as follows:

2.1. As anti-cancer drugs

In the last two decades, many pyrimidine derivatives have been developed as anticancer drugs and several others have been known for their wide range of clinical applications [29,30]. In earlier days, cancer treatments have carried out by chemotherapeutic agents such as antimetabolites [31].

Antifolates are class of antimetabolites that favor the inhibition of nucleotide biosynthesis of cancer cells [32]. A mechanism for the possible treatment of cancer with antimetabolites involves the structural similarity of these molecules with metabolites in the cancer cells. In cancerous cells, they compete with the metabolites, thereby prevents main processes, and leads to apoptosis; concerted cancerous cell death [33]. Whereas, folate-antagonists mimic folate, enter the cell and inhibit an enzyme called dihydrofolate reductase [34]. Many antifolates such as 2-amino-4-hydroxypyrimidines and

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Synthesis, spectral analysis, DFT calculations, biological potential and molecular docking studies of indole appended pyrazolo-triazine

S. M. Basavarajaiah¹ · G. Y. Nagesh² · Mohammad Javeed³ · Rashmi Bhat¹ · S. Nethravathi¹ · Jeelan N. Basha⁴ · K. Ramakrishna Reddy³ · C. Nisarga¹ · Pooja Srinivas¹

Received: 26 February 2022 / Accepted: 19 April 2022 / Published online: 10 May 2022
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Abstract

A series of novel 5-(3,5-disubstituted-1*H*-indol-2-yl)-2,3-dimethyl-1-phenyl-2,6-dihydro-1*H*-pyrazolo[4,3-*e*][1,2,4]triazines (**3a-l**) were synthesized in single step from 3,5-disubstituted indole-2-carbohydrazide and 4-aminoantipyrine under acidic conditions with excellent yields. The various spectroscopic methods were used to prove the formation of all these products. The compounds **3a**, **3b**, **3e**, **3f**, **3i** and **3j** exhibited excellent antibacterial and antifungal activities with an MIC value of 3.125 µg/ml against the tested pathogens and anti-tuberculosis inhibitory potential against *M. tuberculosis* which is equivalent to standard drug. The antidiabetic activity of the compounds **3a** and **3b** showed the maximum potential as glucosidase inhibitors with IC₅₀ = 47.21 µg/ml and IC₅₀ = 48.36 µg/ml, respectively. The physicochemical characteristics like ADMET, drug-likeness and bioactivity scores for these molecules were also disclosed. To comprehend the electronic behavior of compound **3a**, density functional theory estimations at the DFT/B3LYP level via 6-31G++ (d, p) have been carried out to replicate the structure and geometry. The first-order hyperpolarizability calculation was used to calculate the nonlinear visual feature of compound **3a**. The charge transfer interface among the structure is elucidated by the estimated HOMO–LUMO analysis. Further, molecular docking studies were carried out for synthesized compounds with human maltase-glucoamylase (PDB: 2QMJ).

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Therapeutic potential of pyrrole and pyrrolidine analogs: an update

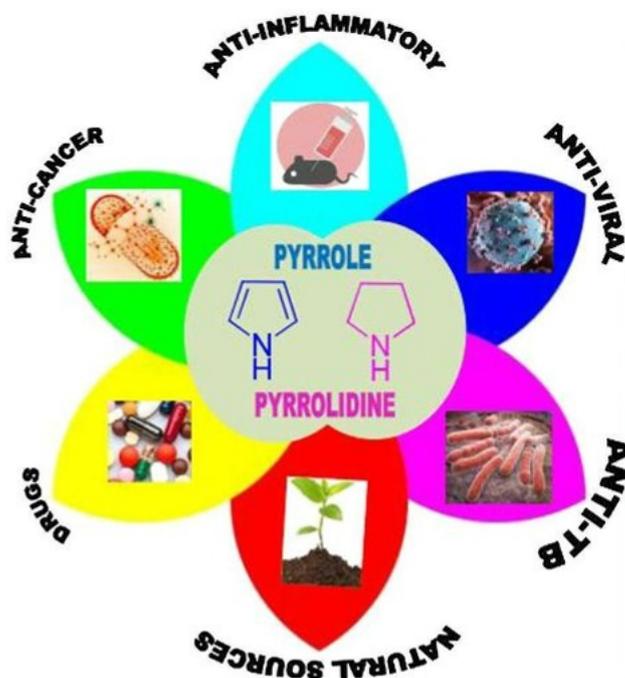
N. Jeelan Basha¹ · S. M. Basavarajaiah² · K. Shyamsunder¹

Received: 11 November 2021 / Accepted: 12 January 2022 / Published online: 25 January 2022
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Abstract

The chemistry of nitrogen-containing heterocyclic compound pyrrole and pyrrolidine has been a versatile field of study for a long time for its diverse biological and medicinal importance. Biomolecules such as chlorophyll, hemoglobin, myoglobin, and cytochrome are naturally occurring metal complexes of pyrrole. These metal complexes play a vital role in a living system like photosynthesis, oxygen carrier, as well storage, and redox cycling reactions. Apart from this, many medicinal drugs are derived from either pyrrole, pyrrolidine, or by its fused analogs. This review mainly focuses on the therapeutic potential of pyrrole, pyrrolidine, and its fused analogs, more specifically anticancer, anti-inflammatory, antiviral, and antituberculosis. Further, this review summarizes more recent reports on the pyrrole, pyrrolidine analogs, and their biological potential.

Graphical Abstract



Keywords Pyrrole · Pyrrolidine drugs · Anticancer · Anti-inflammatory · Anti-viral · Antitubercular activity

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Introduction

Heterocycles are cyclic compounds that contain one different element than carbon in the ring, such as nitrogen [1]. These heterocycles have received considerable

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Updates on the versatile quinoline heterocycles as anticancer agents

Basavarajaiah Suliphuldevara Matada  , Nagesh Gunavanthrao Yernale  and Jeelan N. Basha 

From the journal *Physical Sciences Reviews*

<https://doi.org/10.1515/psr-2021-0040>

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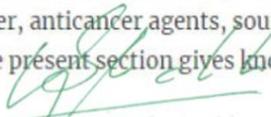
Abstract

Quinoline motifs have befallen significant molecules due to their assortment of interest in medicine, chemical synthesis, coordination chemistry, also in the field of applied chemistry. Therefore, various researchers have produced these molecules as objective structures and studied their potential. The current chapter endows with concise attention about cancer, anticancer agents, sources (natural) of quinoline and together with an innovative scope of quinoline-related medicines. Further, the present section gives knowledge concerning with anticancer activity of synthesized quinolines and their derivatives.

Keywords: anticancer agents; classical methods; heterocyclic compounds; marketed drugs; natural sources; quinolines

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Pages 3054-3068 | Received 31 Mar 2021, Accepted 01 Jul 2021, Published online: 26 Jul 2021

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Abstract

Naturally occurring biogenic amines are known for their diverse biological applications such as antimicrobial, and analgesic activities. Also, some of the natural products act as medicinal drugs. Further, hydrophilic cell-permeable molecule embelin has been reported for its diverse biological activities such as antimalarial, anticancer, and anti-inflammatory in the literature. With the continuation of our research work on biologically active molecules, based on structural activity relationship

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Bioactive Phytochemical Compounds of *Physalis minima* L. and its Anticholinesterase and Antioxidant Activities

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Received: 16 November 2020;

Accepted: 7 January 2021;

Published online: 20 March 2021;

AJC-20275

Physalis minima Linn. was investigated for its antioxidant and acetylcholine esterase inhibition activities. The methanolic extract of the whole plant was evaluated for radical scavenging and *in vitro* hydrolysis of acetylthiocholine iodide. Inhibitory concentration (IC₅₀) of the extract exhibited IC₅₀ values of 78.6, 46.2, 76.7 and 296 µg/mL under 2,2-diphenyl-1-picrylhydrazyl (DPPH), ABTS (2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid)), hydroxyl radical scavenging and acetylcholine esterase inhibition assays. GC-MS analysis revealed the presence of 11 compounds of which most of the compounds were reported with biological activities. The study suggests further investigations of *P. minima* for isolation, purification and characterization of valuable bioactive compounds related to their radical scavenging activity and for the treatment of neurodegenerative disease.

Keywords: *Physalis minima*, Antioxidant activity, Acetylcholine esterase.

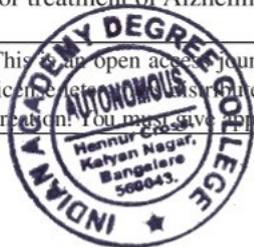
INTRODUCTION

Cholinesterase regulates the neurotransmitters in synaptic cleft thereby playing a crucial role in cholinergic transmission. Acetylcholinesterase hydrolyses the neurotransmitter into acetyl and choline groups to regulate the transmission of nerve impulses hence acetylcholinesterase has been targeted to for therapeutic interventions in several diseases. Acetylcholine esterase (AChE) inhibitors enhance cholinergic neurotransmission through inhibition of the AChE and decreasing the cleavage of acetylcholine. Based on this inhibitory mechanism, AChE inhibitors represent the first option pharmacotherapy for Alzheimer's disease, senile dementia, ataxia, myasthenia gravis and Parkinson's disease [1]. Tacrine, donepezil and rivastigmine are commonly used to treat cognitive dysfunction but their adverse effects like gastrointestinal disturbances [2] necessitate to find out alternates from natural resources. Bioactive compounds from plants are sources of acetylcholine esterase inhibitors [3] and their favourable effects in cognitive disorders makes them potential candidates for treatment of Alzheimer's disease.

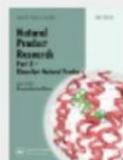
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Physicochemical and antibacterial activities of *Apis* honey types derived from Coorg, Karnataka, India

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Article Info

<https://doi.org/10.31018/jans.v13i2.2710>

Received: May 2, 2021

Revised: June 4, 2021

Accepted: June 8, 2021

How to Cite

Bhushanam M. *et al.* (2021). Physicochemical and antibacterial activities of *Apis* honey types derived from Coorg, Karnataka, India. *Journal of Applied and Natural Science*, 13(2), 729 - 734. <https://doi.org/10.31018/jans.v13i2.2710>

Abstract

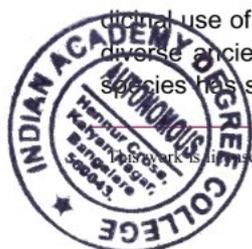
Natural honey has various ingredients in it that contribute to its incredible properties. The aim of this investigation was to evaluate the physicochemical and antibacterial activity of various *Apis* honey from Coorg, Karnataka. Four samples of *Apis* honey viz., *A. florea*, *A. mellifera*, *A. cerana* and *A. dorsata* were collected from various regions of Coorg, Karnataka. The honey samples' physicochemical properties and antibacterial activities against *Streptococcus* sp., *Staphylococcus aureus*, *Bacillus subtilis* and *Enterococcus* sp were determined in vitro. The moisture and ash content varied from 13.6 - 17.2% and 0.32 - 0.49%, respectively. Hydroxy methyl furfurals content of *A. dorsata* honey samples was highest with 9.2±0.5 mg/Kg and least was recorded with 6.8±0.4 mg/Kg for *A. florea* honey. The reducing sugar content of *A. florea* honey sample was highest with 87.5±3.2 (%) and the peroxide levels were in the range of 10.2 - 14.9 µg/g/h at 20°C. The antibacterial assay revealed that *S. aureus*, *Enterococcus* sp and *Streptococcus* sp were most susceptible against the honey varieties tested and minimum inhibitory concentration (MIC) values between 25-6.5 (%v/v) were determined. In conclusion, honey varieties from Coorg could be used in specific antibacterial prophylaxis as the activity depends on the honey bee species, their metabolism and floral sources in specific geographical regions.

Keywords: *Apis* honey, Coorg, Antibacterial, Peroxide, Physicochemical

INTRODUCTION

Honey is an easily digestible foodstuff containing a wide range of nutritiously important complementary elements. Besides the high content of a range of saccharides, there are also organic acids, amino acids, mineral matter, colouring-aromatic substances, and a trace of fats (Bogdanov *et al.*, 1999). Honey also contains very valuable but unstable compounds, such as enzymes, substances of hormonal character, vitamins, and few minor compounds (Qui *et al.*, 1999). The medicinal use of honey in wound treatment is derived from diverse ancient civilizations. A wide range of microbial species has shown to be inhibited by honey (Cooper *et*

al., 2002). Antimicrobial use of honey has been reported since ancient times but modern dressings and antibiotic therapy superseded its use as an anti-infective agent. However, the emergence of bacterial pathogens and the potential of region specific honey variety have confounded the relook of honey and its antibacterial activity. Antibacterial resistance to honey is unlikely and has not been reported in the literature (Hussain, 2018) due to its synergistic antibacterial components (Sanz *et al.*, 2005). In contrast to antibiotics, when consumed orally, beneficial gut flora is not disrupted by honey (Hussain *et al.*, 2015) and also it enhances the growth of normal flora in the gastrointestinal tract (Mohan *et al.*, 2017). Honey exhibits a unique, multifac-





Therapeutic potential of pyrrole and pyrrolidine analogs: an update

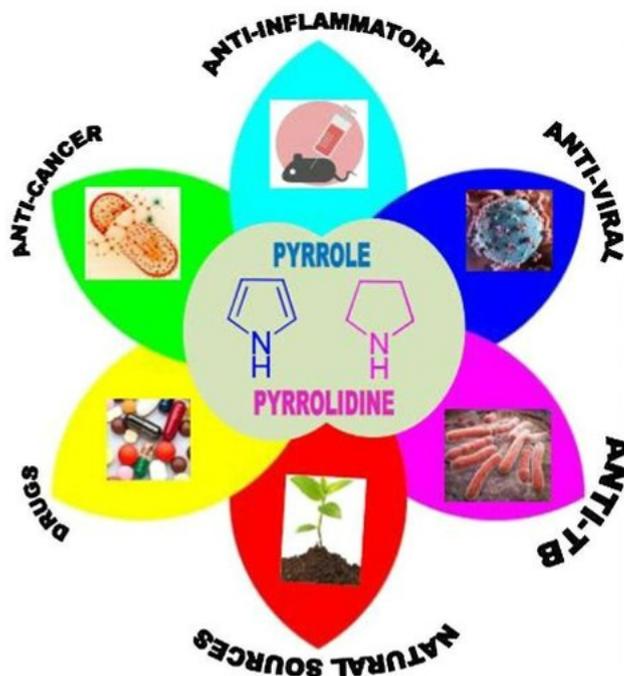
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Received: 11 November 2021 / Accepted: 12 January 2022 / Published online: 25 January 2022
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Abstract

The chemistry of nitrogen-containing heterocyclic compound pyrrole and pyrrolidine has been a versatile field of study for a long time for its diverse biological and medicinal importance. Biomolecules such as chlorophyll, hemoglobin, myoglobin, and cytochrome are naturally occurring metal complexes of pyrrole. These metal complexes play a vital role in a living system like photosynthesis, oxygen carrier, as well storage, and redox cycling reactions. Apart from this, many medicinal drugs are derived from either pyrrole, pyrrolidine, or by its fused analogs. This review mainly focuses on the therapeutic potential of pyrrole, pyrrolidine, and its fused analogs, more specifically anticancer, anti-inflammatory, antiviral, and antituberculosis. Further, this review summarizes more recent reports on the pyrrole, pyrrolidine analogs, and their biological potential.

Graphical Abstract



Keywords Pyrrole · Pyrrolidine drugs · Anticancer · Anti-inflammatory · Anti-viral · Antitubercular activity

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Introduction

Heterocycles are cyclic compounds that have at least one different element than carbon, such as sulfur, oxygen, nitrogen [1]. These heterocycles have received considerable

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CERTIFICATE OF PUBLICATION

This is to certify that the article entitled

**DETERMINANTS OF FINANCIAL WELL-BEING: A QUANTITATIVE STUDY AMONG
WORKING WOMEN IN HIGHER EDUCATION AT BANGALORE”**

Authored By

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Published in

Kanpur Philosophers : **International Journal of humanities, Law and Social Sciences**

ISSN 2348-8301

Vol. IX, Issue II, No.6 : 2022

UGC CARE Approved, Group I, Peer Reviewed and Referred Journal
by Net Archaeological & Genealogical Society Kanpur India



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Editor-in-Chief



INTERNATIONAL RESEARCH JOURNAL OF HUMANITIES AND INTERDISCIPLINARY STUDIES

(Peer-reviewed, Refereed, Indexed & Open Access Journal)

DOI : 03.2021-11278686

ISSN : 2582-8568

IMPACT FACTOR : 5.71 (SJIF 2021)

A Study on 'Students Perception towards Digitalization In Higher Education during Pandemic' With Reference To Bangalore District

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DOI No. **03.2021-11278686** DOI Link::<https://doi-ds.org/doilink/08.2021-24988237/IRJHISICPC210830>

ABSTRACT:

The Covid-19 pandemic has resulted in forceful/unexpected change globally. Almost all the sectors are affected and impacted heavily/badly due to this pandemic. The education sector also has a great impact, which led to the pedagogical change in education was merely due to this epidemic in terms of digitalization in education. This study is an attempt to know the impact of this drastic change in higher education with the perception of students.

The students are main stakeholders in any institution. Any unplanned and forceful execution in higher education will result in a greater impact on the mind of students. The survey is an attempt to know the impact of digitalization in higher education, challenges and the opportunities faced by them with regards to these sudden changes in the higher education witnessed in this pandemic. The detailed questionnaire was drafted and the responses were collected from 258 undergraduate students across Bangalore from different streams and standard statistical tools were used to draw the analysis. From the study it's found that the digitalization transformation in higher education is not free from cons. The students revealed that the unavailability of proper resources, lack of internet connectivity, and absent of proper e-tools for e learning is the major challenges faced by the students. The respondents also accepted that virtual learning has resulted in learning of new technical know-how.

Key words: Pandemic, Digital Transformation, Pedagogy, E-tools in learning etc.

INTRODUCTION:

Digitalization has become a need of the 21st century and the covid-19 pandemic is a driving force for the execution of this digitalization shift in all the areas of working. The unexpected extension of lockdowns and social factors of this epidemic has given rise to virtual business transactions and its continuation.



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DETERMINANTS OF FINANCIAL WELL-BEING: A QUANTITATIVE STUDY AMONG WORKING WOMEN IN HIGHER EDUCATION AT BANGALORE”

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ABSTRACT

We often believe that the fiancé is whatever it can be in terms of money and lead to improving the economic situation of an individual and the family as a whole. Thus, the right financial behavior with a required amount of financial knowledge led to managing finance, this resulted in financial satisfaction which indicates a sign of financial well-being. The previous research regarding financial well-being focused on factors like financial stress, locus of control and work environment, etc. (zahariah mohd zain,marziah mokhtar, 2019) Thus, this research is an attempt to study the factors affecting financial well-being among working women in higher education institutions in Bangalore, Karnataka. This research paper is a quantitative study, data were obtained by a closed-end questionnaire. A total of 216 responses were collected through a google form. The measure of central tendency, SPSS, and AMOS was used to analyse the data collected through a questionnaire. The analyses reveal that Financial Behaviour, Financial Satisfaction, and Financial skills were significantly associated with Financial Well-being. It also depicts that financial satisfaction is the main and the most powerful variable affecting financial well-being, the another variable next to this is financial skills which also impacts financial well-being. The outcome of this study can be referred for analysis and further understanding of working women’s financial behavior variable, which would be amplified by required training & education at the workplace.

Keywords: Financial well-being, Financial Behaviour, Financial Satisfaction, Financial skills

INTRODUCTION

People often understand that finance is all those things that impact the purchasing power of the family. Planning & controlling these financial situations and uncertainties sometimes led to financial dissatisfaction or satisfaction in the individual. Financial well-being is the situation that allowed people to enjoy their life without much worry about their financial situation. It is just not about having excess money it’s all about the individual financial satisfaction, financial behavior, and financial skills which contribute to financial well-being among the people. Financial well-being plays important role in everyone’s life. In India, the female population is 48.04% compared to 51.96% male population. The 21st century is witnessing the contribution of women in every area. Women’s empowerment is becoming more utilized, in such a scenario the financial well-being of working women especially in higher education plays a pivotal role in the overall development of the family and the society as a whole. The innovation and financial inclusions provided a great platform for financial services. College



avenues demand the right attitude for dealing in finance. The required amount of skills and knowledge will facilitate earning the financial avenue from diversified investment opportunities available today. The working environment leads to enhancing the knowledge of finance and the nature of the job and family background will facilitate the development of financial security feeling among working women. Financial freedom in present and future is the dream of every woman and to full fill, this dreams financial stability and security are required. Long-term financial stability and security will result in financial well-being which is the product of financial satisfaction, financial behavior, and financial skills. Financial behavior is not actually independent it depends on various factors like family income, savings, the number of dependents in the family, and other economic situations surrounding us also have a great impact on our financial behavior. Overall Financial well-being is long-term planning and once achieved it must be maintained and continued with the required financial skills.

Aim of the Study

This research paper aims at understanding the financial well-being among working women in higher education, it also focuses on analysing the determinants of financial well-being, in addition, it is also included suggestions to overcome the hindrances in achieving financial well-being among them by suitable means.

Need for the Study

Exploring and showcasing the positive effects of financial well-being in women Teaching fraternity helps in developing suitable methods and confidence to become financially independent. Financial knowledge plays an important role which can be acquired through discussions and training platforms with peer members with the help of higher education institutions.

Statement of the Problem

Since financial well-being is a must to make women independent and confident. Just earning will not lead to financial independence, to boost the morale of women financial satisfaction plays an important role. Although the women are working generally the myth is they are not confident to take the financial decision and that their financial well-being is dependent on their male family members. Actually, it is not that they are failed or not capable it's just in a country like India preferences are given to men over women when it comes to financial decisions. Therefore, the attempt was made to understand the level of financial satisfaction, skills, and behavior among women faculty in the higher education sector to determine their financial well-being.

Objectives of the study

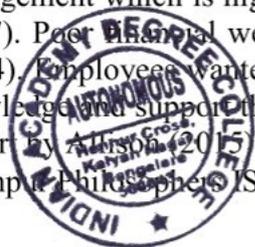
- To study financial well-being among working women in higher education.
- To find the effect of financial satisfaction on financial well-being among working women
- To analyse the result of financial behavior, and financial skills on financial well-being.

Review of Literature

Financial well-being is not a new concept some research has been conducted in various parts of the world but very rare studies are found with reference to India and studies related to the financial well-being of women is equal to naught.

Financial Well-being

The study high light that there no relationship exists between financial well-being and work environment but there is no significance between it at the same time very little evidence is found that financial well-being is connected to individual perception of finance which influences financial management which is highly associated with financial well-being. (Mokhtar, N. and Husniyah, A. R ,2017). Poor financial well-being could also affect employee productivity sated by. Barclays report (2014). Employees wanted financial education which could help them to improve personal financial knowledge and support their financial well-being as mentioned in the Employee Financial well-being Report by Allianz, 2015.



Financial Behaviour:

Financial behavior is any individual behavior with respect to monetary management (Xiao2008). Credit, saving and cash management are common financial behavior found (Hilgert and Hogarth, 2003). Shim et al revealed in their research that financial behavior contributed to financial satisfaction. Good financial behavior is positively correlated to financial well-being whereas poor financial behavior is not positively (negatively) correlated to financial well-being (shim et al.,2009). Not only that, Xiao et al. (2009) disclosed that financial behaviors like credit management, saving and cash management are positively related to individuals' overall well-being. Joo 2008 proclaims that financial behavior is the main contributor to one financial status satisfaction.

Financial Knowledge:

Financial knowledge is the function of financial terms understanding and its idea in daily life routine (Bowen 2003). Financial knowledge has a greater significance on financial well-being was already proved by Joo and Grable (2004). Though the respondents will be different, financial knowledge had played a vital role in financial well-being conveyed by Sabri and Falahati (2003). They are keen on forecasting the financial well-being among different respondents that are college students and employees, respectively.

Financial skills

An ample set of studies portrays that financial management is the determinant of financial attitude and financial knowledge is the prior factor in financial practices (Allen, Edwards, Hayhoe, & Leach, 2007) (Hayhoe, Leach, Turner, Bruin, & Lawrence), (2000). Providing early financial education to children to improve their abilities will result in effective financial decisions, later in adulthood. Adults who received early financial education at a young age are proved more accurate, confident, and capable to handle their financial decision to manage their resources (child and Youth Finance International (CYFI), 2013). The financial skills that are driven through financial education are essential in managing financial matters failing which leads to excessive debts (lane, 2016: Mullainathan & Shafir, 2013).

Financial Satisfaction

Financial satisfaction is related both directly and indirectly, to manifold factors which include financial stress, financial knowledge, financial solvency, risk tolerance, and education (So-hyun Joo, John E Grable 2004). Joo's (2008) model assumes that [financial wellness](#) is a component of personal well-being, comprising financial satisfaction, financial attitude, financial behavior, financial knowledge, and financial status.

Research Methodology

The objective of this research study includes exploration and description. The research design used in this research is a descriptive research design. Primary data is collected & with the help of a structured questionnaire from 216 faculty. The reliability test showed Cronbach's alpha value is 0.78 which indicates that the questionnaire is valid and reliable. The data collected is organised, classified, and analysed using expansive appropriate statistical tools like mean and standard deviation, correlation, path analysis, and regression weight.

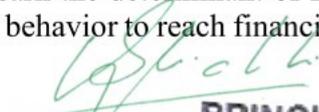
Research Instrumentation

The questionnaire of this survey consists of 2 parts. The first part aims to collect the profile of women faculty in higher education. The second part aims to learn the determinant of financial well-being that is financial skills, financial satisfaction, and financial behavior to reach financial well-being.

Sample Selection

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There are around 893 higher education institutions in Bangalore urban alone (Source: <https://www.thehindu.com/news/cities/bangalore/bengaluru-has-the-highest-number-of-colleges-in-the-country/article24648141.ece>). The data for the number of institutions is available, the population is considered infinite and the sample was drawn off on an infinite basis.

VARIABLES OF THE STUDY

In the current study, financial well-being has been identified as the dependent variable, and financial satisfaction, financial skills, and financial behavior as independent variables. These variables are considered to study determinants of financial well-being among working women in higher education specifically among female faculty in Bangalore city.

LIMITATIONS OF THE RESEARCH

The study is restricted to college faculty in Bangalore city only and may not be relevant to other areas. The opinion of the faculty is analysed on the basis of primary data collected for this research work only.

ANALYSIS AND INTERPRETATION

The analysis is carried out for determinants of financial well-being among working women in higher education. The measures of central tendency, T-test & Anova, correlation, and AMOS (SEM) for path analyses were used to draw the results from studying. The variables and the analysis for the same are as follows.

Table I. Mean & Standard Deviation of Determinants of Financial well-being among working women in Higher Education.

Measuring Variables	Mean	S. D
I am capable to find a source of income to meet my expenses whenever it is increased.	3.88	0.891
I always make a fixed amount of saving every month and secure my future financially.	4.24	1.047
I am confident to meet the financial contingencies in my life.	3.98	0.841
I have secured my retirement through appropriate investments.	3.03	1.427

Source: Primary Data

From the average scores of the Table I it is found that the women faculty always make a fixed amount of saving every month and try to secure their future financially is the main variable for financial well-being with a mean value of 4.24 and a standard deviation of 1.047, followed by faculty are confident enough to meet financial contingencies with a mean of 3.98 and standard deviation of 0.841, another variable ability to manage the source of income to meet expenses whenever it increased with a mean value of 3.88 and standard deviation of 0.891. The last factor considered was secured retirement by appropriate investment with a mean of 3.03 and a standard deviation of 1.427. This indicates that women faculty are not confident and planning their retirement financially whereas they are successful to meet their financial commitment in the short run successfully to a certain extent.

Table II. Mean & Standard Deviation of Financial Satisfaction among working women in Higher Education.

Measuring Variables	Mean	S. D
I am satisfied with my overall financial position.	3.38	1.218
I am financially satisfied with my current job.	3.61	1.383
I am capable enough to manage my own financial commitment	3.95	0.834
I feel financially secured and independent in my career	3.97	0.988

Source: Primary Data

Using the mean value from the above Table II it is clear that the women faculty are financially secure and independent in their careers with the highest mean score of 3.97 and standard deviation of 0.988, followed by female faculty are capable enough to manage their own commitment in terms of finance with the mean 3.95 and a standard deviation of 0.834, then faculty are also financially satisfied with their current job with the mean of 3.61 and standard deviation value of 1.383. The last factor considered was the respondents are satisfied with their overall financial position with a mean result of 3.38 and a standard deviation of 1.218. This stipulates that women faculty are not satisfied with their present financial position and the reason is not the lack of job and career opportunities. It is due to some other reasons which may include family structure and financial skills & behavior and confidence in financial planning which may result in dissatisfaction in terms of finance in the long run.

Table III. Mean & Standard Deviation of Financial Behavior among working women in Higher Education.

Measuring Variables	Mean	S. D
I always plan my budget and implement the same on a regular basis	4.32	0.693
I am ready to compromise on my needs to meet any financial uncertainties in my life.	4.16	0.906
I can have a financially sustainable future if I plan my finance today	4.48	0.501
I always believe in the diversification of investment	4.05	0.856

Source: Primary Data

Table III, clearly depict that the women faculty strongly believe that if they plan their finance today, they can have a financially sustainable future with the highest mean of 4.48 and standard deviation of 0.501 among overall variables of the study. Further, it is analysed that women faculty believe in planning their budget and they make sure they will execute the same on a routine basis to manage their finance with a mean value of 4.32 and standard deviation of 0.693. The working women are ready to compromise on their needs to meet the financial uncertainties with a mean of 4.16 and a standard deviation of 0.906, followed by the least mean value statement that women faculty believe in diversification of investment because women are not having sufficient skills to manage their fiancé and they are not able to assess the risk involved in the diversification of investment.

Table IV. Mean & Standard Deviation of Financial skills among working women in Higher Education.

Measuring Variables	Mean	S. D
I am always ready and interested to learn and increasing my financial knowledge.	4.46	0.727
I give preference to investing in a financial scheme to increase my finance.	3.52	0.910
I am very much aware of all the financial avenues available.	3.26	0.867
It is easy to arrange finance by taking the debts and managing the debts whenever it is required	2.65	1.515

Source: Primary Data

From the above table IV, the mean score is clear that the women faculty is always ready and interested to learn and increase their financial knowledge with a mean value of 4.46 and a standard deviation of 0.727, followed by that faculty are ready to invest in the financial scheme to maximize their finance with the mean score of 3.52 and standard deviation of 0.910. whereas the women faculty are aware of financial avenues available with the mean of 3.26 and 0.867. The last factor considered was women faculty are confident about arranging finance through debt and managing their debt if it is required with a minimum score of the mean of 2.65 and a standard deviation of 1.515. which indicates the faculty are not confident about their future financially and are even not ready to take a risk in any financial matter in the long run.



1. There is no significant difference between Demographic factors and determinants of financial well-being.
2. There is no significant difference between Demographic factors and Financial Satisfaction
3. There is no significant difference between Demographic factors and Financial skills.
4. There is no significant difference between Demographic factors and Financial Knowledge.

In order to understand the relationship between determinants of financial well-being among working women in higher education institutions the demographic factors, all the hypotheses were verified & analysed using T-tests, Chi-square, and ANOVA and the results are in Table 1.1

Table V. Demographic factors with respect to Determinants of Financial well-being, Financial Satisfaction, Financial skills, Financial Behaviour.

Demographic factors	Financial well-being	Financial Satisfaction	Financial skills	Financial Behaviour
MARITAL STATUS				
t value	1.221	1.098	4.197	4.615
P Value	< 0.000**	< 0.000**	< 0.001**	0.990
Inference	Rejected	Rejected	Rejected	Accepted
QUALIFICATION				
F value	94.431	112.637	3.317	47.294
P Value	< 0.000 **	< 0.000**	0.038*	< 0.000**
Inference	Rejected	Rejected	Rejected	Rejected
AGE				
F value	121.239	54.660	15.318	16.304
P value	< 0.000**	< 0.000**	< 0.000**	< 0.000**
Inference	Rejected	Rejected	Rejected	Rejected
COMPETITIVE EXAM				
F value	10.00	7.314	3.670	0.627
P value	<0.001**	0.001**	0.029*	0.537
Inference	Rejected	Rejected	Rejected	Accepted
INCOME(RS)				
F value	42.518	37.271	20.631	14.047
P value	< 0.000**	< 0.000**	< 0.000**	< 0.000**
Inference	Rejected	Rejected	Rejected	Rejected
EXPERIENCE				
F value	170.165	65.597	9.574	2.953
P value	< 0.000**	< 0.000**	< 0.000**	0.054*
Inference	Rejected	Rejected	Rejected	Rejected
NATURE OF INSTITUTION				
f value	104.660	43.911	23.462	84.389
P value	< 0.000**	< 0.000**	< 0.000**	< 0.000**
Inference	Rejected	Rejected	Rejected	Rejected

Source: Primary Data Note: 1. * denotes significant at 5% level
2. ** denotes significant at 1% level

Table V shows that P-value is less than 0.000 considering the financial well-being of women faculty with demographic factors Marital Status, Qualification, Age, Competitive Exam, Income, Experience, and Nature of Institution. Hence significant difference was found between all the above-mentioned demographic factors with reference to the financial well-being of faculty. Therefore, the hypothesis about the no significant difference between Demographic factors and the financial well-being of women faculty is rejected.

Table V further projects that the P-value is < 0.00 considering Financial Satisfaction with demographic factors Marital Status, Qualification, Age, Competitive Exam, Income Experience, and Nature of Institution of female college faculty. Hence a significant difference exists between all the above demographic factors with reference to Financial Satisfaction among women faculty. Therefore, there is sufficient evidence to reject the hypothesis with regard to all the demographic factors with regard to Financial Satisfaction. As the financial satisfaction varied and have a different meaning for everyone which is directly connected to too many demographic factors.

Likewise, Table V exhibits that P-value is < 0.00 considering financial skills with the demographic factors Age, Income, Experience, and Nature of Institution among women faculty. This indicates changes in Income and Qualification directly influence the financial skills to possess by working women. Whereas P-value is less than 0.005 concerning marital status, Qualification, and Competitive Exam. Hence a significant difference between all the demographic factors studied in this research paper regarding the financial skills of the female faculty of Bangalore.

With reference to Table V, the P-value is less than 0.00 considering Financial Behaviour in relation to Qualification, Age, Nature of Institution, and Income, whereas P-value is < 0.05 with regard to Experience. Hence there is enough evidence to write that a significant difference is found between Qualification, Age, Nature of Institution, Income, and Experience with Financial Behaviour of women faculty at Bangalore. Therefore, the hypothesis there is no significant difference between demographic factors and Financial Behaviour is accepted while considering the demographic factors like marital status and competitive exams of women faculty.

Which indicate financial behavior is totally influenced by income, nature of the job, and qualification, income, experience, and qualification result in job security which lead to building confidence in women to take financial risk and manage their finance.

BIVARIATE CORRELATION

H_0 : There is no correlation between the variables of determinants of financial well-being among working women in higher education institutions in Bengaluru.

Table VI. Karl Pearson Correlation Coefficient between Determinants of Financial well-being Among Working Women In Higher Education.

Factors	Financial Well Being	Financial Satisfaction	Financial Skills	Financial Behaviour
Financial Well Being	1	.812**	-0.05	-.105
Financial Satisfaction		1	.183**	-.049
Financial Skills			1	.268**
Financial Behaviour				1

*. denotes Correlation is significant at the 0.05 level.
 **. denotes Correlation is significant at the 0.01 level.

Source: Primary Data

The correlation coefficient between financial well-being of women faculty and financial satisfaction is 0.81 which indicates an 81 percent of positive correlation exists between financial well-being and financial satisfaction so it's highly significant therefore null hypothesis there is no correlation between the above variable is not accepted.

Whereas the correlation coefficient between financial well-being and financial skills is just -0.05 which is the same, the correlation between financial well-being and Financial Behaviour is -0.105 which means a 10.5 percent of negative correlation exists between these two variables respectively. The study reveals that there is sufficient evidence to reject the null hypothesis in the above variable.



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The Karl Pearson coefficient of correlation between financial satisfaction and financial skills of women faculty is 0.18 percent positive relations between these variables and it is highly significant, so the null hypothesis is rejected. At the same time, the correlation between financial satisfaction and Financial Behaviour is -0.049 which depicts a 4.9 percentage of negative correlation between these two variables and it is not significant. So, the researcher does not have enough proof to reject the null hypothesis.

The correlation coefficient between financial skills and financial behaviour is 0.268 which indicates a 26.8 percent positive relationship between these two factors it is highly significant and the researcher has sufficient evidence to reject the null hypothesis.

So, therefore, financial satisfaction and financial behavior are directly influencing the financial well-being of women faculty which can be gained through financial skills.

STRUCTURAL EQUATION MODELLING (SEM)

Table VII Model Fit Summary for Determinants of Financial well-being among women in Higher Education Institution.

Test for model fit	Values
RMR	0.017 (P Value)
GFI	1
AGFI	0.999
RMSEA	0.000(P Value)

Source: Primary Data

This model is said to be a perfect fit as the GFI (goodness of fit) value is exactly 1 and the AGFI ((Adjusted Goodness of Fit) value is 0.999 which is as per the standard values for model fit mentioned.

The RMR (Root Mean Square Residual) is the square root of the average squared amount by which the sample variances and covariance differ from their estimates is 0.017 and it is depicted that the value is less than 0.08 which is considered a good fit model.

The RMSEA (Root Mean Square Error of Approximation) values should be less than the level of significance is 0.05 for significant (*) and less than 0.000 for highly significant (**). In this model, the ‘P-value is < 0.00, which indicates a high level of significance.

Table VIII. Regression Weights – Determinants of Financial well-being of working women in a higher education institution

Variable	Inf.	Variable	UE	SE	S.E.	C.R.	P
Financial Satisfaction	←	Financial Behaviour	-.206	-.106	.135	-1.528	.127
Financial Satisfaction	←	Financial Skills	.344	.212	.112	3.060	.002
Financial Well-being	←	Financial Satisfaction	.682	.850	.030	22.424	***
Financial Well-being	←	Financial Skills	-.268	-.206	.049	-5.440	***

*** Significant at 0.01 percentage Level

** Significant at 0.05 percentage Level

SE – Standardised Estimate

S.E – Standard Error

C.R – Critical Ratio

P – Probability Value



UE – Unstandardised Estimate		Inf. – Influence
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Source: Primary Data

The Independent variable financial skills among working women in higher education influence the dependent variable financial satisfaction as P-value is highly significant (0.002). The other variable that is financial satisfaction also highly influenced the dependent variable of financial well-being as P-value is highly significant (< 0.000) whereas financial skills also influence the variable of financial well-being as the P-value is highly significant (< 0.000). which indicates that financial satisfaction is a must for financial well-being and this financial satisfaction can be assessed through financial skills possessed by the women faculty in higher education.

The Independent variable of financial behavior among working women in higher education does not influence the variable of financial satisfaction as the value is not significant. As financial behavior does not result in financial satisfaction. But there is little evidence found that there are financial skills influence financial behavior.

Figure I. Determinants of Financial well-being among Working Women In Higher Education Institutions.

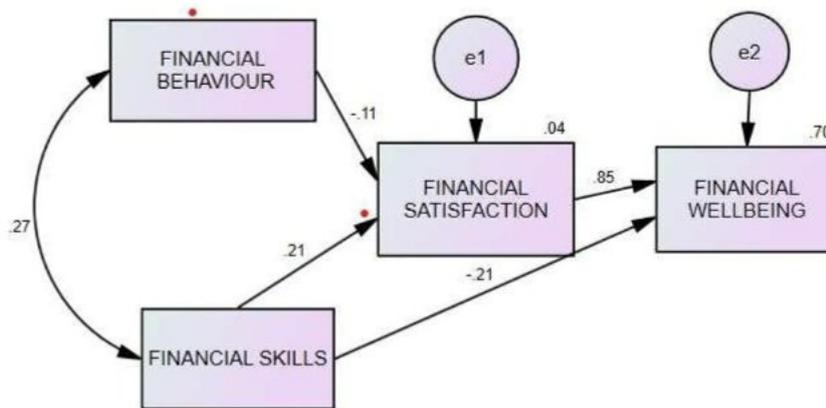


Table IX. Squared Multiple Correlations – Determinants of Financial well-being among working women college faculty

Variable	Estimate
Financial Satisfaction	.044
Financial well-being	.701

Source: Primary Data

The dependent variable financial well-being influences the independent variable financial satisfaction. The working women’s financial well-being can be assessed or measured with the amount of financial satisfaction in terms of, satisfaction from their current job, ability to control their financial commitment, and being financially secured and independent in their career.

Findings

1. The study found that 32% of the respondents’ income is below 3lakhs per anum, 75% are married, 37% of the faculty respondents group belongs to less than 30 years, 59% of the respondents’ highest qualification is post-graduation, 45% of the responded faculty have not clear net/set, 29% of the respondents possess less than 5 years of experience and 58% of the faculty work in Autonomous institution.
2. From the study it is found that the maximum of the women faculty agree that they always make a fixed amount of saving every month from their earnings to secure their future as they are financially secured and independent in their career to the extent which helps them to have financially sustainable future if they plan wisely today their finance, which can be possible by learning and increasing the financial knowledge as they are ready to enhance their knowledge which results in gaining Financial skills.



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3. All the demographic factors such as Marital Status, Qualification, Age, Competitive Exam, Income Experience, and Nature of the Institution play an essential role in ascertaining the financial well-being of working women and influence all the variables of the studies.
4. The study reveals that financial satisfaction is having a direct positive relationship with financial well-being and also correlate with financial skills, whereas financial skills are also highly correlated with Financial Behaviour.
5. The research discloses that there are no discrepancies between the actual and predicted values as the RMSEA value is > 0.000 which indicates there is no error whereas the RMR value is 0.017 which is a 1 % error which is acceptable and the model is a good fit.
6. The study also reveals that financial satisfaction and financial skills are highly influenced by the financial well-being of women faculty. As Financial skills are required for managing finance which results in financial satisfaction which leads to financial well-being in long run.

Suggestions

The financial well-being of women faculty's main determinant is financial skills and financial satisfaction which can be gained through education and experience. Financial well-being can be achieved by financial satisfaction for which job security and qualification and other demographic factors will be taken into consideration. Job security and a secured career will result in financial satisfaction which further influences financial skills and financial behavior. The risk assessment and return on investment can be planned only if working women are confident and satisfied with their financial status. The major reason for not behaving positively and confidently is the fear of losing funds. This can be removed through channelized learning and awareness among the working women especially with faculty as they are the main source to persuade the youth of the country in the right direction. Another very important demographic factor is family size and the number of dependents in the family is not studied in this research which can influence the main variable of financial satisfaction which has a greater impact on the financial well-being of working women. The study reveals that the female faculty are not having a feeling of Financial well-being as they are not feeling safe and secure about their retirement. This may be due lack of financial skills which can be learned through peer learning, discussion, and FDPS regarding this. If they are able to plan their retirement financially financial well-being can be found to an extent.

Conclusion:

The study led to the conclusion that the women faculty are facing constraints in financial well-being as the major determinants of financial well-being that is financial satisfaction and financial skills are not achieved to the extent by the women faculty at higher education Bangalore. The various demographic factors reveal the fact that the income level is not high and mainly they are not having job security and secured careers which is the main hindrance to the financial well-being of women faculty. Another main reason for the lack of financial satisfaction is the absence of required financial skills among them to manage their finance. Due to this, there is adverse Financial Behaviour which is the main hindrance to their financial upliftment among them. Financial skills have to be gained to make accurate decisions related to financial matters and help them to assess the risk involved in each financial action which assists the women faculty to maximize their finance and achieve financial well-being by planning their finance and career.

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DOCKING STUDY OF ACTIVE PHYTOCOMPOUNDS FROM METHANOLIC FLOWER EXTRACT OF *Flacourtia jangomas* AGAINST CELL WALL PROTEINS OF *Candida tropicalis*SANGEETHA ANNIE GEORGE ; SHUBHA BHADRAN; SUDHAKAR MALLA; B. P. HARINI

UTTAR PRADESH JOURNAL OF ZOOLOGY, Volume 42, Issue 19, Page 36-47

Published: 15 September 2021

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Abstract

Human fungal infections have augmented in the last few decades. *Candida tropicalis* is the most prevalent amongst the non albican species of *Candida* causing these infections. Recent Research focuses on development of new drug leads from plant based novel molecules with potential therapeutic efficacy and lesser side effects. *Flacourtia jangomas* a tree in South India is known for its pharmacological activities. In this study, the bioactive compounds identified from Gas Chromatography Mass Spectrometry (GC-MS) analysis of methanolic flower extract of *Flacourtia jangomas* was subjected to molecular docking against the cell wall proteins of *Candida tropicalis*. From *in silico* studies it was found that among all the ligands only two ligands, methyl myristate and methyl tridecanoate were best docked to the proteins, chitin deacetylase model 1 and 3 (CD1, CD3) and FET3 taking into consideration the Patchdock score. It was found that the methyl myristate was found to be best docked towards the chitin deacetylase model 1. The patchdock score was found to be 3688 with a binding energy of -10.2 kcal/mol for the fluconazole. The binding energy was found to be -10.2 kcal/mol for methyl myristate and CD1 complex and found almost similar when compared to the complex of methyl myristate and CD3. The SWISS ADME showed that methyl myristate and methyl tridecanoate were highly absorbable in the gastrointestinal tract with TPSA values of 1.9 and 1.9 respectively. The most suitable drug being methyl myristate. As the findings indicated, methyl myristate showed good activity as they inhibited the cell wall protein, chitin deacetylase, responsible for the survival of fungal organism *Candida tropicalis*; furthermore, they were suitable for the lead molecules.

Keywords: *Candida tropicalis*; *Flacourtia jangomas*; Patch Dock score; Fluconazole; chitin deacetylase; Methyl myristate



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Original Article

Detection of aflatoxin producing *Aspergillus flavus* from animal feed in Karnataka, India.

Pethannan Rajarajan¹, Katherin Sylvia¹, Malaiyarasa Pandian Periasamy¹, Maheswari Subramanian^{1*}¹ Department of Microbiology, Indian Academy Degree College-Autonomous, Bangalore, India*Correspondence: mahehrp@gmail.com

Received: December 30, 2020 Accepted: July 20, 2021

Abstract

Aflatoxins are toxic carcinogenic secondary metabolite produced by *Aspergillus flavus* and are responsible for contamination in animal feed. The aim of the study was to determine the prevalence of aflatoxin contamination in animal feed in Karnataka state, India. The screening was performed by desiccated coconut agar and quantification of aflatoxin by liquid ammonia vapor test, TLC and ELISA. A total of 29 samples received from different places of Karnataka were analysed for aflatoxin B1. Out of 29 animal feed sample aflatoxin B1 detected in 12 samples representing 41.38% at average concentration of 288.50 µg/kg. Out of 42 isolates screened in animal feed, *Aspergillus flavus* was found to be in 86.2% and *Aspergillus niger* was 24.1%. It was observed that out of 42 isolates analyzed from animal feed, aflatoxin B1 was detected in 12 samples. Aflatoxin B1 is the most common contaminant and the method is more sensitive in screening and detection of aflatoxin B1 in the animal feed.

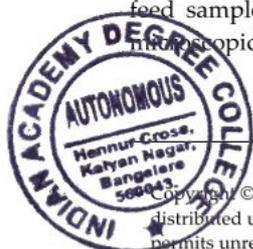
Keywords: Animal feed, *Aspergillus flavus*, Aflatoxins, Coconut milk agar, Ammonia vapor test, ELISA.

Introduction

Aspergillus flavus is worldwide distribution and probably produce numerous airborne conidia which easily disperse by insects and air movements. In a variety of livestock and agricultural products, aflatoxin B1 are commonly produced by *Aspergillus flavus*. *Aspergillus flavus* can be able to grow at optimum temperature of 37 °C and the growth can be observed at temperature ranging from 12-48 °C with water activity (a_w) between 0.86 and 0.96 [1]. Aflatoxins are mainly produced by *Aspergillus flavus* and *Aspergillus parasiticus*, which are especially found in areas with hot and humid climates; and hence frequent contaminants of agricultural products from tropical countries [2]. Contamination caused by species of *Penicillium* also occur under unsuitable storage conditions, where water activity (a_w) drops slightly below 0.95, promoting the growth of xerophilic species [3]. Several mould fungi are capable of contaminating various foods and feeds by toxic secondary metabolites, which have adverse effects on human and animal consumers following consumption of these contaminated food or animal feed [4].

Toxigenic fungi like *Aspergillus flavus* produce aflatoxins which are responsible for feed contamination. It may cause detrimental and damaging effects on human, livestock, and poultry [5]. Aflatoxins have been associated with quality degradation of many agricultural products which cause considerable changes in texture, flavor, and color. There are 18 different types of toxins in the aflatoxin group identified. Among these aflatoxins, B1, B2, G1, G2, M1 and M2 are the major types [6]. Aflatoxin B1, B2, G1, G2 are classified as group I human carcinogens and type M1, is as toxic as type B1 which is listed as a group 2B carcinogen [7]. AFB1 is the most prevalent and toxic of the aflatoxin, with acute toxicity demonstrated in all species of animals, birds and fish tested resulting in LD₅₀ values in the range 0.3–9.0 mg/kg body weight. AFB1 is also known to be one of the most potent genotoxic agents and hepatocarcinogens identified. Several naturally occurring dietary aflatoxins have been reported but the most prevalent and hazardous is AFB1 [8]. There are two general forms of the disease caused by exposure to aflatoxin, aflatoxicosis. Acute aflatoxicosis results in death whereas chronic aflatoxicosis cause cancer, with the liver as the primary target organ, immune suppression, teratogenicity, and other symptoms [9].

Aflatoxin contamination associated with food or feed is a global problem especially in the tropical and subtropical regions of the world. The warm and humid climate is one of the predisposing factors which enhance the growth of fungi and mycotoxins in feed [10]. The tropical conditions in Karnataka such as high temperature and moisture, monsoon, seasonal rains and flash floods leads to fungal proliferation and mycotoxin production. Also improper storage, less than optimal conditions during transport and marketing of animal feed can also contribute to fungal growth and mycotoxin production. The study was carried out from Nagavara (NG), Mandya (MY), Malavalli (ML) and Chikkaballapur (CH) from Karnataka, India to screen and determine the contamination of *Aspergillus flavus* from animal feed. A total of (n=29) animal feed samples were analyzed by isolating fungi. The isolates were initially screened through colony morphology and microscopic examination. Out of isolates screened, *Aspergillus flavus* and *Aspergillus niger* was found to be in 86.2 and 24.1%.



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Decolorization of mixture of UV/ TiO₂ pre-treated azo dyes by using developed bacterial consortium – An excellent outcome

[Shamsi Shoa](#), [Fathima S.G. Bibi](#), +2 authors [Krishna Bayineni Venkata](#) • Published 25 September 2021 • Engineering • Research Journal of Biotechnology

The degradation of the mixture of azo dyes by the developed bacterial consortium, photocatalytic process (TiO₂/UV) and their combined effects were investigated in this study. The bacteria consortium was developed from waste disposal drains in the local textile dyeing industry. The consortium consists of two different bacteria which were identified as *Stenotrophomonas pavanii* and *Bacillus licheniformis* through 16S rDNA sequence alignment. The decolorization efficiency was estimated by spectrophotometry and it was observed that biological and photochemical methods alone could not effectively remove the dyes as the decolorization efficiency was low and the absorption peak in the UV region was not completely removed. After 5 days of incubation at 37°C, pH 7 and a dye concentration of 150 mg/L, the microbial dye degradation reached a decolorization efficiency of more than 97%. Additionally, the UV treatment alone was also able to decolorize the dye less than 20% at 45°C, pH 9 at 150 mg/L. The two-step treatment process, namely, photocatalytic treatment followed by biological degradation, Ultraviolet-Visible (UVVis) spectral analysis showed that the combined effects were most efficient in the dye degradation (97-98%) which involved a complex interaction of enzyme activity, bioremediation and photocatalytic action. Here we also report the optimization of various operational parameters.



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Photosynthetic Based Technology for the Bioremediation of Domestic Sewage Water Using Anoxygenic Bacteria

Katherin Sylvia, Ashutosh Kumar, Fc Lalsiamliani, Mayank Nagotra, Malaiyarasa Pandian*

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Abstract

Bioremediation employs the use of naturally occurring organisms to break down hazardous substances into less toxic or non-toxic substances. The conventional treatment method of domestic sewage water is expensive and generates waste sludge that requires further handling and the problem of disposal of sludge into the environment is risky as it has a high potential to pollute the environment. The development of a simple and cost effective process allows the implementation of bioremediation in a safer and effortless manner. Therefore in this investigation microbiological and chemical analyses were very useful to suggest the best ways to improve bioremediation limits in domestic sewage water. In the study indigenous anoxygenic phototrophic bacteria were isolated from domestic sewage water to treat domestic sewage waste water, to develop a cost-effective process for bioremediation. Domestic sewage water was analyzed for different physico-chemical parameters such as pH, Temperature, TDS, TSS, TS, DO, BOD, COD, total sulphate and chlorides using bio inoculants of anoxygenic phototrophic bacteria isolated and domestic sewage water in a suitable light, pH and temperature conditions. The results showed that among the 3 anoxygenic phototrophic bacteria isolated; isolate RP2 (*Rhodospseudomonas palustris*) could grow well at pH 8, temperature 30°C and also reduce more pollutant parameters in domestic sewage water during bioremediation in the period of four consecutive weeks at the rate of 80%.

Keywords Anoxygenic Phototrophic Bacteria, Bioremediation, Pollutant, *Rhodospseudomonas palustris*, Sewage water

Introduction

Water is one of the most important elements on earth. All plants and animals must have water to survive. Due to industrialization and urbanization, it is becoming more polluted and risk of this polluted water consumption and its sanitation problem is increasing day to day in most of the developing countries. Hence it has become an essential need for today's environment to protect water from getting polluted or to develop cost effective remedial method for its protection. Generally, the wastewater discharged from domestic premises like residences, institutions and commercial establishments is termed

as "Sewage/Community wastewater". It comprises of 99.9% water and 0.1% solids and is organic because it consists of carbon compounds like human waste, paper, vegetable matter etc. The current piped sewerage systems do not treat sewage but merely transport it away. They are toxic and extremely pollute the rivers and lakes where they are dumped. While in India only 33 per cent of houses are connected to sewer systems, only around 38 per cent use septic tanks. These septic tanks do not treat waste and have to be emptied periodically. The report points out that entrepreneurs who service septic tanks, pump out the sludge from the tanks and empty it into drains, fields, just about anywhere. Many domestic wastes are organic in composition and can be treated physico-chemically and/or by microorganisms (1). In green technology, both algae and bacteria have shown to degrade organic and inorganic compounds. Almost completely and their degraded product also does not show any estrogenic activity. The biodegradability by anaerobic treatment is strongly dependent on the characteristics of the wastewater (2). Further the biodegradation is also influenced by numerous chemical factors, such as structural properties and environmental factors. Integrated algal systems can be used for wastewater treatment and bioremediation to capture carbon, nitrogen and phosphorus from specialty industrial, municipal and agriculture wastes.

Anoxygenic photosynthetic bacteria (APB) are one of the general terms for prokaryotes holding the original photosynthetic system, which had large variety and wide distribution in the environment (3). The traces of which are often observed in the paddy fields, lakes, rivers, oceans, activated sludge and soil (4). Their photosynthesis depends on the external electron donor, such as sulphide, molecular hydrogen or organic substances. APB have become famous for wastewater purification in recent times, since there are two flexible metabolic pathways for them, i.e. the respiratory and the fermentative pathways which enable them to adapt to varied environmental condition. Experimental data also proved that some APB species have high toxicity resistant level and can survive in toxic ridden wastewater whereby it utilizes the toxic substances as carbon source for growth and reproduction (5). So far, photosynthetic based technology for the bioremediation of domestic sewage water using anoxygenic bacteria has not been studied with certain physical parameters. Hence, the



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Original Article

Detection of aflatoxin producing *Aspergillus flavus* from animal feed in Karnataka, India.

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Green Synthesis of Silver Nanoparticles using Marine Sea Weed *Acetabularia acetabulum* and their Activity as MMT-Ag Nanocomposites towards Antifouling Applications

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ABSTRACT:

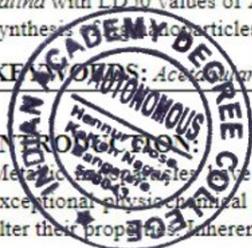
The present study proposed the green synthesis of silver (Ag) nanoparticles using aqueous extract of *Acetabularia acetabulum* followed by their fabrication onto montmorillonite (MMT). Fourier transform infrared (FTIR) spectra revealed the involvement of multiple functional groups in the reduction of silver ions to Ag nanoparticles and their stabilization on MMT. The obtained MMT-Ag nanocomposites were characterized by UV-visible spectroscopy, powder X-ray diffraction (XRD), particle size analysis (PSA), scanning electron microscopy (SEM) and Energy Dispersive X-Ray (EDX) analysis. The synthesised Ag nanostructures were found to be cubic shaped with average size ranges from 37nm to 60 nm. The seaweed mediated MMT-Ag nanocomposites were evaluated for their potential antimicrobial properties against the isolated biofouling bacteria. Maximum bactericidal activity was recorded against *S. aureus* followed by *E. coli*, *M. flavus*, *Pseudomonas aeruginosa*, *B. cereus*, *M. luteus* and *B. subtilis*. In addition, the viability of incorporating MMT-Ag nanocomposites in paint was examined where a significant inhibition of marine fouling bacteria was exhibited by the panel coated by MMT-Ag nanocomposites-based paint as compared to water-based paint. The addition of MMT-Ag nanocomposites in water-based paint was also found to be effective against corrosion from marine water. The present study shows cytotoxicity of MMT-Ag nanocomposites as nanoclay/metallic nanocomposites against *A. salina* with LD50 values of $200 \pm 3.4 \mu\text{g/ml}$. The results of the present study suggested the application of *A. acetabulum* extract as a good bio-resource for the synthesis of nanoparticles and their implementation to combat marine biofouling on ship hulls.

KEYWORDS: *Acetabularia acetabulum*, Antifouling Paint, Bactericidal activity, Montmorillonite (MMT), Nanocomposites, Silver (Ag) nanoparticles.

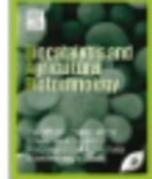
INTRODUCTION

Metallic nanoparticles have attracted global interest in recent years in the area of industrial, environmental and biomedical applications owing to their exceptional physicochemical properties. Extensive use of nanomaterials has attracted global interest in sustainable strategies for their synthesis which can alter their properties. Inherent properties of the nanoparticles can be easily altered with minor changes in their process of synthesis.

Traditionally nanoparticles are synthesized using physical and chemical approaches, however, these methods involve the use of non-biodegradable



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Remediation potential of mushrooms and their spent substrate against environmental contaminants: An overview

Sahithya K  , Mouli T, Ankita Biswas, Mercy Scorlet T

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Abstract

The large-scale application of synthetic compounds in industrial and agricultural sectors has contaminated the natural environment that further led to exacerbating the pollution-related problems in the ecosystem and human health. The rapid industrialization and anthropogenic activities of the present era have further increased environmental contamination with various organic chemicals and inorganic metals, including pesticides, industrial dyes, petroleum hydrocarbons, pharmaceuticals, and heavy metals. Hence, an effective strategy needs to be developed to eliminate pollutants from the environment. Since many decades, microbial based remediation approaches using bacteria, algae and fungi have been proved to be an




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Original Article

Detection of aflatoxin producing *Aspergillus flavus* from animal feed in Karnataka, India.

Pethannan Rajarajan¹, Katherin Sylvia¹, Malaiyarasa Pandian Periasamy¹, Maheswari Subramanian^{1*}¹ Department of Microbiology, Indian Academy Degree College-Autonomous, Bangalore, India*Correspondence: mahehrp@gmail.com

Received: December 30, 2020 Accepted: July 20, 2021

Abstract

Aflatoxins are toxic carcinogenic secondary metabolite produced by *Aspergillus flavus* and are responsible for contamination in animal feed. The aim of the study was to determine the prevalence of aflatoxin contamination in animal feed in Karnataka state, India. The screening was performed by desiccated coconut agar and quantification of aflatoxin by liquid ammonia vapor test, TLC and ELISA. A total of 29 samples received from different places of Karnataka were analysed for aflatoxin B1. Out of 29 animal feed sample aflatoxin B1 detected in 12 samples representing 41.38% at average concentration of 288.50 µg/kg. Out of 42 isolates screened in animal feed, *Aspergillus flavus* was found to be in 86.2% and *Aspergillus niger* was 24.1%. It was observed that out of 42 isolates analyzed from animal feed, aflatoxin B1 was detected in 12 samples. Aflatoxin B1 is the most common contaminant and the method is more sensitive in screening and detection of aflatoxin B1 in the animal feed.

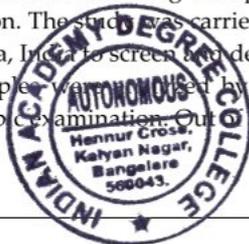
Keywords: Animal feed, *Aspergillus flavus*, Aflatoxins, Coconut milk agar, Ammonia vapor test, ELISA.

Introduction

Aspergillus flavus is worldwide distribution and probably produce numerous airborne conidia which easily disperse by insects and air movements. In a variety of livestock and agricultural products, aflatoxin B1 are commonly produced by *Aspergillus flavus*. *Aspergillus flavus* can be able to grow at optimum temperature of 37 °C and the growth can be observed at temperature ranging from 12-48 °C with water activity (a_w) between 0.86 and 0.96 [1]. Aflatoxins are mainly produced by *Aspergillus flavus* and *Aspergillus parasiticus*, which are especially found in areas with hot and humid climates; and hence frequent contaminants of agricultural products from tropical countries [2]. Contamination caused by species of *Penicillium* also occur under unsuitable storage conditions, where water activity (a_w) drops slightly below 0.95, promoting the growth of xerophilic species [3]. Several mould fungi are capable of contaminating various foods and feeds by toxic secondary metabolites, which have adverse effects on human and animal consumers following consumption of these contaminated food or animal feed [4].

Toxigenic fungi like *Aspergillus flavus* produce aflatoxins which are responsible for feed contamination. It may cause detrimental and damaging effects on human, livestock, and poultry [5]. Aflatoxins have been associated with quality degradation of many agricultural products which cause considerable changes in texture, flavor, and color. There are 18 different types of toxins in the aflatoxin group identified. Among these aflatoxins, B1, B2, G1, G2, M1 and M2 are the major types [6]. Aflatoxin B1, B2, G1, G2 are classified as group I human carcinogens and type M1, is as toxic as type B1 which is listed as a group 2B carcinogen [7]. AFB1 is the most prevalent and toxic of the aflatoxin, with acute toxicity demonstrated in all species of animals, birds and fish tested resulting in LD₅₀ values in the range 0.3–9.0 mg/kg body weight. AFB1 is also known to be one of the most potent genotoxic agents and hepatocarcinogens identified. Several naturally occurring dietary aflatoxins have been reported but the most prevalent and hazardous is AFB1 [8]. There are two general forms of the disease caused by exposure to aflatoxin, aflatoxicosis. Acute aflatoxicosis results in death whereas chronic aflatoxicosis cause cancer, with the liver as the primary target organ, immune suppression, teratogenicity, and other symptoms [9].

Aflatoxin contamination associated with food or feed is a global problem especially in the tropical and subtropical regions of the world. The warm and humid climate is one of the predisposing factors which enhance the growth of fungi and mycotoxins in feed [10]. The tropical conditions in Karnataka such as high temperature and moisture, monsoon, seasonal rains and flash floods leads to fungal proliferation and mycotoxin production. Also improper storage, less than optimal conditions during transport and marketing of animal feed can also contribute to fungal growth and mycotoxin production. The study was carried out from Nagavara (NG), Mandya (MY), Malavalli (ML) and Chikkaballapur (CH) from Karnataka, India to screen and determine the contamination of *Aspergillus flavus* from animal feed. A total of (n=29) animal feed samples were screened by isolating fungi. The isolates were initially screened through colony morphology and microscopic examination. Out of 42 isolates screened, *Aspergillus flavus* and *Aspergillus niger* was found to be in 86.2 and 24.1%.



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Effect of impurity on modulational instability of localized modes in a discrete quantum ferromagnetic spin chain

E. Parasuraman  

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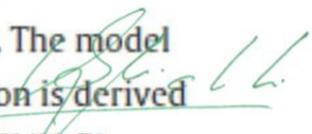
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Abstract

The modulational instability (MI) of localized modes in a discrete quantum ferromagnetic spin chain with the effect of impurity is studied in this paper. The model of the discrete ferromagnetic spin chain is considered and dynamical equation is derived by using the Heisenberg's coherent state method along with Holstein-Primakoff (H-P) representation of spin operators. The dynamical equation is in the form of nonlinear Schrödinger (DNLS) equation which describes the complete dynamics of ferromagnetic spin chain. The MI technique is applied to the DNLS equation and obtains the dispersion relation which relates the frequency and wavenumber of the



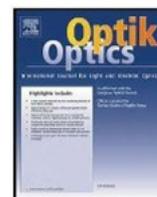


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Original research article

Evolution of dark optical soliton in birefringent fiber of Kundu–Eckhaus equation with four wave mixing and inter-modal dispersion

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ARTICLE INFO

Keywords:

Dark soliton
Birefringent fiber
Inter-modal dispersion
Four wave mixing

ABSTRACT

The dark soliton propagation in birefringent fiber of Kundu–Eckhaus equation with four wave mixing and inter-modal dispersion is investigated. We consider the Kundu–Eckhaus (KE) equation with the inclusion of four wave mixing term and inter-modal dispersion term. The developed Jacobi elliptic function expansion method is used to construct the solution of KE equation. New results are presented which includes dark soliton solution and using it to analysis the inter-modal dispersion in birefringent fiber of the KE equation with four wave mixing.

1. Introduction

In the field of telecommunication industry, the dynamics of optical soliton in birefringent fibers is growing interest. In general, transmission of soliton in optical fiber are mainly affected by various inhomogeneous effects which tends to attenuation, dispersion and some nonlinear effects which cause broadening of soliton, soliton control, soliton shaping [1–5]. Therefore, it is essential to discuss the impacts of inhomogeneous effects on the transmission of soliton pulse in optical fiber. This fact caused great interest to finding the soliton solutions of governing nonlinear wave equations, such as nonlinear Schrödinger equations with different nonlinearities, Fokas–Lenells equation, complex Ginzburg–Landau equation, Lakshmanan–Porsezian–Daniel model, Kaup–Newell model, Radhakrishnan–Kundu–Lakshmanan equation, Kundu–Eckhaus equation and Gerdjikov–Ivanov equation [6–10]. Among these nonlinear equations, Kundu–Eckhaus (KE) equation is popular to describe the nano and polarization-preserving fibers have been examined extensively [11–15]. The optical soliton propagation in birefringent fibers of KE equation with the effect of four wave mixing by the use of the extended trial equation method is studied recently by Biswas et al. [16]. Subsequently, Yildirim et al. also investigated the optical soliton propagation in the form of bright, dark as well as singular solitons in birefringent fibers having four-wave mixing through the KE equation [17]. This paper utilizes the same KE equation which models the propagation of pulses through birefringent fibers with effect of four wave mixing and inter-modal dispersion. The rest of this paper is organized as follows. In Section 2, the model of KE equation with the inclusion of four wave mixing and inter-modal are considered to describe the propagation of soliton in birefringent fiber. We employ the Jacobi elliptic function method to KE equation and constructed the solution in Section 3. Section 4, contains our conclusions.

2. Governing model of equation

The model of the KE equation [16–18] which describes the polarization-preserving fibers are imparted with the help of

$$i\psi_t + a\psi_{xx} + b|\psi|^4\psi + c(|\psi|^2)_x\psi = 0. \quad (1)$$

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<https://doi.org/10.1016/j.ijleo.2021.167380>

Received 25 May 2021; Accepted 3 June 2021

Available online 8 June 2021

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Original research article

Modulational instability criterion for optical wave propagation in birefringent fiber of Kundu–Eckhaus equation

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ARTICLE INFO

Keywords:

Modulation instability
Birefringent fiber
Kundu–Eckhaus equation

ABSTRACT

We study the modulational instability of nonlinear wave propagation in birefringent fiber of the Kundu–Eckhaus equation without four wave mixing term and analysis the effect of self phase modulation and cross phase modulation. The model of Kundu–Eckhaus equation in the absence of four wave mixing term are consider and apply the linear stability analysis to the Kundu–Eckhaus equation. Modulational instability criteria are found from linearized equations for small perturbations. Using modulational instability criteria, the self phase modulation and cross phase modulation effects on optical wave propagation in birefringent fiber are discussed.

1. Introduction

The phenomenon of modulational instability (MI) is of great consequence for finding applications in plasma physics, hydrodynamics, nonlinear optics, and other branches of physics [1,2]. In particular, the phenomenon is important for fiber optics communication systems (degradation of performance), the generation of short pulses with high repetition rates [3], and the design of all-optical logical devices [4]. MI is the exponential growth of certain modes of an inhomogeneous perturbation imposed on a stationary homogeneous solution. MI can help to understand localized modes are considered as the best precursor to the formation of soliton trains. In optical fiber, MI has been the subject of extensive study, since its inherent connection with short pulse train generation in nonlinear optical media, as well as optical parametric amplification [5–7]. Zakharov et al. and Kadomtsev et al. have established MIs of the envelope soliton for single nonlinear Schrödinger equation and the KdV solitons [8,9]. Later, many theoretical and experimental works was established the MI in a nonlinear media. The propagation optical pulses in nonlinear dispersive media has been modeled using nonlinear equations such as nonlinear Schrödinger equation, Lakshmanan–Porsezian–Daniel equation, complex Ginzburg–Landau equation and Fokas–Lenells equation [10–14]. However, the Kundu–Eckhaus (KE) equation discloses many different types of analytical solutions and it is like a nonlinear Schrödinger equation [15]. The nonlinear complex KE model play a vital role to describes various physical phenomena such as nonlinear optics, plasma physics, fluid mechanics, etc. Recently, Vega-Guzman et al. reported the dark and singular optical soliton solutions to KE equation in the context of birefringence without the effect of four wave mixing. Very recently, Yildirim found that dark, bright as well as singular solitons called optical solitons of the coupled system with KE equation and having four-wave mixing which governs soliton transmission in birefringent fibers [16,17]. However, in this work, we discuss the modulational instability of optical nonlinear wave in the KE equation in the absence of four wave mixing term and also analysis the stability of nonlinear wave in the birefringence optical fiber of KE model by varying the effect of self phase modulation (SPM) and cross phase modulation (XPM). Both SPM and XPM induced MI has been studied extensively in conventional silica based optical fibers with Kerr nonlinearity [18–20]. Drummond et al. has theoretically and experimentally investigated XPM induced vector of MI of single frequency pumping in the normal dispersion region in high birefringent fibers and exposed that XPM induced vector MI only occurs for nonzero group velocity dispersion (GVD) mismatch between the eigenstates of

E-mail address: nldparasu@gmail.com.<https://doi.org/10.1016/j.ijleo.2021.167429>

Received 23 May 2021; Received in revised form 10 June 2021; Accepted 10 June 2021

Available online 15 June 2021

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Role of Social Media in Promoting Tourism Business – A Study on Tourism Promotion in Odisha

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ABSTRACT

The use of Internet and other information communication technologies leads to a new era of tourism economy. Social media, as one of most powerful online networking tools, has been integrated into a part of social and economic life in the real world. Wikipedia defines social media as the means of interactions among people in which they create share, exchange and comment contents among themselves in virtual communities and network. It includes social networking sites, blogs, microblogs, consumer review sites, content community sites, wikis, internet forums and location based social media. Social media has emerged as the new way in which people connect socially, by integrating information and communication technology (such as mobile and web-based technologies), social interaction, and the construction of words, pictures, videos and audio. It is actually more than a new way to communicate, but refers to an entire online environment built on people's contributions and interactions. The importance of social media is growing in the realm of the tourism industry. More and more researchers are undertaking studies in the areas of the impact of social media on the tourism industry. The social media proved to be a major communication vehicle that spread across the region like wildfire. Tourism industry is one of the sectors that have benefited the most from the internet and as a result social media has become an integral part of any central or state tourism promotion and planning. This study investigates use of social media by Odisha Tourism in tourism promotion. The primary objective is to develop a framework on social media for tourism promotion in Odisha.

Keywords: Tourism, internet, social media, marketing, business, Promotion

Introduction

The last decade has seen a significant increase in the use of both social media and the general development of new technology worldwide. The tourism and hospitality industry has seen an impressive development since the



Characterization of the Regulatory Signatures of Peptidoglycan Recognition Proteins of *Apis Cerana* by *Insilico* Analysis

Mary Stella, Bhupanapadu Sunkesula, M. S. Reddy

Abstract: Honey bees (*Apis cerana*) are the most common species of South India, and are found in both natural and managed ecosystems. But since last two to three decades, bee depopulation and colony losses are strikingly increasing in these areas, due to pathogen infestation especially *Varroa*, loss or alterations within the ecosystem or agrochemical lands. These factors are creating a stressful environment within the bees, and as such some genetic predisposition among the genes which regulate such process. Pathogens, Acaricides, Fungicides, and Pesticides do affect the bee immune system and eventually their health.

In the present study, we employed *in-silico* methods to analyse the PGRPs gene comprehensively so as to investigate its regulatory activity. We predicted physico-chemical parameters and deduced that it does contain a signal peptide. PTM also are observed within the sequence, which could have damaging impact on this protein functioning. STRING is used to estimate the amount of protein interactions with the query protein. In conclusion, the information gathered or obtained could be used to understand the regulatory role of PGRPs so as it can provide a valuable source for the honey bee population-based studies.

Key words: *Apis cerana*, Peptidoglycan recognition proteins, ProtParam, STRING, Signal peptide.

I. INTRODUCTION

Ecosystem processing largely depends upon the insects, as their important ecological function is pollination [Jankielsohn, 2018]. Globally, according to the latest data available, it was stated that there is a drop in the number of pollinators [Goulson, 2015]. In tropical and temperate regions, especially in Southern parts of India honeybees (*Apis cerana*) among all the other insects play a major role in pollination. Commercial crops and wild plants are subjected to sexual reproduction by these pollinators. But rearing of honey bee colonies has a great thrash, even though they are reared in different socioeconomic aspects, Worldwide [Smith, 2013]. Multiple stressors like hazardous pesticides, infections by pathogens, nutritional stress are said to be responsible for the effect of colony declination.

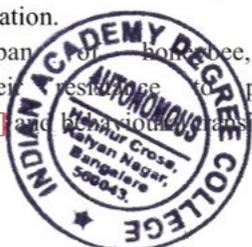
Impact on life span of honeybee, their immunocompetence, their resistance to pathogen infection [Basualdo, 2014] and their youth transition will

be affected by pollen nutrition. Colony loss due to the decline in the health of honey bees is because of the pathogens, *Varroa destructor*, RNA viruses and the microsporidia, *Nosema ceranae* [Higes, 2013]. Rearing of animals in artificial habitat need to face a broad range of potential confrontational environmental challenges. Artificial lighting, exposure to intolerant sound, odours in surrounding areas, and unfavourable temperatures or uncomfortable substrates are the abiotic factors that induces a change the environmental conditions which in turn led to stress in animals. Captivity specific stressors such as restricted movement, reduced sanctuary space, forced propinquity to humans, reduced feeding opportunities, abnormal social group maintenance, and other restrictions of behavioural opportunity can also be considered. [Kathleen, 2007].

Environmental enrichment was the conception to introduce artificial environment which was structurally simple and impassive to behaviour and moreover, animals could not interact with artificial environment provided to them, instead developed sensory and cognitive abilities which expressed species – typical behaviours.

Native habitat acquired composite environments to increase the immortality rate and reproductive success by their morphological and physiological behaviour. Captive animals dwell in the habitat, which is extensively different from that where they originated. Behavioural change was observed in such adapted animals and these adaptive changes resulted in genetic and phenotypic divergence between captive and wild populations [McPhee, 2002].

In general 3 levels of responses were observed within the captive or managed systems. Firstly, to meet the emergency specific needs, the individual has changed its behaviour. e.g. conforming to scheduled feeding or conspecific groupings. Secondly, the habitats of captive animals are more restricted when compared to wild. Altered environment might lead to change in animal behaviour and its response to future events. Thirdly, the response of many individual changes can be included and even expressed in population. Certain behaviours of captive population with altered expressions conferred greater survivorship on the individuals, e.g. developing tolerance to loud noises. These altered behaviours are genetically inherited, which resulted in a distribution of



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DOCKING STUDY OF ACTIVE PHYTOCOMPOUNDS FROM METHANOLIC FLOWER EXTRACT OF *Flacourtia jangomas* AGAINST CELL WALL PROTEINS OF *Candida tropicalis*

[SANGEETHA ANNIE GEORGE](#) ; [SHUBHA BHADRAN](#); [SUDHAKAR MALLA](#); [B. P. HARINI](#)

UTTAR PRADESH JOURNAL OF ZOOLOGY, Volume 42, Issue 19, Page 36-47

Published: 15 September 2021

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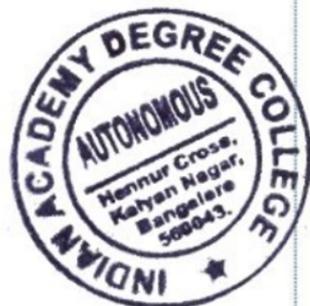
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Abstract

Human fungal infections have augmented in the last few decades. *Candida tropicalis* is the most prevalent amongst the non albican species of *Candida* causing these infections. Recent Research focuses on development of new drug leads from plant based novel molecules with potential therapeutic efficacy and lesser side effects. *Flacourtia jangomas* a common tree in South India is known for its pharmacological activities. In this study, the bioactive compounds identified from Gas Chromatography-Mass Spectrometry (GC-MS) analysis of methanolic flower extract of *Flacourtia jangomas* was subjected to molecular docking against the cell wall proteins of *Candida tropicalis*. From the *insilico* studies it was found that among all the ligands only two ligands, methyl myristate and methyl tridecanoate were best docked to the receptors, chitin deacetylase model 1 and 3 (CD1, CD3) and FET3 taking into consideration the Patchdock scores. It was found that the methyl myristate was found to be the best solution towards the chitin deacetylase model 1. The patchdock score was found to be 3688 with CD1. The patchdock score of the fluconazole. The binding affinity was found to be -5.3Kcal/Mol for methyl myristate and CD1 complex and found almost similar when compared to the positive control Fluconazole. Study on drug likeness of the ligands using SWISS ADME showed that methyl myristate and methyl tridecanoate were suitable for the lead molecules. The best molecular tract with TPSA values < 140 Å²; but stronger candidate drug being methyl myristate. As the findings indicated, methyl myristate showed good antifungal activity as they inhibited the cell wall protein, chitin deacetylase1 responsible for the survival of fungal organism *Candida tropicalis*; furthermore, they were suitable for the lead molecules.

Keywords: *Candida tropicalis*; *Flacourtia jangomas*; Patch Dock score; Fluconazole; chitin deacetylase1; methyl myristate



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Validation of Antioxidant and Immune Related Gene Members Among *Apis Cerana* Species of South India by Quantitative Real-Time PCR.

Mary Stella Bhupanapadu Sunkesula, M. S. Reddy

Abstract: *Apis cerana* most widely found bee species of southern parts of India is now at stress. Due to the increasing bee cultivation centres, these bees are under tremendous stress levels from both external and internal agents. External agents might be due to constant application of miticides and other chemical compounds. Wild varieties which are in a free setup, though infected by Varroa mites, could face little pressure.

We designed to study the effect of the habitat settings (natural and captive) on the bee species. Natural ones are those which are seen in forests, trees and other house roofs. Captive are those seen among the bee keeping centres. Antioxidant and immune related gene members were studied for their expression levels between the natural and captive environments.

As hypothesized, we found significant effects on the expression of the gene members. Bees kept in captivity showed over expression of both antioxidant and immune related genes when compared to the natural bees. Ribosomal protein (RP4) was used as housekeeping gene throughout the study. Among them 2 members, CYP6AS3 and CYP6AS10 showed contradictory results. Their expression was little more in natural bees when compared to the captive bees.

This study could pave ways of how to effectively manage the bees among the cultivated centres so as to get more yields, keeping in view of the colony collapse disorder. This validation studies could also throw knowledge on the actual mechanism involved in the stress regulation among this sweet little bees.

Key words: *Apis cerana*, Antioxidant genes, CYP6AS3 and CYP6AS10, Natural vs Captive.

In artificial and natural habitat, pollination of plants by honeybees (*Apis mellifera*) not only contributes for production of food and nourishment but also leads to increase in biodiversity. From the reports, it is estimated that globally, there is an overall increase in colony loss and honey bee depopulation. Apart from pathogens (parasites, fungi, bacteria and viruses), environmental factors, agrochemical use, many other factors seems to be reasons for the decline in honeybee population, which eventually is altering the immune system of bee for defense mechanisms.

Honey bees defend themselves against infectious and parasitic organisms by the innate immune system which also includes physical barriers and comprehensive cellular and humoral responses. Overall health status and immune system of bees can be affected by pathogens, acaricides, fungicides, herbicides and other pesticides. Pathogen recognition receptors, innate immune system effectors and signalling pathways are those defense mechanisms associated with bee immune system.

To control varroa mite [Johnson et al. 2010] treatment by miticides have been introduced as management strategy. Honey bee products were contaminated due to irrelevant application of miticides and this not only inflicted undesirable effects on the health of bees but also imparted the pesticide tolerance of varroa mites [Johnson et al. 2013]. Harmonious color, aroma, and structure of honey bees and biological characteristics are of great importance because of endured relationship and co-evolution with plants as pollinators in natural habitats [Garibaldi LA, et al. 2013]. Considerably there was increase in fruit seed rate and yield as the bees were introduced into greenhouses for pollination which led to reduction in the cost of artificially assisted pollination. However, there is a negative impact on the foraging behaviour and reproduction of bees due to reduced area resulting in variation of temperature and humidity [Ollerton J, et al. 2012].

Antioxidant system in *Apis cerana*: By-products of aerobic metabolism generate Reactive Oxygen Species (ROS) frequently. The data collected on ROS suggest that it causes oxidative damage to cellular components and responsible for retrogressive diseases and ageing. Mitochondria generate ROS which is about 90%



INTRODUCTION

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CIRCULAR

Date of workshop : 18th May 2022 to 20th May 2022
Venue : Biotechnology Laboratory 1 & 2
Time : 18th May 2022 - 12:00 – 2:00 pm, 19th May 2022 01:00 - 4:00 pm
& 20th May 2022 01:00 to 4:00 pm

Genome editing in general, and CRISPR-Cas9 in particular, is a revolutionary tool that can impact science, food production, and society. CRISPR-Cas9 has great potential for transforming agriculture by making plants tolerant to biotic and abiotic stresses and improving their nutritional value and yield. These attributes are necessary to meet the demand of an increasing world population. CRISPR-Cas9 system has a wide diversity of applications. In medicine, it has been applied in research related to cancer, virus infections, genetic diseases, and the detection of pathogens. In view of keeping the current trend with the latest technology, CRISPR-Cas9 and to equip students with the technique the Department of Biotechnology, IADCA in association with Vowels Advanced School of Learning and Research (VASLR) is organizing an In house Hands-on workshop on "**CRISPR/CAS Gene Editing: Potential tool in therapy & diagnostics**".

The objectives of the workshop are as follows:

- To help participants to perform *In silico* experiments.
- To provide a thorough understanding of genome editing.
- To exercise the hands on experience for future research career.

The outcomes of the workshop are mentioned below:

- Help students gain confidence and perform a "real CRISPR experiment" in wet lab conditions.
- Understand and perform DNA editing (*In silico* / wet lab) for various molecular biology applications.
- Follow scientific literature on genome editing and understand the possibilities and limitations of its therapeutic applications.

Resource person: Dr. Gokul Kesavan, PhD, Program Director, Vowels Advanced School of Learning and Research (VASLR), Bangalore.

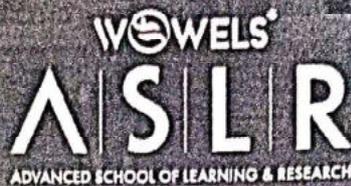
Certificates (hard copy) will be provided on the completion of the workshop to all the participants. Each student/participant will charged with Rs.400/- (Four Hundred rupees only) for the workshop.

Head of Department, Biotechnology
Head of the Department
Department of Biotechnology
Indian Academy Degree College - Autonomous
Bangalore - 560 043

Principal
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INDIAN ACADEMY DEGREE COLLEGE
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HENNUR MAIN ROAD
BANGALORE - 43

INDIAN ACADEMY

Degree College - Autonomous



DEPARTMENT OF BIOTECHNOLOGY

IADC - A, Bengaluru in association with Vowels Advanced School of Learning & Research (VASLR) is organizing an In house Hands-on workshop on

"CRISPR / CAS Gene Editing: Potential tool in therapy & diagnostics"



WEDNESDAY, 18TH MAY 2022



12:00PM - 02:00PM



THURSDAY, 19TH MAY 2022



01:00PM - 04:00PM



FRIDAY, 20TH MAY 2022



01:00PM - 04:00PM



BIOTECHNOLOGY LABORATORY 1 & 2

Resource person:

Dr. Gokul Kesavan

Ph.D., Programme Director,
Vowels Advanced School of Learning &
Research (VASLR), Bangalore.

Mr. Midhun A Kunj

Co-Founder & Director

Programme Co-ordinator:

Dr. Mohammed RafiqKhan K
Associate Professor

Convener:

Dr. Paramesh H
HOD, Dept. of Biotechnology

Organising Members:

Prof. Sudhakar M
Associate Professor

Dr. Divya
Assistant Professor

Certificates (hard copy) will be provided on the completion of the workshop to all the participants.

INDIAN ACADEMY

Degree College - Autonomous

Three days Research Oriented In house Hands on Workshop on
"CRISPR-Cas gene editing: potential tool in therapy and diagnostics"

Organized by
 Department of Biotechnology,
 Indian Academy Degree College (Autonomous), Bengaluru
 and



VOWELS- Advanced School of Learning and Research, Bengaluru

On
 18th to 20th May 2022

ATTENDANCE PROFORMA

Sl. No.	Register No.	Name of the Participant	Signature of the Participant			
			18 th May	19 th May	20 th May	Certificate
IV SEMESTER M.Sc. BIOTECHNOLOGY						
1	20IAMOS024	Adarshini K	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	20IAMOS025	Akbar Babu	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	Akbar Babu
3	20IAMOS026	Bhavani M P	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
4	20IAMOS027	Chetana Ganga G	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
5	20IAMOS029	Inchara S	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
6	20IAMOS030	Kammara Sumanjali	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
7	20IAMOS031	Kavya Kb	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	20IAMOS032	Manjunatha V L	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
9	20IAMOS036	Sharina N K	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	20IAMOS037	Sharon Sherly Samuel M S	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	20IAMOS040	Yashodha T K	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
I SEMESTER M.Sc. BIOTECHNOLOGY						
12	21IAMOS025	Aditya Mandal	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	21IAMOS026	Aimen Nawar	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
14	21IAMOS027	Aishwarya Puranic	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15	21IAMOS028	Archana Kumari	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
16	21IAMOS029	Ariba Hafeez	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
17	21IAMOS030	Bhagyashree Mahendran	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
18	21IAMOS031	Bhanu Shree S	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
19	21IAMOS032	Bhavani S	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
	21IAMOS061	Sneetha-CrB	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

			Signature of the Participant			
			18 th May	17 th May	20 th May	2 nd Certificate
20	21IAMOS033	Chandan K	Chandan K	Chandan K	Chandan K	Chandan K
21	21IAMOS035	Divya R	Divya R	Divya R	Divya R	Divya R
22	21IAMOS036	Gokul A	Gokul A	Gokul A	Gokul A	Gokul A
23	21IAMOS037	Jaya Surya Raju K	Jaya Surya Raju K	Jaya Surya Raju K	Jaya Surya Raju K	Jaya Surya Raju K
24	21IAMOS039	Khamnam Urmila Devi	Urmila	Urmila	Urmila	Urmila
25	21IAMOS040	Kondakamarla Hadiya	Hadiya	Hadiya	Hadiya	Hadiya
26	21IAMOS041	Koppala Padmapriya	K. padmapriya	K. padmapriya	K. padmapriya	K. padmapriya
27	21IAMOS042	Lavanya L V	Lavanya L V	Lavanya L V	Lavanya L V	Lavanya L V
28	21IAMOS043	Mallepalli Lokesh	Lokesh	Lokesh	Lokesh	Lokesh
29	21IAMOS044	Manasa N	Manasa N	Manasa N	Manasa N	Manasa N
30	21IAMOS045	Manasa P	Manasa P	Manasa P	Manasa P	Manasa P
31	21IAMOS046	Manasa S G	Manasa S G	Manasa S G	Manasa S G	Manasa S G
32	21IAMOS047	Monisha A	Monisha A	Monisha A	Monisha A	Monisha A
33	21IAMOS048	Moolinti Myna	M. Myna	M. Myna	M. Myna	M. Myna
34	21IAMOS049	Navya G N	Navya G N	Navya G N	Navya G N	Navya G N
35	21IAMOS050	Navya H L	Navya H L	Navya H L	Navya H L	Navya H L
36	21IAMOS051	Neemashree N	Neemashree N	Neemashree N	Neemashree N	Neemashree N
37	21IAMOS052	Nitesh Gowda S	Nitesh Gowda S	Nitesh Gowda S	Nitesh Gowda S	Nitesh Gowda S
38	21IAMOS053	Niveditha V	Niveditha V	Niveditha V	Niveditha V	Niveditha V
39	21IAMOS054	Pankhi Borah	Pankhi Borah	Pankhi Borah	Pankhi Borah	Pankhi Borah
40	21IAMOS056	Preeti Sao	Preeti Sao	Preeti Sao	Preeti Sao	Preeti Sao
41	21IAMOS057	Rajshekara S	Rajshekara S	Rajshekara S	Rajshekara S	Rajshekara S
42	21IAMOS058	Sankhadip Dolui	Sankhadip Dolui	Sankhadip Dolui	Sankhadip Dolui	Sankhadip Dolui
43	21IAMOS059	Sara Salomi	Sara Salomi	Sara Salomi	Sara Salomi	Sara Salomi
44	21IAMOS060	Satish Maharaya Gavade	Satish Maharaya Gavade	Satish Maharaya Gavade	Satish Maharaya Gavade	Satish Maharaya Gavade
45	21IAMOS061	Shwetha G K	Shwetha G K	Shwetha G K	Shwetha G K	Shwetha G K
46	21IAMOS062	Soniya K M	Soniya K M	Soniya K M	Soniya K M	Soniya K M
47	21IAMOS063	Sridhar C A	Sridhar C A	Sridhar C A	Sridhar C A	Sridhar C A
48	21IAMOS064	Subhankar Pradhan	Subhankar Pradhan	Subhankar Pradhan	Subhankar Pradhan	Subhankar Pradhan
49	21IAMOS065	Thoti Bhanuprakash	Thoti Bhanuprakash	Thoti Bhanuprakash	Thoti Bhanuprakash	Thoti Bhanuprakash
50	21IAMOS066	V Pushpalatha	V Pushpalatha	V Pushpalatha	V Pushpalatha	V Pushpalatha
51	21IAMOS067	Vandhana	Vandhana	Vandhana	Vandhana	Vandhana
52	21IAMOS068	Veena N	Veena N	Veena N	Veena N	Veena N
53	21IAMOS069	Venugopala B	Venugopala B	Venugopala B	Venugopala B	Venugopala B
54	21IAMOS070	Vidhya N	Vidhya N	Vidhya N	Vidhya N	Vidhya N
55	21IAMOS071	Vinay K N	Vinay K N	Vinay K N	Vinay K N	Vinay K N
56	21IAMOS072	Vivekananda D	Vivekananda D	Vivekananda D	Vivekananda D	Vivekananda D
IV SEMESTER M.Sc. BIOCHEMISTRY						
57	20IAMOS010	Ashrith Kumar A	Ashrith Kumar A	Ashrith Kumar A	Ashrith Kumar A	Ashrith Kumar A
58	20IAMOS014	Harikrishnan	Harikrishnan	Harikrishnan	Harikrishnan	Harikrishnan

INDIAN ACADEMY

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- 1. Title of the Event:** In house Hands-on workshop on "CRISPR/CAS Gene Editing: Potential tool in therapy & diagnostics".
- 2. Place:** Biotechnology Laboratory 1 & 2, IADCA, Bangalore
- 3. Date:** 18th to 20th-May-2022 ,
 1. 18th May 2022 - 12:00 – 2:00 pm,
 2. 19th May 2022 01:00 - 4:00 pm
& 20th May 2022 01:00 to 4:00 pm
- 4. Name of the Resource Person:** Dr. Gokul Kesavan, PhD, Program Director, Vowels Advanced School of Learning and Research (VASLR), Bangalore.
- 5. Broad Aim of the Event:** Genome editing in general, and CRISPR-Cas9 in particular, is a revolutionary tool that can impact science, food production, and society. CRISPR-Cas9 has great potential for transforming agriculture by making plants tolerant to biotic and abiotic stresses and improving their nutritional value and yield. These attributes are necessary to meet the demand of an increasing world population.
- 6. Objectives (at least 3):**
 1. To help participants to perform In silico experiments.
 2. To provide a thorough understanding of genome editing.
 3. To exercise the hands on experience for future research career.

7. Outcomes (at least 3):

1. Help students gain confidence and perform a "real CRISPR experiment" in wet lab conditions.
2. Understand and perform DNA editing (In silico / wet lab) for various molecular biology applications.
3. Follow scientific literature on genome editing and understand the possibilities and limitations of its therapeutic applications.

8. Brief details about the event:

CRISPR-Cas9 system has a wide diversity of applications. In medicine, it has been applied in research related to cancer, virus infections, genetic diseases, and the detection of pathogens. The students really enjoyed learning by doing with expertize hands on experience with good feedback.



Head of the Department

Head of the Department
Department of Biotechnology
Indian Academy Degree College - Autonomous
Bangalore - 560 043

Principal

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BANGALORE-560043, KARNATAKA

INDIAN ACADEMY
Degree College - Autonomous
DEPARTMENT OF BIOTECHNOLOGY

07-03-2022

CIRCULAR

Date of webinar : 09-03-2022
Venue : Seminar Hall - 2
Time : 11:00 am to 1:00 pm

In view of "Azadi ka Amrit Mahotsav" the Department of Biotechnology, IADCA in association with Intellectual Property India; Ministry of Industry and Commerce, Govt. of India; Institution Innovation Council and Patent Office Chennai is organizing a webinar on "**Intellectual Property Rights & Protection in India**".

The **objectives** of the webinar are as follows:

- To recognize the importance of IP and to educate the pupils on basic concepts of Intellectual Property Rights, the significance of practice, and the procedure of Patents.
- To make the students understand the statutory provisions of different forms of IPRs in simple forms.
- To learn the procedure of obtaining Patents, Copyrights, Trade Marks, & Industrial Design.

The **outcomes** of the webinar are mentioned below:

- Apply intellectual property law principles (including copyright, patents, designs, and trademarks) to real problems and analyze the social impact of intellectual property law and policy.
- Work in teams, solve problems and manage time.
- Analyse ethical and professional issues which arise in the intellectual property law context.

Resource person: **Mr. Abhishek Singh, Examiner of Patents & Design Patent Office, Chennai. Ministry of Industry & Commerce, Govt. of India**

We request all the HoDs and faculty to render their support by participating in the webinar. E-certificates will be provided from the National Intellectual Property Awareness Mission (NIPAM), Govt. of India.

HoD, Dept. of Biochemistry

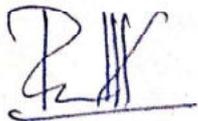
HoD, Dept. of Chemistry

HoD, Dept. of Genetics

HoD, Dept. of Microbiology

HoD, Dept. of Zoology

Enclosure: Brochure with QR scan code of the webinar link


Head of Department, Biotechnology
Department of Biotechnology
Indian Academy Degree College - Autonomous
Bangalore-560043


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INDIAN ACADEMY

Degree College - Autonomous
Department of Biotechnology
In association with



Organises a Webinar on

"Intellectual Property Rights & Protection in India"



WEDNESDAY, 09TH MARCH 2022



11:00AM - 01:00PM



SEMINAR HALL - II



Chief Guest

Mr. Abhishek Singh

Examiner of Patents & Design Patent Office, Chennai,
Ministry of Industry & Commerce, Govt of India.

Patron

Dr. Srinidhi K Parthasarathi

Principal,
Indian Academy Degree College - Autonomous

Covener

Dr. Paramesh H

Head of Biotechnology

Coordinator

Dr. Mohammed Rafiq Khan K

Associate Professor of Biotechnology

Organizing Members

Prof. Sudhakar Malla

Dr. Amrita Roy

Dr. Divya



Scan QR Code to join the Webinar:

✓ E-Certificates will be provided to the participants

INDIAN ACADEMY

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Webinar on
"Intellectual Property Rights and its protection in India"

Organized by
Department of Biotechnology,
Indian Academy Degree College (Autonomous), Bengaluru

In association with



On
09th March 2022

Chief Guest

Mr. Abhishek Singh

Examiner of Patents & Designs, Patent Office, Chennai

ATTENDANCE PROFORMA

S No	Register Number	Name of the Student	Class and Programme	Signature
1.		ARIBA HAFEEZ	I SEM MSC	Ariba
2.		ARCHANA KUMARI	I SEM MSC	Archana
3.		AIMEN NAWAR	I SEM Msc	Aimen
4.		BHAVANI.S	I SEM MSC	Bhavani's
5.		NEERMA SHREE.N	I SEM MSC.	Neerma
6.		HADIYA.K	I SEM Msc.	Hadiya
7.		PUSHPA LATHA.V	I SEM MSC	VPushpalatha

S No	Register Number	Name of the Student	Class and Programme	
8.	201AM05027	CHETANA GANGA. G	III rd Sem MSc Biotechnology	Chetana
9.	201AM05025	BHAVANI. M. P	III rd Sem MSc Biotechnology	Bhavani
10.	201AM05037	SHARON SHERLY SAMUELMS	III rd Sem, Msc. BT	Sharon
11.	201AM05031	KAVYA R. B	III rd Sem, Msc, BT	Kavya
12.	201AM05030	SUMANJALI	III rd Sem, Msc, BT	Suma
13.	201AM05024	ADARSHINI. K	III rd Sem, MSc, BT	Adarshini
14.	201AM05040	YASHOPHA	III rd Sem, MSc, BT	Yashopha
15.				
16.				
17.				
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24.				
25.				
26.				
27.				
28.				

S No	Register Number	Name of the Student	Class and Programme	Signature
29.		Padma priya . k	I sem MSC	Padmapriya
30.		Veena . N	I sem MSC	Veena
31.		Khammam Umila Devi	I sem MSC	Khammam
32.		Aishwarya Pawanic	I sem MSC	Aishwarya
33.		Preeti Pao	I SEM MSC	Preeti
34.		Sara Salomi	I st sem MSC	Sarasalomi
35.		Bhagyashree . M	Ist sem MSC	Bhagyashree
36.		Vandana	Ist Sem MSC	Vandana
37.		Navya.HL	Ist SEM MSC BT	Navya
38.		Manasa . P	I st Sem MSC BT	Manasa P
39.		C. Bhavya Sri	Ist sem Msc Biotec	C. Bhavya Sri
40.		Navya GN	Ist Sem MSc Biotec	Navya
41.		Sonaja KM	Ist Sem MSc Biotec	Sonaja KM
42.		Nitesh Gowda . S	I st Sem MSc Biotec	Nitesh Gowda
43.		Jayasanga Raju . K	I st Sem M.Sc Biotech	Jayasanga
44.		Vivekananda . D	I st Sem. M.Sc Biotech	Vivekananda.D
45.		Rajshanker . S	I st sem . Msc Biotech	Rajshanker . S
46.		Chandan . K	I st Sem MSC Biotech	Chandan . K
47.		Vinay . K . N .	I st Sem M.Sc Biotech	Vinay . K . N .
48.		Sridhar . C . A	I st Sem M.Sc Biotech	Sridhar . C . A
49.		Bhannu Prakash . T	I st Sem MSc Biotech	Bhannu Prakash

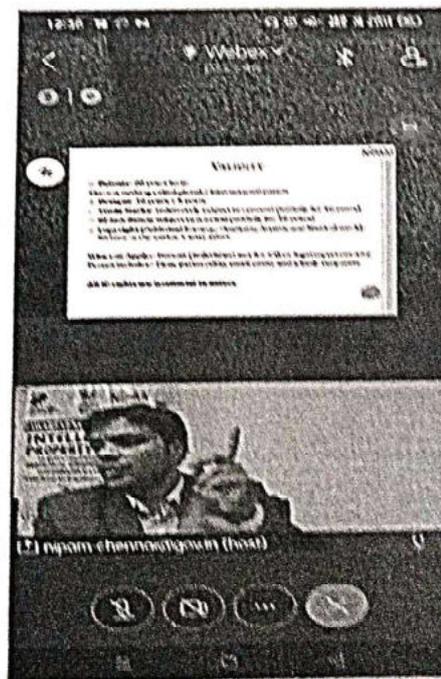
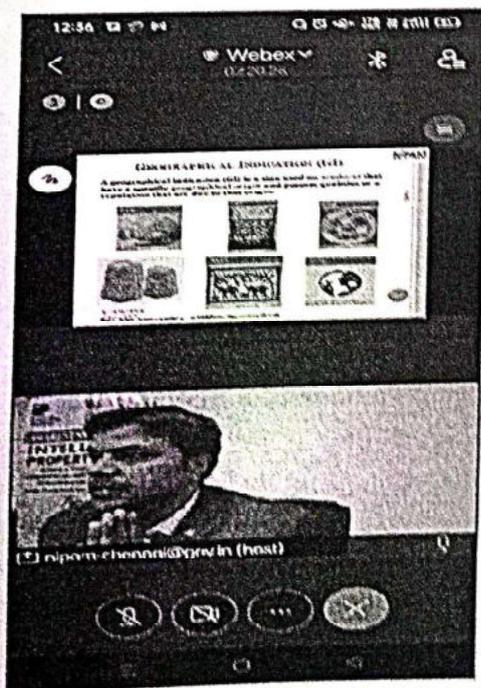
INDIAN ACADEMY

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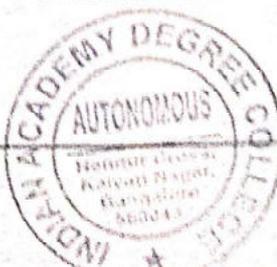
Department of Biotechnology Report on Webinar

"Intellectual Property Rights and its Protection in India"

The Department of Biotechnology, Indian Academy Degree College – Autonomous, Hennur Cross, Hennur Main Road, Kalyan Nagar, Bengaluru in association with Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry; Intellectual Property India; NIPAM (National IP Awareness Mission) Organized a Webinar on **"Intellectual Property Rights and its Protection in India"** in the College Premises on 9th March 2022. Dr. Paramesh H, Associate Professor and Head of Biotechnology welcomed the gathering. Dr. Mohammed Rafiq Khan K, Associate Professor of Biotechnology introduced the Chief Guest. Mr. Abishek Singh, Examiner of Patents and Design, Patent Office, Chennai was the Chief Guest and delivered a Lecture on **"IPR and its protection in India"**. The programme aimed to create the first level IPR awareness among the participants about the beneficial aspects of patenting their creative and novel ideas, inventions, etc. Nearly 200 Students, Research Scholars and Academicians participated in the Webinar. Vote of thanks was rendered by Prof. Sudhakar Malla, Associate Professor of Biotechnology. Dr. Amrita Roy and Dr. Divya, Assistant Professors of Biotechnology Coordinated the Webinar.



Head of the Department



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INDIAN ACADEMY

Degree College - Autonomous

"Know the Biocatalysts - A Workshop on Enzymology"

Organized by Department of Biotechnology

Resource Persons:

Dr. Amrita Roy Assistant Professor

Dr. Md Rafiq Khan K Associate Professor



सत्यमेव जयते

Sponsored by the DBT - STAR College Programme,
Department of Biotechnology, Govt. Of India.

Organizing Members:

Dr. Paramesh H. HOD, Associate Professor

Prof. Sudhakar Malla Assistant Professor

Dr. Divya Assistant Professor

Beneficiaries : UG III Sem Life Science students
Difficulty level: Beginners

THURSDAY, DECEMBER 16TH, 2021 AT 10.00 AM

- Thrust Area: Skill Development
- Free Registration
- E-Certificate will be provided to all the participants



Registration Link & QR Code

Hennur Main Road, Kalyan Nagar Post, Bangalore - 560 043

www.indianacademy.edu.in

☎ 080674 58900

f @ t v / Indianacademy

"Know the Biocatalysts—a Hands-on Workshop on Enzymology"

Organized by

Department of Biotechnology,
Indian Academy Degree College (Autonomous), Bengaluru

Sponsored Under
DBT-STAR College Scheme



Department of Biotechnology
Ministry of Science & Technology
Government of India

On

16th December 2021

LIST OF PARTICIPANTS – ATTENDANCE PROFORMA

S No	Name of the Student	Register Number	Class and Programme	Signature of the Candidate with Date
1.	VEERA NARAYANA REDDY K	20IABSC008	II B.Sc., GBcBt	<i>K. Veera Reddy</i> 16/12/2021
2.	SUKANYA RAMESH BHAT	20IABSC058	II B.Sc., CZBt	<i>Sukanya Ramesh</i> 16/12/2021
3.	LOHITH V	20IABSC011	II B.Sc., GBcBt	<i>Lohith V</i> 16/12/2021
4.	DARSHAN V	20IABSC052	II B.Sc., CZBt	<i>Darshan V</i> 16/12/2021
5.	J SATYA NARAYANA	20IABSC053	II B.Sc., CZBt	<i>J Satya Narayana</i> 16/12/2021
6.	NIKSHITHA.M	20IABSC013	II B.Sc., GBcBt	<i>Nikshitha M</i> 16/12/2021
7.	SHIVA SATHYA K.E	20IABSC057	II B.Sc., CZBt	<i>Shiva Sathya K.E</i> 16/12/2021
8.	PRIYANKA.J	20IABSC016	II B.Sc., GBcBt	<i>Priyanka J</i> 16/12/2021
9.	TRISHA BHATTACHARYA	20IABSC021	II B.Sc., GBcBt	<i>Trisha</i> 16/12/2021
10.	ABITHA S	20IABSC001	II B.Sc., GBcBt	<i>Abitha S</i> 16/12/2021

11.	G YASWANTH KUMAR	201ABSC006	II B.Sc., GBcBt	Y. V. Kumar 16-12-2021
12.	THAVASI M	201ABSC060	II B.Sc., CZBt	Thavasi.M 16-12-2021
13.	VINAY KUMAR V	201ABSC022	II B.Sc., GBcBt	Vinay Kumar.V 16-12-2021
14.	ROHIT RAJESH	201ABSC056	II B.Sc., CZBt	Rohit 16-12-2021
15.	RAHUL CURIE	201ABSC016	II B.Sc., GBcBt	Rahul 16-12-2021
16.	VENKAT CHARAN	201ABSC002	II B.Sc., GBcBt	— ABSENT —
17.	ROSHAN KADROLLI	201ABSC019	II B.Sc., GBcBt	Roshan 16-12-2021
18.	VINITHA MURUGAN	201ABSC023	II B.Sc., GBcBt	Vinitha.M 16/12/2021
19.	CHIRANTH M	201ABSC005	II B.Sc., GBcBt	Chiranth 16/12/2021
20.	LAVANYA J M	201ABSC010	II B.Sc., GBcBt	Lavanya J.M 16-12-2021
21.	JEESHAN AHMED	201ABSC054	II B.Sc., CZBt	— ABSENT —
22.	THOUHEED. M	201ABSC020	II B.Sc., GBcBt	— ABSENT —
23.	THANUSHA. R	201ABSC049	II B.Sc., GBcMb	Thanusha.R 16-12-2021
24.	K.VANITHA	201ABSC039	II B.Sc., GBcMb	Vanitha.K 16/12/21
25.	SHALINI	201ABSC046	II B.Sc., GBcMb	Shalini.V.K 16/12/21
26.	RAVI KUMAR	201ABSC018	II B.Sc., GBcBt	Ravi Kumar 16/12/21
27.	HARI KEERTHANA	201ABSC037	II B.Sc., GBcMb	Hari Keerthana 16/12/21
28.	LAKSHMIPRIYA MP	201ABSC009	II B.Sc., GBcBt	Lakshmi 16/12/21
29.	JEEVITHA.G.	201ABSC038	II B.Sc., GBcMb	Jeevitha.G 16-12-2021
30.	VANDANA. S	201ABSC050	II B.Sc., GBcMb	Vandana.S 16/12/2021
31.	RANJITH KUMAR	201ABSC033	II B.Sc., CZMb	— ABSENT —

32.	SHRAVANI	20IABSC047	II B.Sc., GBcMb	Shravani 16/12/21
33.	RACHITHA. K	20IABSC043	II B.Sc., GBcMb	Rachitha K 16/12/2021
34.	RUDRAKSHINI. S	20IABSC045	II B.Sc., GBcMb	Rudrakshini 16/12/2021
35.	NIDA KHAN	20IABSC041	II B.Sc., GBcMb	Nida Khan (16-12-21)
36.	NANCY NAYMOI A	20IABSC032	II B.Sc., CZMb	Nancy. A (16-12-21)
37.	MANISHA SRI .K	20IABSC030	II B.Sc., CZMb	Manisha (16-12-21)
38.	SYEDA ASMA	20IABSC048	II B.Sc., GBcMb	Syeda Asma (16-12-21)
39.	KAMINI G	20IABSC055	II B.Sc., CZBt	Kamini G (16-12-21)
40.	RAHUL.C	20IABSC044	II B.Sc., GBcMb	Rahul.C (16-12-21)
41.	CHANDANA. P. V	20IABSC027	II B.Sc., CZMb	Chandana.P.V - 16/12/21
42.	ALAINA ARA	20IABSC026	II B.Sc., CZMb	Alaina Ara - 16/12/21
43.	DEEPTHI.B	20IABSC028	II B.Sc., CZMb	Deepthi.B - 16/12/21
44.	ANNORA BLESSY	20IABSC051	II B.Sc., CZBt	Annora Blessy - 16/12/21
45.	NIKITHA V YADAV	20IABSC042	II B.Sc., GBcMb	Nikitha V - 16/12/21

1. Roy

2. P. H. 16/12/2021

RESOURCE PERSONS

1. Dr Amrita Roy, Assistant Professor of Biotechnology
2. Dr. Mohammed RafiqKhan K, Associate Professor of Biotechnology



HEAD OF THE DEPARTMENT

Dr. Paramesh H
 Head of the Department
 Department of Biotechnology
 Indian Academy Degree College - Autonomous
 Bangalore - 560 043

INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF BIOTECHNOLOGY

Hands on training on Molecular Docking

Resource person: Bionome Solutions

Venue: BCA lab

Timings: 9.30-11am

Students: MSc 3sem Biotechnology

Objectives:

- To create an awareness about basic tools and techniques used in *insilico* analysis.
- To provide hands-on-training on the molecular docking technique.
- To inspire the students on various *insilico* applications with the lab based research.

Learning outcomes:

- Students will learn of the receptors and ligands and their interaction with each other.
- Students will also learn of how to retrieve and data mine the structures of various receptors from databases.

About bionome:



BioNome
A BIOTECHNOLOGY COMPANY

Bioinformatics Division of SRNOME PRIVATE LIMITED!!!

BioNome is a leading certified organization approved by Ministry of Corporate Affairs, Government of India and also ISO Certified (9001:2015) located in world's fastest growing tech – hub Bengaluru, India. BioNome is equipped with advanced computational instruments and software to provide high quality Research and Development services and Programs in the field of Life Science such as Bioinformatics, Next-Generation Sequencing, Clinical Research, Scientific Article Writing, Dissertation and Research Projects.

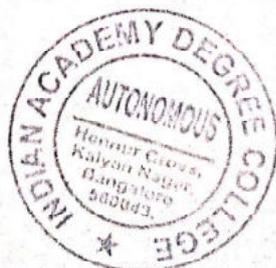
At present, Bioinformatics is a fast growing field both at the level of Academia and Industry. At BioNome, we are keen to create awareness on the Scope of Bioinformatics through Free workshops. BioNome runs a series of bioinformatics workshops to train students and researchers in developing their own data analysis methods, and enabling them to choose the right tools in their specific research projects. Each workshop includes both lectures and hands-on sessions.

Report:

A hands on training workshop was held at IADC-A on 24th February 2022, in order to educate the 3rd semester M.Sc Biotechnology students about Molecular Docking which is a part of the Bioinformatics curriculum. The workshop was organized and hosted by Prof.Sudhakar Malla, Faculty-Dept. of Biotechnology, IADC-A and was conducted by BioNome, a Biotechnology company based in Bangalore. It deals with the high quality Research and Development services, in the field of Bioinformatics, Biotechnology, Microbiology, Genomics, Next-Generation Sequencing, Clinical Research. It focuses on conducting Workshop, Training and Internship Programs, along with B.Sc., M.Sc., PhD Research Projects. The company is led by Mr.Sameer (Director) and Mr. Rajan (CEO) who are the alumni of IADC-A.

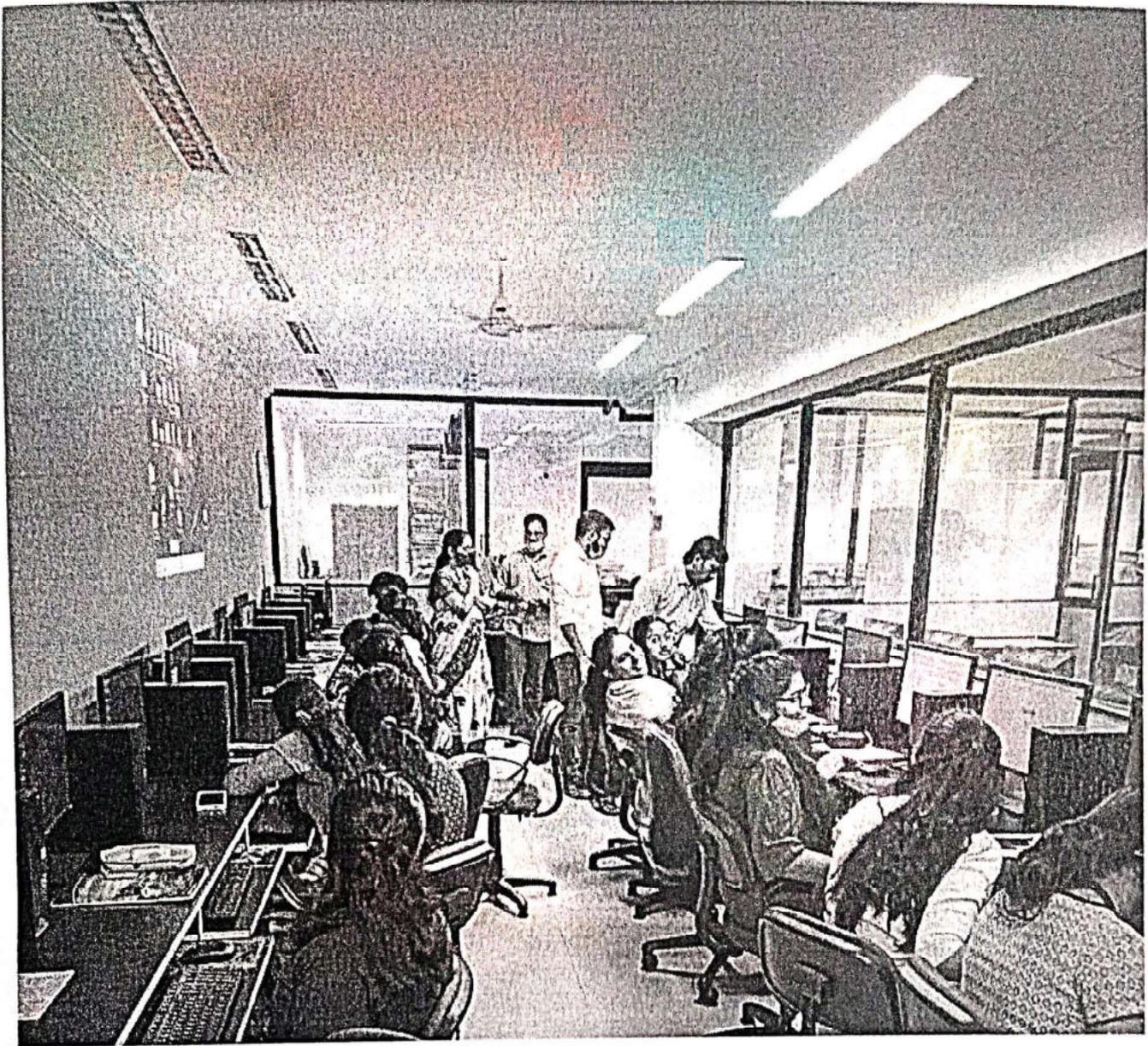
The workshop began with an introductory talk by Mr.Sameer. A description about what is "Bioinformatics" and its use in the vast array of tasks in today's world was addressed. This was then followed by the introduction lecture about the main topic of the workshop "Molecular Docking" which is the key tool used for computerized drug designing. The protein "1J2E" called as Human Dipeptidyl peptidase IV and "Apigenin" a phyto-compound was used as a ligand for the protein-ligand molecular docking example. Followed by this, different databases were explained such as NCBI, PDB, PubChem, ChEMBL, ZINC etc. After the theoretical explanation of the topic, hands-on training began for the above mentioned molecules using PDB and PubChem databases along with Biovia Discovery Studio and Pyrx softwares. The protein and ligand structures were downloaded using databases and their interaction was predicted using the softwares which went on with ease. Every student was mentored/guided by the training personnel by clarifying their doubts regarding the software use.

The next session was conducted by Mr. Rajan who interacted with the students about their interest w.r.t them pursuing research or being a part of the corporate world. He gave the insights about how to go on with research and also explained about various programs provided by their company and how one can benefit from it. The workshop finally ended with a Q&A session where every student was given a chance to come up with their queries which were gracefully answered by the respective personnel.



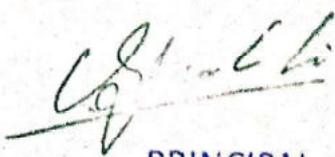
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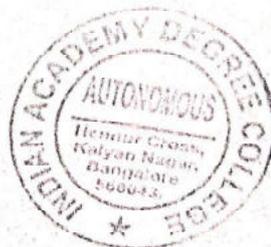
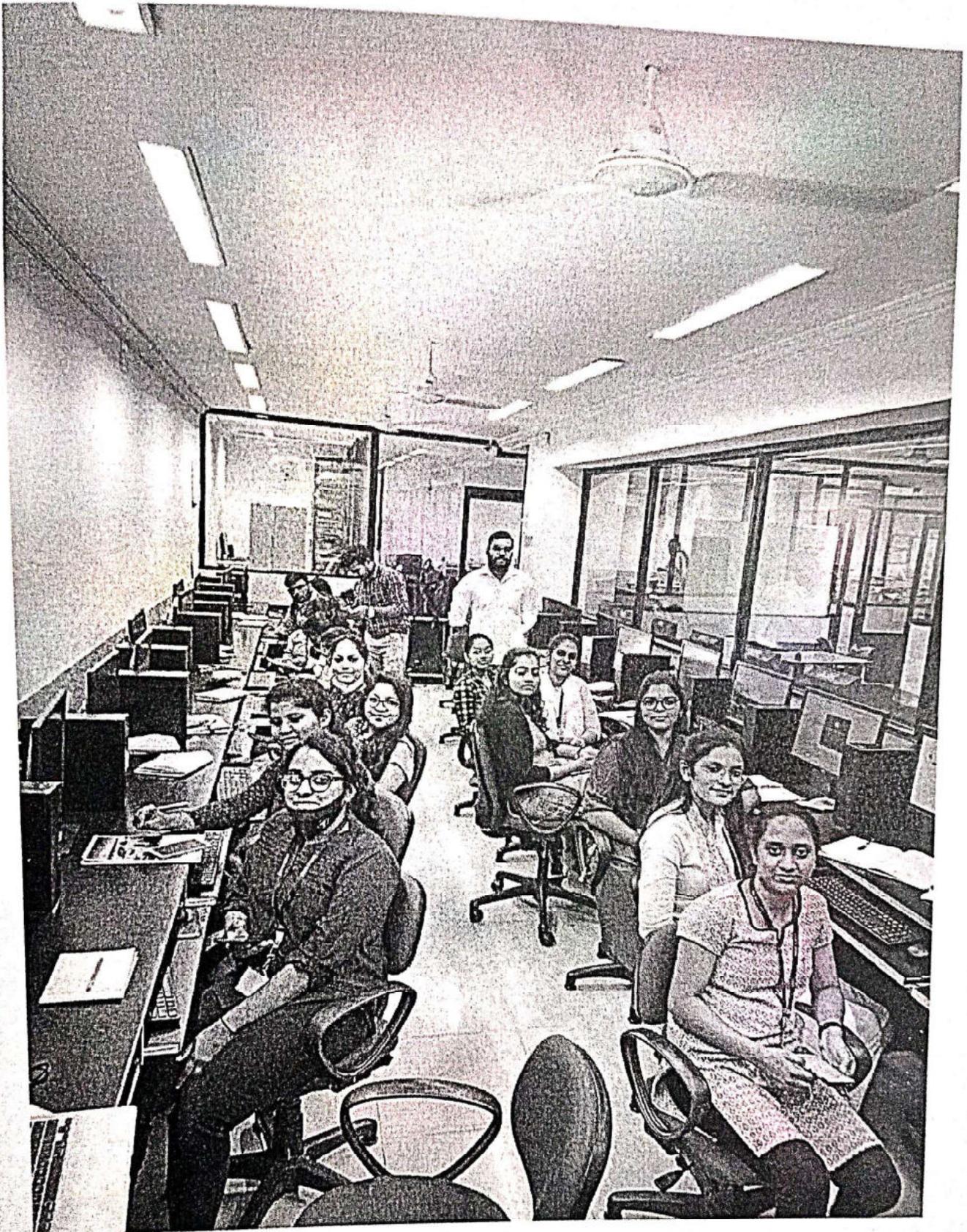
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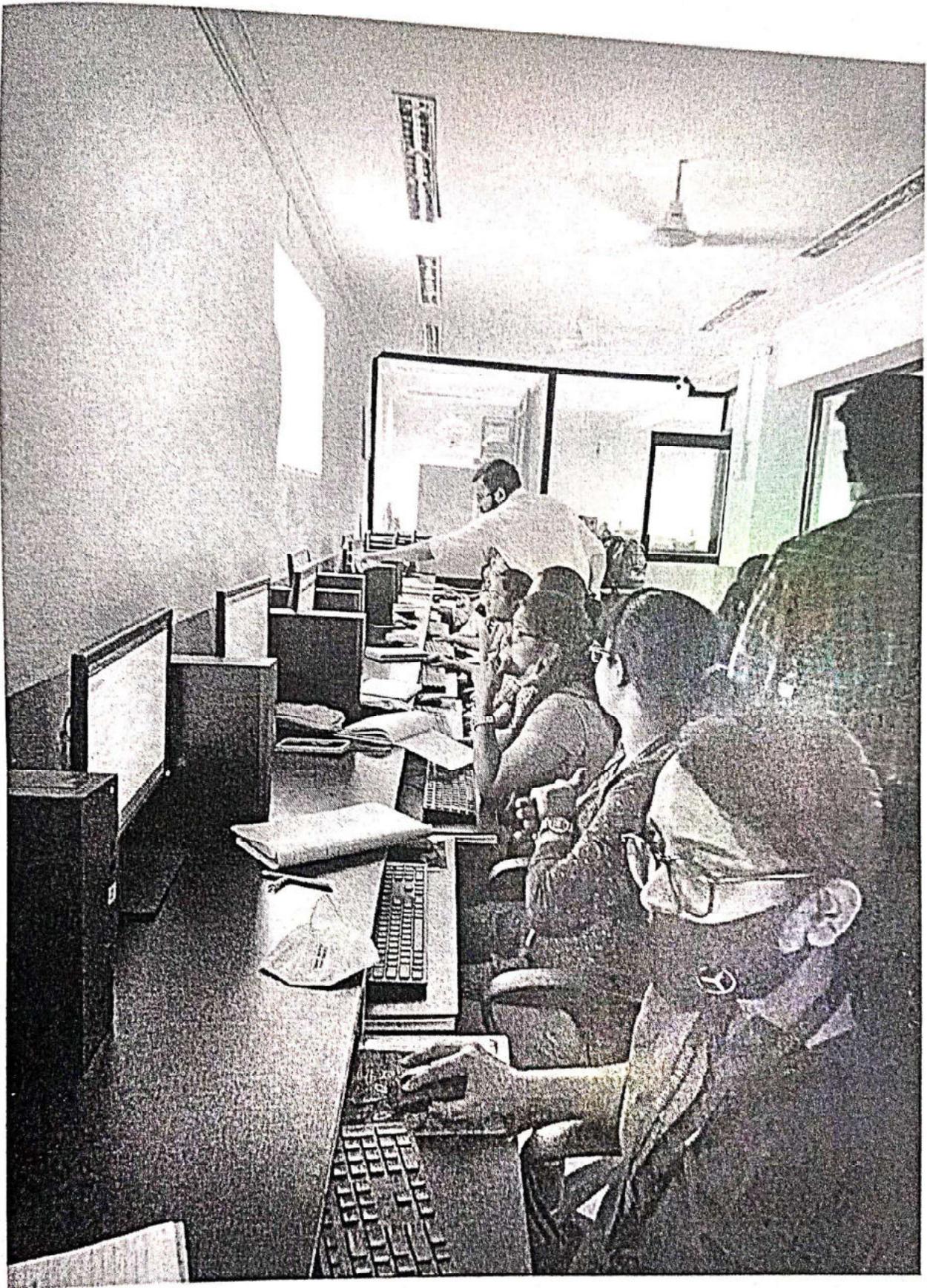
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INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF BIOCHEMISTRY

Date: 14-01-2022

To,

The Principal,
Indian Academy Degree College-
Autonomous
Bangalore-560043

Sub: Permission to conduct a **Webinar on “Cancer Awareness Day”**.

Respected Sir,

Our Department would wish to organize a Webinar on “**Cancer Awareness Day**” for both PG & UG Life Science students on **04-02-2022**. I have attached the tentative flyer for your kind reference and request you to permit us organizing this event virtually.

I also request you to permit us in taking the help of Institutional Designer team for finalizing the event flyer.

Thanking you Sir

Kind Regards,


Dr. Ananda Vardhan H,
HOD-Biochemistry
IADCA
HEAD

Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Bangalore-560 043


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Bangalore - 560043

INDIAN ACADEMY DEGREE COLLEGE

AUTONOMOUS

Reaccredited by NAAC with 'A' Grade | Recognized by Govt. of Karnataka | Affiliated to Bengaluru North University

Date:14-01-2022

To,

Dr. C. D. Mohan,
Assistant Professor,
Department of Studies in Molecular Biology,
University of Mysore,
Manasagangotri, Mysuru - 570009.

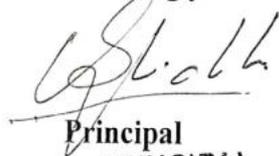
Sub: Invitation as a Resource Person for a Virtual Guest Talk on “Cancer Awareness Day”.

Respected sir,

We are extremely glad to invite you as a resource person to the virtual guest talk during “**Cancer Awareness Day**” on **4th February 2022**, organized by Department of Biochemistry, IADCA; for PG & UG Life Science students. We would be grateful if you could accept our invitation and take part in this virtual webinar and share your expertise on a relevant topic of your choice.

Kindly accept our invitation and oblige.

Thanking you



Principal
PRINCIPAL
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INSTITUTION'S
INNOVATION
COUNCIL
Ministry of Education, Government of India



DEPARTMENT OF BIOCHEMISTRY

In association with Institution's Innovation Council, MHRD, Govt. of India

CANCER AWARENESS WEBINAR ON

"Anticancer Drugs from Mother Nature: Ancient Solutions for Modern Problems"



FRIDAY, 04TH FEBRUARY 2022



10:30AM - 12:00PM



Dr. C. D. Mohan

NASI Young Scientist, Assistant Professor,
Department of Studies in Molecular Biology,
University of Mysore, Manasagangotri Campus, Mysuru.

*Beneficiaries - Faculties, UG & PG Life Science Students

FREE REGISTRATION

Register Online at <https://forms.iace/indbiochemclub>

ZOOM WEBINAR ID: 875 7033 9922 and PASSCODE: UeEq9x

✓ Participants will receive e-certificates on submission of feedback after attending the webinar.

Dr. T Somasekhar

Chairman, Indian Academy Education Trust

Mrs. Bharathi T

Secretary, Indian Academy Education Trust

Dr. H Ananda Vardhan

Prof. & Head, Department of Biochemistry,
Indian Academy Degree College - Autonomous

Dr. Srinidhi K Parthasarathi

Principal,
Indian Academy Degree College - Autonomous

Dr. C Naveenkumar

Assistant Professor, Department of Biochemistry,
IADC-A, Email: indbiochemclub@gmail.com

Biosketch of Dr. Mohan C D

Dr. Mohan CD earned his Bachelor, Master and Doctoral degrees from the University of Mysore. He was awarded with INSPIRE fellowship from Department of Science & Technology, Government of India for securing highest marks in post-graduation. He has also qualified CSIR-UGC-National Eligibility Test, Karnataka State Eligibility Test (University of Mysore) and Graduate Aptitude Test in Engineering (IIT, Kharagpur) in Life Sciences. He worked under the supervision of Professor K S Rangappa for the Ph.D degree and discovered several inhibitors towards JAK-STAT, BAD, TNF- α and NF- κ B in cancers. He also worked as a visiting researcher at National University of Singapore, Singapore and Hokkaido University, Japan. Presently, he is serving as Assistant Professor at Department of studies in Molecular Biology, University of Mysore, Manasagangotri, Mysore. His research orient towards designing of synthetic small molecule inhibitors against proinflammatory signaling pathways in cancer. Dr. Mohan has published 71 research papers in international peer reviewed journals including Proceedings of the National Academy of Sciences USA, Journal of Biological Chemistry, iScience (Cell Press), Scientific Reports etc. and has 05 patents in the area of cell biology. He has coauthored three book chapters and coinvestigator for several collaborative research project. He has the scientific citations of over 1700, h-index of 30 and delivered more than 15 invited talks in national and international conferences. He is the editorial board member of PLoS One and BMC Complementary and Alternative Medicine and reviewer for 12 journals. He has been awarded with NASI-Young Scientist Platinum Jubilee Award by the National Academy of Sciences, India (NASI) in 2019, Prof. Umakant Sinha memorial award by the Indian Science Congress Association, Kolkata in 2020, PHSS Young Scientist Award by The Prof. H. S. Srivastava Foundation, Lucknow in 2022. Recently, he has been conferred with Biochimie Article of the Year Award by French Society for Biochemistry and Molecular Biology (SFBBM) and Elsevier B.V., with a cash prize of €1000. He has been invited to deliver a talk at the annual congress of SFBBM which will be held at University of Paris, France on 4th-5th July 2022. He is also serving as visiting scientist at Adichunchanagiri Institute for Molecular Medicine, BG Nagara, Nagamangala Taluk, Mandya.

INDIAN ACADEMY

Degree College - Autonomous

Department of Biochemistry

Report on Cancer Awareness Webinar on “Anticancer drugs from mother nature: Ancient solutions for modern problems”

Place: Virtual webinar organized by Department of Biochemistry, Indian Academy Degree College – Autonomous, Bengaluru.

Date: 4th February 2022

Time: 10.30 am to 12.00 pm

Name of the Resource Person: Dr. C. D. Mohan

Broad Aim of the Event: The purpose of the event was to raise cancer awareness among students and faculty so that they might help battle the devastating disease of cancer and avoid millions of deaths caused by it each year.

Objectives:

- The Objective of this webinar was to spread awareness among students about Common Cancer, Symptoms, Preventive measures, and risk factor of cancer.
- It is important to step up cancer literacy and knowledge among students & faculties because nowadays the incidence of cancer is increasing rapidly in India.

- This will lead to early detection which is important in the management and treatment of cancer and also prevention by making necessary lifestyle changes.

Outcomes:

- Students and faculties will have knowledge about cancer risk factors, symptoms, and preventive measures.
- Students will develop social awareness among the people within the community.
- Attending such events which helps students to create value for society as unique and responsible citizens.

Brief details about the event:

The Department of Biochemistry, Indian Academy Degree College – Autonomous, Bengaluru organized a Cancer Awareness Webinar. The topic of the webinar was “Anticancer drugs from mother nature: Ancient solutions for modern problems”. More than 200 participants joined in response to the invitation of the organizers, coordinators, and Faculty members of the Department of Biochemistry, Indian Academy Degree College – Autonomous, Bengaluru. The Cancer Awareness Webinar held on Friday 4th February 2022 began at 10.30 am.

The guest speaker of the day Dr. C.D.Mohan is an Assistant Professor and valuable eminent researcher in the Department of Studies in Molecular Biology, University of Mysore, Manasagangothri, Mysuru. Dr. C.D.Mohan’s laboratory is devoted to the cancer biology area and his research is oriented toward designing synthetic small molecule inhibitors against proinflammatory signaling pathways in cancer. Dr. C.D.Mohan graced the occasion by delivering his speech emphasizing the

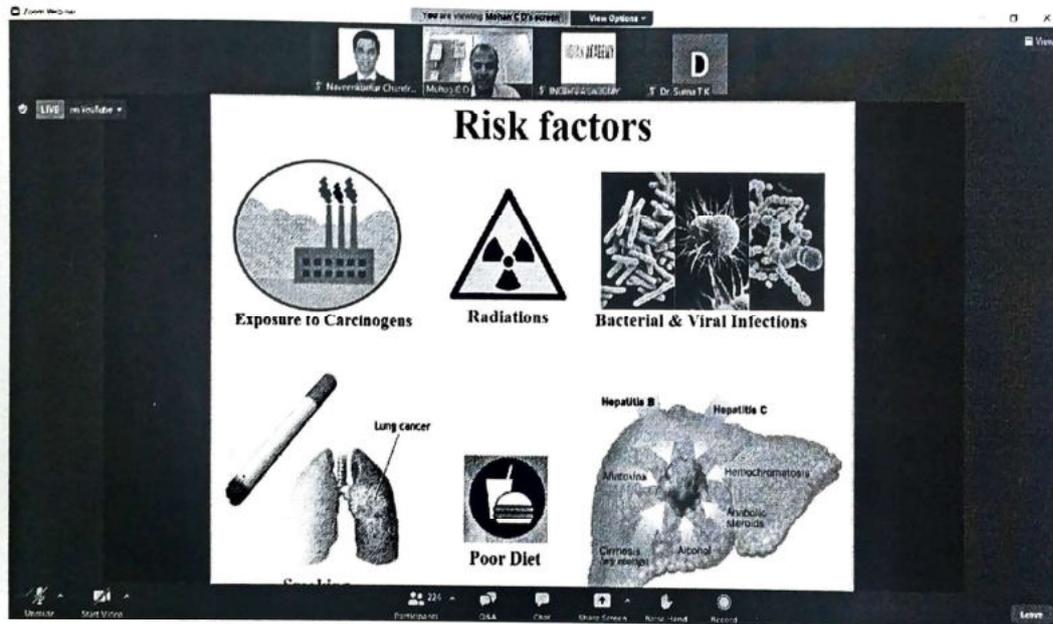
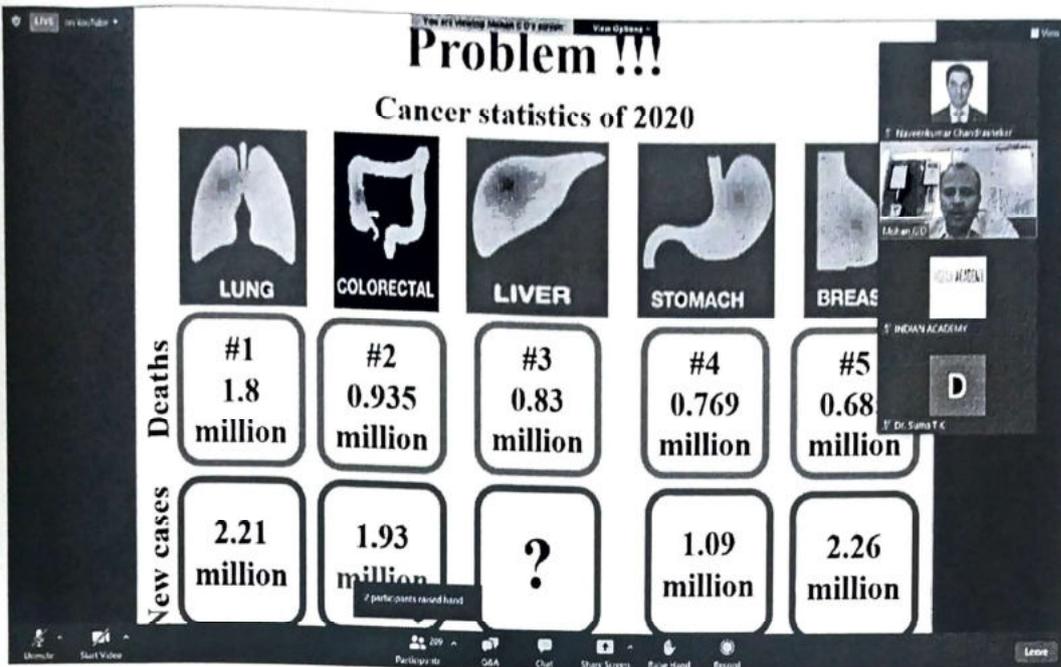
need and significance of the awareness of cancer among the people, especially the upcoming generation i.e. college students. He mainly focused on oral and lung cancer. These two types of cancers are highest among men and women in the urban as well as rural populations and these can also be prevented to a large extent. Therefore, making people aware of the dangers of chewing tobacco and smoking is of great importance. Later he discussed three aspects of cancer awareness i.e., how to reduce the probability of getting cancer, early detection, and make a substantial difference in a person's life diagnosed with cancer, risk factors for cancer, the most common form of cancer, and also about the basic do's & don't's when someone you know has cancer. He also explained nutrition and diets, and different types of anticancer molecules from a natural source. He interacted with the participants and answered most of the questions raised by the participants and also described his research work on cancer.

A total of 216 participants registered and participated in the online awareness webinar. The program was a very informative and societal concern. It is not only creating changes within students but also develops social awareness among the people within the community. Students are always keenly interested to attend such events which help them to create value for society as unique and responsible citizens. The event culminated with a student hand-made poster session virtually regarding cancer awareness on the occasion which was a source of inspiration for all. The session was inspiring and so informative.


Coordinator
R.C. Narayankumar


HoD
HEAD
Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
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Participants (216)

Panel 1 (4)

Attendees (212)

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A ASMA S

A AShreshvi K

A ADITYA MANDAL

A Aditya Acharya

A Arin Patha

A Ashwarya H

A Aishwari babu

A Aman Nawaz

A Akshay S

A Anshu Menzies

Lower All Attendees' Hands

Cancer

Broad classification of tumors:

- Benign (Non-metastatic)
- Malignant (Metastatic)

Primary site of tumor formation "seed"

Intravasation

Arrest in cerebral capillary bed and extravasation

Dissemination

Brain parenchyma "soil" colonization and proliferation

Brain metastasis

Cancer spreads to other parts of the body

Lung metastasis

Primary cancer

216

Participants

GA

Chat

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C. Narayana Kumar
 Coordinator
 Dr. C. Narayana Kumar

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 5

Anshu Menzies
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PARTICIPANT DETAILS										FEED BACK				
Email Address	Full Name	Organization	Mobile Number	Category	Department	Semester and Course or Others	Name of the College and Place	What is your level of satisfaction for the lecture ?	This webinar delivered the information I expected to receive.	The subject matter was presented effectively.	Speaker stimulated my interest in the topic.	Overall how would you rate the Webinar?	Any other suggestion a / comments in the space below	
bagieutopia@gmail.com	Bhargavi. R	IADCA	8105843252	Faculty	Genetics	NA	IADCA	5	Strongly agree	5	5	Excellent	NIL	
dr.suma.biochemistry.iadca@indianacademy.edu.in	Dr. Suma T. K.	IADCA	9741417346	Faculty	Biochemistry	Others	IADCA, BANGALORE	5	Strongly agree	5	5	Excellent	More sessions please	
786.dilshad@gmail.com	Dilshad Begum	Indian Academy Degree College, Bengaluru	9739996920	Faculty	biochemistry	teacher	bangalore IADCA	5	Agree	5	5	Excellent	good overall	
samreen.sam04@gmail.com	P.Samreen	Indian Academy Degree College Autonomous	7259796696	Student	Biotechnology	3rd semester Msc Biotechnology	Indian Academy Degree College Autonomous, Bangalore	5	Agree	5	5	Very good	Good	
pavanpavankumar836@gmail.com	Pavan kumar	Indian academy degree college	9.16366E+11	Student	Microbiology	1st sem microbiology	INDIAN ACADEMY DEGREE COLLEGE	5	Agree	5	4	Good	Nope	
saipavaisankranthi@gmail.com	SAI PAVANI S	Indian Academy Degree College	7349451495	Student	Biochemistry	5th sem Bac GBcBT	Indian academy degree college Autonomous . Bangalore	4	Agree	4	5	Very good	very informative session	
jrthumi28@gmail.com	Bhumika J.R	Indian academy degree college autonomous	8317448965	Student	Biochemistry	3rd sem Biochemistry	Indian academy degree college, Hennur	4	Agree	4	5	Very good	No	
yashwanthgowdar333@gmail.com	Yashwanth.R	Manasagongotri, University of Mysore	7795270512	Student	BIOCHEMISTRY	3rd semester	University of Mysore,mysore	5	Strongly agree	5	5	Excellent	No	
arshya.19absc066@indianacademy.edu.in	ARSHIYA FATHIMA	BIOCHEMISTRY	#####	Student	BIOCHEMISTRY	5TH SEM BSC	IADC-A BANGAORE	4	Agree	5	5	Excellent	NO SUGGESTIONS	

mahehr@gmail.com	Dr.S.MAHESWARIRI	Indian Academy Degree College - Autonomous	9.19742E+11	Faculty	MICROBIOLOGY	NA	Indian Academy Degree College - Autonomous	5	Strongly agree	5	5	Excellent	Great Job. All the Best
sniteshgowda2242000@gmail.com	Nitesh Gowda S	Indian Academy Degree College Autonomous	8197118613	Student	Biotechnology	1st semester Biotechnology	Indian Academy Degree College Autonomous	5	Agree	5	5	Very good	Overall good
monalisagowda6362@gmail.com	Monalisa s	Indian academy degree college autonomous	6362172047	Student	Microbiology	Msc	Indian academy degree college autonomous, hennur cross Bangalore	5	Agree	5	4	Very good	No
gowthamy43@gmail.com	GOWTHAM YADAV N	INDIAN ACADEMY DEGREE COLLEGE	9606212350	Student	BIOCHEMISTRY	3rd semester, Msc	IADC- Hennur cross	5	Strongly agree	5	5	Excellent	Great session
raghuvigweda2000@gmail.com	Raghavi kv	Cancer awareness	9986683583	Student	Microbiology	1 sem	Indian academy hennur cross	4	Agree	4	4	Very good	Thank you it was helping
ranjithmi87480@gmail.com	Ranjith Kumar G S	Indian Academy degree College	874787273	Student	Microbiology	MSc 1st semester	Indian Academy degree college autonomous Bangalore	4	Agree	4	4	Very good	Very informative and helpful
joycesrinivasan0209@gmail.com	Joyce Madalene	Indian academy degree college	7022359662	Student	Microbiology	1st Sem msc	Indian academy degree college Bengaluru	4	Agree	4	4	Good	The webinar was good
ashnth.20iamos010@indianacademy.edu.in	Ashrith Kumar A	Indian Academy Degree College	8861497703	Student	Biochemistry	3rd sem, M.Sc Biochemistry	Indian Academy Degree College Bangalore	4	Agree	5	4	Very good	It was a wonderful session
arbahafeez786@gmail.com	Ariba Hafeez	Student	9964011159	Student	Biotechnology	Msc 1st sem biotechnology	Indian Academy degree college Bangalore	4	Agree	4	3	Very good	Good
mshashree15@gmail.com	Subhashree m	Biochemistry	8984595203	Student	Bsc	5 th sem GBcEt	Indian academy degree college autonomous	5	Strongly agree	5	5	Excellent	It was very informative

Can you give more information about cancer?	Very good	5	Strongly agree	4	5	Very good					
shashankkrodz421@gmail.com	Indian academy degree college	7760188264	Student	Biochemistry	1 semesters msc biochemistry	Indian Academy degree college	5	Strongly agree	4	5	Very good
shalini0712@gmail.com	Cancer awareness IADCA	9739025538 9741417346	Student Faculty	Microbiology BC	1sem MSc microbiology Others	Indian academy degree college IADCA	4	Agree	4	4	Very good
rksume@gmail.com	Indian Academy Degree college autonomous	9742597354	Student	BSC GBCMB	5 BSC GBCMB	Indian Academy Degree college autonomous Bangalore	5	Strongly agree	5	5	Excellent
rthika.19iabc075@india macademy.edu.in	Indian Academy Degree college autonomous	9742597354	Student	BSC GBCMB	5 BSC GBCMB	Indian Academy Degree college autonomous Bangalore	4	Agree	4	4	Very good
jeevithag032002@gmail.com	Indian academy degree College autonomous	8088055627	Student	Bsc GBCMB	3rd sem GBCMB	Indian academy degree College autonomous hennur main road hennur cross Bangalore	4	Neutral	5	4	Very good
harshinsj097@gmail.com	Nargund College Of Pharmacy	9972372928	Faculty	Department of Molecular Biology and Microbiology	Research Associate	Nargund College Of Pharmacy, Bangalore	5	Strongly agree	5	5	Excellent
bawansyiemlieh.36@gmail.com	Indian Academy Degree College - Autonomous	6009129322	Student	Microbiology	MSc 3rd Semester	Indian Academy Degree College - Autonomous, Bangalore	5	Strongly agree	5	5	Excellent

krisnamachem08@gmail.com	Dr. Honnur Krishna	S. S. Arts College and T. P. Science Institute, Sankeshwar	9449002086	Faculty	Chemistry	Chemistry	Ph.D	S. D. V. S. Sangh's, S. S. Arts College and T. P. Science Institute, Sankeshwar	5	Agree	5	5	Excellent	Highly informative session.
asha20iamoc04@indianacademy.edu.in	Asha.	Indian academy degree college	8073735799	Student	Chemistry	Chemistry	3rd	Indian academy degree college, Hennur cross	3	Agree	4	3	Good	
monika_chemistry@indianacademy.edu.in	Dr. Monika Bajpai	Indian Academy Degree College Autonomous	9986917529	Faculty	Chemistry	Chemistry	Chemistry	Indian Academy Degree College Autonomous	5	Strongly agree	5	5	Excellent	No
yashuchinnu198@gmail.com	Yashaawini C S	University of Mysore	9035604607	Student	Department of Studies in Molecular Biology	Molecular Biology	3rd semester	University of Mysore Manasagangotri	5	Strongly agree	5	5	Excellent	No
prakruthiumanaren@gmail.com	Prakruthi U N	Yuvaraja's College	8150886644	Student	Molecular biology	Molecular biology	7th semester	Yuvaraja's College Mysuru	5	Strongly agree	5	5	Excellent	No
ananyam2018@gmail.com	Ananya M	Yuvaraja's College	9620178027	Student	Molecular Biology	Molecular Biology	7th sem Integrated M.Sc	Yuvaraja's College, Mysuru	5	Strongly agree	5	5	Very good	I request that much more such webinars be conducted. Thank you for such an informative webinar.
sreejoni.21absc046@indianacademy.edu.in	Sreejoni Adhikari	INDIAN ACADEMY DEGREE COLLEGE	8101097278	Student	Microbiology	Microbiology	B.sc 1st SEM	Bangalore	4	Agree	4	4	Very good	It was good
nandinidebasingha@gmail.com	Nandini Deb Singha	Indian Academy Degree College	8170839597	Student	Microbiology	Microbiology	B.Sc 1st sem	Indian academy degree college	5	Strongly agree	5	5	Very good	Thanks for giving us an opportunity to be a part of this webinar. It was interesting, worthy, and great effort were give by Mohan sir.
raneemkhtiel@gmail.com	Raneem Ismail Alkhafeel	Mysore university	7022624746	Student	Molecular biology	Molecular biology	Phd scholar 1st year	University of Mysore	5	Agree	5	5	Very good	

deepdreshanurs@gmail.com	Deepadarshan Ura	Mangalore University	9731923595	Student	Department of Studies and Research in Biochemistry	PhD	Mangalore University, Jnana Kaveri Post graduate campus, Chikka Aluvara, Kodagu	5	Strongly agree	5	5	Excellent	No
sowmyaj634@gmail.com	J Sowmya	Cancer awareness webinar - JSS College for Women	8106275534	Student	Applied Genetics	MSc 1st semester applied genetics	Indian academy, Bengaluru	4	Strongly agree	4	5	Very good	It was really good
singhabhijith@gmail.com	Abhijith M Singh	JSS College for Women	8050228001	Faculty	Biotechnology	-	JSS College for Women, Mysore	5	Agree	5	5	Excellent	-
maheshwarims1985@gmail.com	Maheshwari M S	JSS college for women, Mysore	9.19744E+11	Faculty	Biotechnology	BSc	JSS College for women, Mysore	5	Agree	4	4	Very good	Good
mercy.20iamos086@indianacademy.edu.in	T Mercy Scoriet	Indian academy degree college autonomous	7019130914	Student	Microbiology	3rd semester MSc MICROBIOLOGY	Indian academy degree college autonomous	4	Neutral	4	4	Very good	No suggestions we want even more such webinars to be organised. Thank you for such beautiful experience.
bhan06021413@gmail.com	Bhanu Shree	Indian academy degree college	9108158475	Student	Biotechnology	1st semester	Indian academy degree college autonomous, Bangalore	4	Agree	5	5	Good	No suggestions
vineykumardc@gmail.com	Vinay Kumar D C	University of Mysore	9535822983	Student	Department of Physics	2nd year PhD	DoS in Physics	5	Strongly agree	5	5	Excellent	Very effective and very informative
reddypoojitha63@gmail.com	G.poojitha	Biochemistry	9390236235	Student	Biochemistry	5th sem	Indian academy	2	Strongly agree	4	4	Very good	It was good
kounairkhan82@gmail.com	Kounain	Indian academy degree college	8971062482	Student	Biochemistry	Biochemistry	Indian academy degree college	5	Agree	5	5	Excellent	It was excellent


HEAD

Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Bangalore-560 043


Dr. c. Navaneethan

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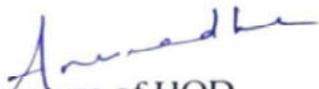
Department of Computer Science

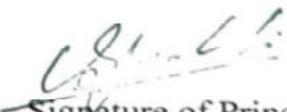
Circular

Workshop on Social Intelligence Leading to Corporate Success

The Department of Computer Science is organizing a Workshop on “**Social Intelligence Leading to Corporate Success**” for Final year BCA students on 24th May 2022 from 11:00 AM to 12:30 PM. All the students are instructed to participate in the workshop.

RESOURCE PERSON	TOPIC	VENUE
Mohammed Younus Happiness Specialist, Career Catalyst, Skill Enabler and TEDx Speaker	Workshop on Social Intelligence Leading to Corporate Success	Seminar hall-2


Signature of HOD
Head
Department of Computer Science
Indian Academy Degree College
Mannur Circle, Mannur Main Road
Bangalore-560043


Signature of Principal
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Department of Computer Science

REPORT

Workshop on Social Intelligence Leading to Corporate Success

Date: 24/05/2022

Time: 11.00 AM-12:35 PM

Venue: Seminar Hall 2

Resource Person: Mohammed Younus

Happiness Specialist,, Career Catalyst, Skill Enabler and
TEDx Speaker

Aim:

To comprehend importance of Social Intelligence and its role in achieving
Corporate success

Objectives:

- To instill in the young minds the value of socializing
- To gain awareness on dealing with social anxiety

Summary:

The workshop on “Social Intelligence Leading to Corporate Success” was conducted on 24/05/2022 by Mohammed Younus for final year BCA students of IADCA.

Mr. Younus is a happiness specialist, behavioural trainer and career coach with more than 15 years of experience in training, motivational speaker and a

credible relationship builder. A certified happiness coach, certified trainer by Dale Carnegie and TEDx speaker.

Social intelligence is one of the most important character strengths to determine the success of leaders because leading is social in nature. Mr. Younus began the session with how to pursue happiness in a holistic sense that focuses on both internal and external well being.

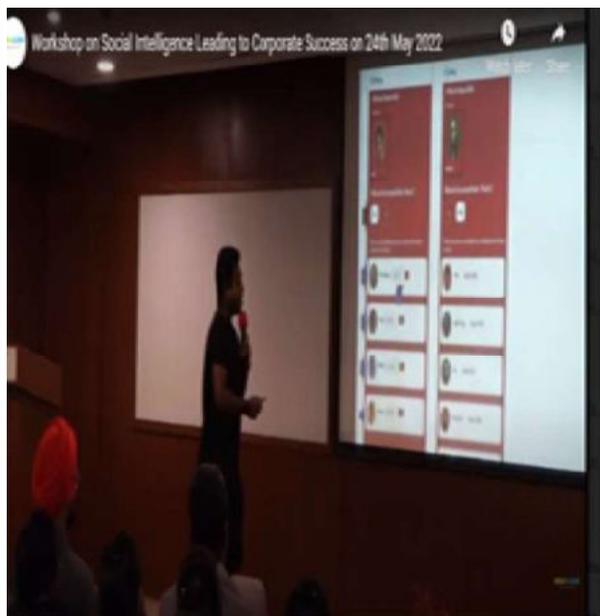
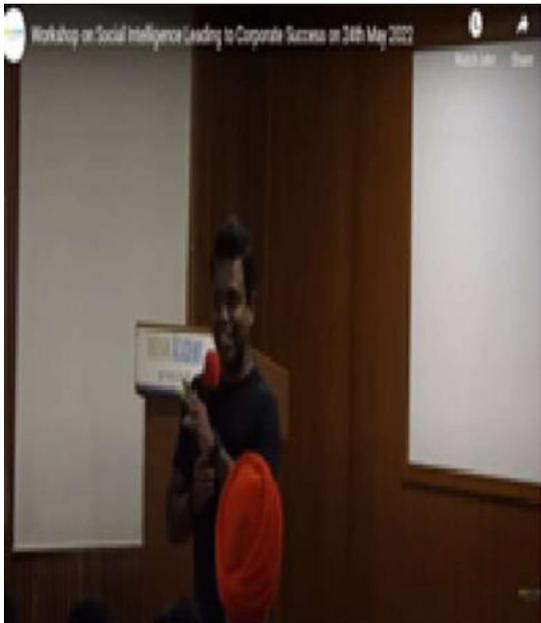
Mr. Younus spoke about how to build on one's strengths, becoming independent, healing our minds, being more aware of our surroundings and oneself and how to deal with SAD (Social Anxiety Disorder).

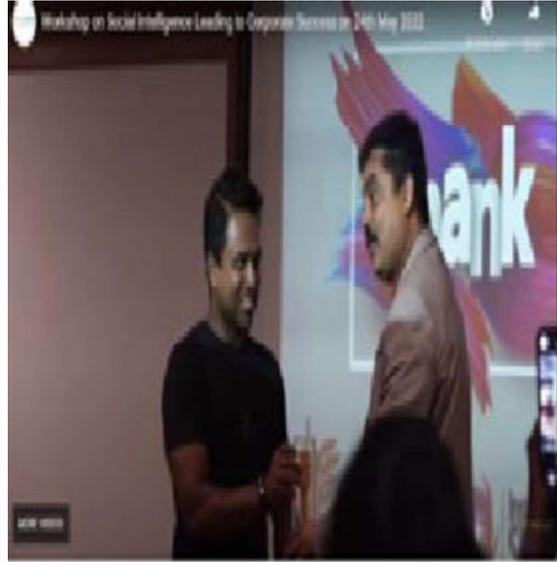
He practically engaged students to build healthy connections with people around them, through a mobile application called 'BUCKET LIST', where students were asked to interact with others and find out the given characters within the given time limit.

Students enjoyed participating in the game and understood the importance of Socializing. It was an experiential learning activity.

Learning Outcome:

- Students were able to channel happiness in themselves and ignite their passion
- Students received some tips for self-development and find joy and carve a success path they desire
- Students learnt how to deal with social anxiety





Attendance for the Workshop

Reg. No.	Name	Attendance
19IABCA001	ABDUL RAHIM KAISER	P
19IABCA002	ADITHYA KASHYAP R	P
19IABCA003	ADNAN ANEES	P
19IABCA004	AHMAT MOUSSA FOTTE	P
19IABCA005	AHMED RAZA	P
19IABCA006	AISHWARYA N	P
19IABCA007	ALEX ROY	P
19IABCA008	ALI CHERIF MAHAMAT	A
19IABCA009	ALI MAHAMAT MOUSSA	P
19IABCA010	ALWIN A	P
19IABCA011	ANAND M	P
19IABCA012	ARVIND V	P
19IABCA013	AVINASH E	P
19IABCA014	AYYAPPA C P	P
19IABCA015	AZMATHULLA KHAN	P

19IABCA016	BAG SUBHADIP PROBIR	P
19IABCA017	BHOOMIKA C R	P
19IABCA018	BHUMIKA C	P
19IABCA019	BINDU R	P
19IABCA020	BUKASA WA BUKASA ABEL	P
19IABCA021	C KEERTHANA	P
19IABCA022	CHANDAN V	P
19IABCA023	CHANDRU R	P
19IABCA024	CHENNAMALLIKARJUNA A BADADAL	A
19IABCA025	CHETAN R	P
19IABCA026	DEEPESH SUTHAR	P
19IABCA027	DUET RAGAVA R	P
19IABCA028	ESAM HUSSEIN MOHAMMED AL JUNAIDI	P
19IABCA029	G VIVIN KAMAL	P
19IABCA030	GOPI B	P
19IABCA031	HAFIZUNNISA	P
19IABCA032	HARIPRASAD V	P
19IABCA033	HEMAVATHI K	P
19IABCA034	JAGANATHAN B	P
19IABCA035	JAI KUMAR N	P
19IABCA036	JAIKUMAR R	P
19IABCA037	JYOTHIKA J	P
19IABCA038	K VINDHYA SHREE	P
19IABCA039	KANITHA N	P
19IABCA040	KARTHIK S	P
19IABCA041	KARTHIK V	P
19IABCA042	KAVYA M	P
19IABCA043	KHALID ABADELWAHAB HUSSEIN MOHAMED	A
19IABCA044	KISHORE P ADAVALLI	P

19IABCA045	KOMALA L	P
19IABCA046	KOWRU LAKSHMI LAHARI	P
19IABCA047	KUMUDA M S	P
19IABCA048	KUSHITH C G	A
19IABCA049	LOKESH T S	P
19IABCA050	MACHE YOUMBI INGRID ORLANE	P
19IABCA051	MAHAMAT HISSEIN GORIMA	P
19IABCA052	MALOCK MBANG VINCENT DE PAUL	P
19IABCA053	MANASA N	P
19IABCA054	MANJUNATHA K	P
19IABCA055	MANJUSHREE L	P
19IABCA056	MARIA RUTH	P
19IABCA057	MD YASEEN	P
19IABCA058	MELVIN G	P
19IABCA059	MOHAMED KHIZARUDDIN	A
19IABCA060	MOHAMED YOUSIF MOHAMED NOEIM	A
19IABCA061	MOHAMMED JUNAID S	P
19IABCA062	MOHAMMED ADNAN LAIS A	P
19IABCA063	MOHAMMED HAG SALEM BIN SOMER	P
19IABCA064	MOHAMMED IRSHAD	P
19IABCA065	MOHAMMED ISMAIL K S	P

VI BCA 'B'

Reg. No.	Name	Attendance
19IABCA066	MOHAMMED JUNAID	P
19IABCA067	MOHAMMED OMAR	A
19IABCA068	MOHAMMED SAHIL	P
19IABCA069	MOHAMMED SAQLAIN KHAN	P

19IABCA070	MOHAMMED SHOAIB	P
19IABCA071	MOHAMMED TAJUDEEN	P
19IABCA072	MOHAMMED THARIQ A	P
19IABCA073	MOHAMMED ZAHID	P
19IABCA074	NANDA KUMAR M	P
19IABCA075	NANDAKUMAR S	P
19IABCA076	NASSER SAEED NASSER TALLAN	A
19IABCA077	NAYANA H T	P
19IABCA078	NAYEEMULLA SHARIFF	P
19IABCA079	NEHAL RAJ	P
19IABCA080	NIKHIL GOWDA S	P
19IABCA081	NIRANJAN K	P
19IABCA082	NIZAMUDDIN P S	P
19IABCA083	OUATTARA SEDJENIN SOULEYMANE	P
19IABCA084	PARVEEZ PASHA	A
19IABCA085	PAUL MESHACK J	P
19IABCA086	PRASHANTH V	A
19IABCA087	PREMA M	P
19IABCA088	RAHUL KUMAR	P
19IABCA089	RAJESH K	P
19IABCA090	RIZWAN RAHMAN	P
19IABCA091	ROHAN G	P
19IABCA092	ROHIT J	P
19IABCA093	ROYAN EDWIN	P
19IABCA094	S LOKESH	P
19IABCA095	S SNEHA	P
19IABCA096	SAMEER AHMED	P
19IABCA097	SAMUEL C	P
19IABCA098	SANJAY S	P

19IABCA099	SANTHOSH A	P
19IABCA100	SANTHOSH K	P
19IABCA101	SARISHMA THAPA	P
19IABCA102	SASIKUMAR R	P
19IABCA103	SATHYARAJ S	P
19IABCA104	SHAID AFREED F	P
19IABCA105	SHARAN J	P
19IABCA106	SHARMILA	P
19IABCA107	SHARON PRINCY S	P
19IABCA108	SHIFA AIYMAN B	P
19IABCA109	SHIVA NARAYANA K	P
19IABCA110	SHIVAM B	P
19IABCA111	SHIVANANDA R	P
19IABCA112	SRILOCHANA S R	P
19IABCA113	SRIMANTH MS	A
19IABCA114	SUDHAKAR S	P
19IABCA115	SYED ABDUL AHAD	P
19IABCA116	SYED HASEEB	P
19IABCA117	TANUJA NAYAK	P
19IABCA118	TAYYABA FATHIMA H	P
19IABCA119	TOUSIF PASHA	P
19IABCA120	UMAR ABDUL AZEEZ	P
19IABCA121	UMME AYMANN	A
19IABCA122	UZAIR AHMED	P
19IABCA123	V MOHAMMED SHARIQ	P
19IABCA124	VAMSHI L	P
19IABCA125	VENU GOPAL C S	P
19IABCA126	VIGNESH E	P
19IABCA127	VIJAY B	P

19IABCA128	VINAY BA	P
19IABCA129	VINAY KUMAR H V	P
19IABCA130	VINAYAK R	P
19IABCA131	VINODHA C	P
19IABCA132	YASAR ARFATH BAIG	P

Anandha
Head
Department of Computer Science
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[Signature]
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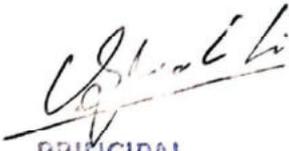
Date: 23.06.2022

Circular

The Department of Commerce (UG) is organising a Guest lecture on the "Time Management" by Dr.Syeda TabassumS.G on 28/06/2022 (Tuesday) for the second semester B.Com Students in the Seminar Hall II at 12.00 pm.

Sign

Principal



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DEPT. OF COMMERCE
Indian Academy Degree College
Kalyan Nagar, BANGALORE 43



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GUEST LECTURE REPORT ON THE TOPIC "TIME MANAGEMENT" AS ON 28.06.2022

- ❖ **Title of the Event:** Guest Lecture on time management
- ❖ **Place:** Seminar Hall II
- ❖ **Date:** 28.06.2022
- ❖ **Time:** 12.00 pm
- ❖ **Name of the Resource Person:** Dr. Syeda Tabassum
- ❖ **Beneficiaries:**

The guest talk was arranged for the second-semester B. Com students.

- ❖ **Broad Aim of the Event:** To understand how time can be managed and know why time management is important and make them aware of their plan to work actively with some autonomy

- ❖ **Objectives:**

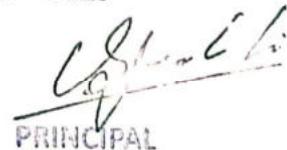
1. To make them aware of the use of time in the most effective way possible.
2. To create control over distractions that waste time.
3. To educate them about giving them more quality to relax and be creative.

- ❖ **Outcomes:**

1. To enable productivity among students.
2. To enable students to get more and better work done in less time.
3. To help students in managing time to overcome stress.

- ❖ **Brief Report**

The Department of UG Commerce, Indian Academy Degree College organized a guest lecture program for the second semester. B. Com students on the topic "**Time Management**" on 28-06-22 by Dr. Syeda Tabassum S.G



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Dr. Syeda Tabassum S.G addressed students and explained what TIME MANAGEMENT is she told them Your stress handling, your attitude, your communication skills, your emotional intelligence and a whole host of other personal attributes are the time management that is crucial for career success. Problem-solving, delegating, motivating, and team building is all much easier if you have good soft skills. She highlighted that nowadays an individual must have time management to survive in the corporate world. She also explained how managing time can influence everything from the way employees communicate with customers to the way they solve problems internally. She also highlights the importance of time management in planning their studies.

She encouraged students to take involve themselves in the activity. Almost all students attended the program with good interest and got inspired by Dr. Syeda Tabassum S.G. During the session, she also conducted activities like a few physical exercises where all the students participated. Overall, the session was very interactive. The feedback was collected at the end of the session from the beneficiaries for catering to further need improvements.



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PROFILE OF SPEAKER

Name: Dr. Syeda Tabassum S.G , M.Com, Ph.D.

Designation: H.O.D of Commerce
Abbas Khan College for Women
Bangalore 560 002, Karnataka

Contact Number:Ph: 7204259416

Email: tabu9416@gmail.com

Experience: 15 yrs (UG & PG)

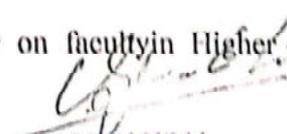
Specialization:Ph.D in Commerce on the topic " A Study on Women Attrition In I.T Sector with reference toBangalore City".

Other Portfolio held:

- External Examiner for Ph.D thesis Evaluation at Bharathidasan University.
- Paper setter for Indian Academy Degree College Bangalore (Autonomous).
- Worked as BOE member, for VI Semester B.com Bangalore University2019-2020.
- Appointed as External Examiner for BBA Viva Voce Bangalore Universityin 2018.
- External Guide for BBA students of Jain University in 2018.
- Evaluator /Reviewer for U.G courses of Bangalore City University.
- Asst. Co ordinator of NAAC & IQAC Abbas Khan College Bangalore.

Publications & Certifications

- Work-LifeBalance& Stress management - A Case study on Health Centres. Best paper award at International summit in Jain UniversityJan 2022 (Publication awaited)
- IAMS School of Business Spectrum- Impact on employability duringerises- A case study on the corporate sector. Vol XIV Nov 2 Dec 21
- Managing Emotional stress during Pandemic- A case study on facultyin Higher Education.(publication awaited)


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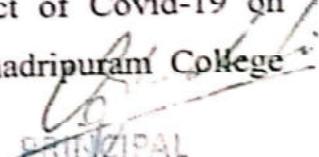
- International Journal of Inter-Disciplinary Studies - 19 on Teaching & Learning on college faculty.
- International Journal of Analytical and Experimental Modal analysis Title - Organizational citizenship of Bank employees.
- International Journal of mgt, technology and engineering - Title "Determinants of service climate a Theoretical study."
- International journal of Multidisciplinary research review-peer reviewed monthly journal on Title - "Women attrition and retention".
- International journal of Management and social science research review Title- "Employee retention and commitment".
- International journal of Business administration research review Impact factor 3996 Title- the "A Study on the impact of factors affecting women attrition in I.T sector with specific reference to strategies and techniques".
- Southern Economists National work-life "Work life balance & attrition".
- Southern Economists National journal Title "Impact of the attrition on the performance of I.T companies".
- Southern economists Title "Women attrition in IT sector".
- Conference publication - Global workplace by 2020, on the title "Use of technology in HR and its implications."

Book Publication

Human Resource Management reference book by Dr. Nirmala, Syeda Tabassum S.G - Himalaya Publishing House.

Papers Presented

- Work-Life balance & Stress management - A Case study on Health Centers. Best paper award at International summit in Jain University Jan 2022.
- Managing Emotional stress during Pandemic- A case study on faculty in Higher Education.
- Presented a paper in 3 days International Webinar on "Impact of Covid-19 on Teaching & Learning by College Faculty" 2nd Sep 2020 Sheshadripuram College Bangalore.


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- Presented a paper in 3 days International Webinar on “Digital Pedagogy in 21st Century – Opportunities & Challenges. Rajiv Gandhi University.
- Presented a paper in the 3rd National Seminar on “Global work place by 2020”, (Sindhi College of Commerce Bangalore).
- Presented paper in UGC Sponsored 1 day National Conference on “Impact of metro rail on Environment” Abbas Khan College Bangalore).
- UGC Sponsored 1 day State level seminar on “Effect on entry of foreign players in Indian retail industry and strategies for survival and growth” (AKCW).



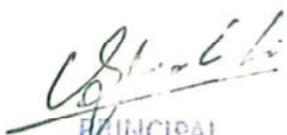
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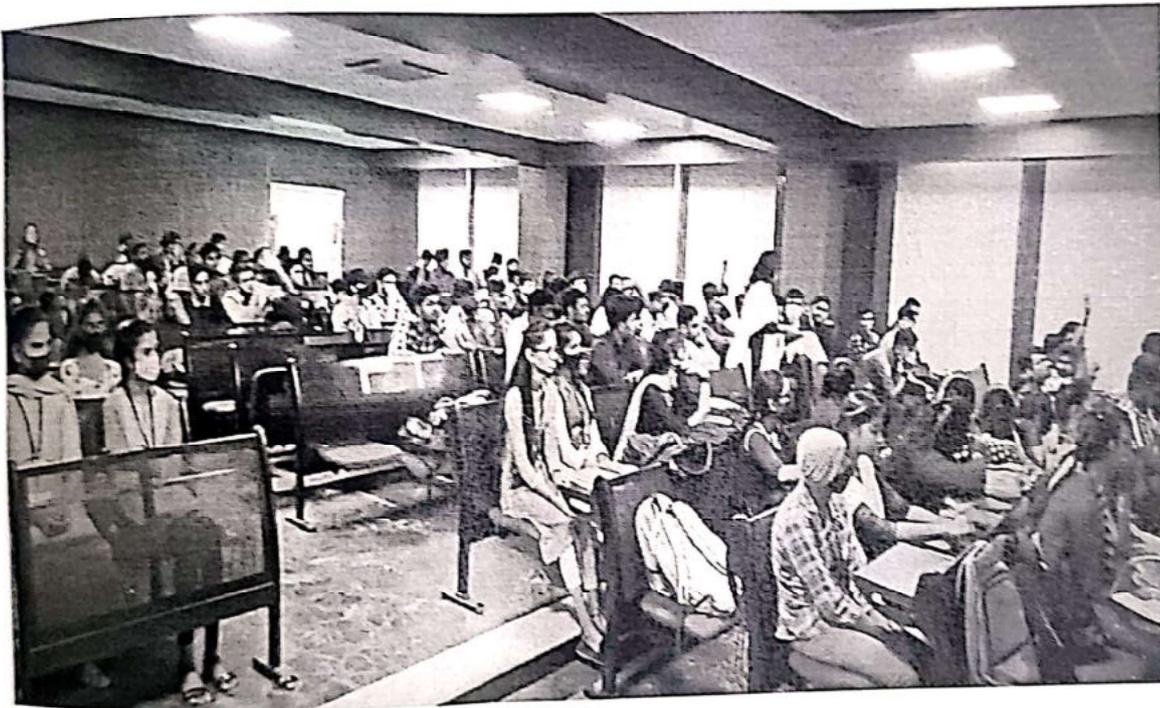
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GUEST LECTURE PICTURES ON THE TOPIC "TIMEMANAGEMENT" AS ON
28.06.2022




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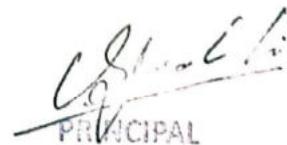
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GUEST LECTURES

Speaker : Dr. Syeda Tabassum S.G
Designation : HOD of Commerce Abbas Khan College for Women
Topics : Time Management
Nature of Audience : II Semester B.com
Date & Time : 28th June 2022 - 12:15pm to 1:10pm
Views of the Speaker : The experience was wonderful, audience was very enthusiastic & energetic. All the best.
Signature of the guest

Views of the beneficiaries

- Kuthika P 21IABCM138 1. The session was very good and it was very useful for us.
Amal Kumar 21IABCM168 2. The session was informative & useful for us.
Remarks Prati 21IABCM177 3. Very enlightening words and words of wisdom to hear from an experienced person



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DEPARTMENT OF COMMERCE

PARTICIPANT LIST FOR GUEST LECTURE

TOPIC TIME MANAGEMENT

DATE 28th June 2022

NAME OF SPEAKER Dr. Syeda Tabassum S.G

CLASS II Sem B.Com 'A' Sec

SI No	REGISTER NO	NAME OF THE STUDENTS	SIGNATURE
1	21IABCM001	ABDUL AHAD	<i>[Signature]</i>
3	21IABCM003	ABDUL REHMAN	Absent
4	21IABCM004	ABDUL REHMAN VIRANI	<i>[Signature]</i>
5	21IABCM005	ABU HARIS KHAN	<i>[Signature]</i>
6	21IABCM006	ADITHYA KUMAR NISHAD R	<i>[Signature]</i>
7	21IABCM007	ADITHYA M	<i>[Signature]</i>
8	21IABCM008	AFNAN KHAN	<i>[Signature]</i>
9	21IABCM009	AHBAS AHMED P	Absent
10	21IABCM010	AJAY R (Raja R)	Ajay
11	21IABCM011	AJAY R (Ravi B)	<i>[Signature]</i>
12	21IABCM012	AKASH S	Akash S.
13	21IABCM013	AKSHAY G S	<i>[Signature]</i>
14	21IABCM014	AMBRISH KUMAR P	Absent
15	21IABCM015	AMITH K S	<i>[Signature]</i>
16	21IABCM016	ANIKET MAHATO	Absent
18	21IABCM018	ARATHI P	<i>[Signature]</i>
19	21IABCM019	ARAVIND SWAMY B	Absent
20	21IABCM020	ARBAZ PASHA	<i>[Signature]</i>
21	21IABCM021	ARCHANA S	<i>[Signature]</i>
22	21IABCM022	ARJUN S	<i>[Signature]</i>
23	21IABCM023	ARUL NADAN	<i>[Signature]</i>
24	21IABCM024	ARUN RAJ A	Absent
25	21IABCM025	ASHISH R	Absent
26	21IABCM026	ASHWANI KUMARI	Absent
27	21IABCM027	AUSTIN D CRUZE J	Absent
28	21IABCM028	AVEZ PASHA F	Absent
29	21IABCM029	AYESHA KHANUM	<i>[Signature]</i>
30	21IABCM030	AYESHA SAYADI	<i>[Signature]</i>
31	21IABCM031	B LAKSHMI POOJITHA	Lakshmi
32	21IABCM032	B MOHAMMED MISBAH AHMED	Absent
33	21IABCM033	BABITHA S	<i>[Signature]</i>
34	21IABCM034	BALAJI MANJUNATH S	<i>[Signature]</i>
35	21IABCM035	BHAGYASHREE KUMARI C	Absent
36	21IABCM036	BHARATH KUMAR N	<i>[Signature]</i>
37	21IABCM037	BHARATH S	Absent
38	21IABCM038	BHARATH V	<i>[Signature]</i>
39	21IABCM039	BHARGAVI B K	<i>[Signature]</i>
40	21IABCM040	BHAVANA M	<i>[Signature]</i>
41	21IABCM041	BHOLA YADAV	Absent
42	21IABCM042	BHOOMIKA S V	<i>[Signature]</i>
43	21IABCM043	BILAL M	<i>[Signature]</i>
44	21IABCM044	BINDU G	Absent

[Signature]
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42	21IABCM139	KRUTHIKA S	Kruthika S
43	21IABCM140	LAKSHMI KUMARI	Lakshmi Kumari
44	21IABCM141	LAKSHMI NARAYANA S	Lakshmi Narayana S
45	21IABCM142	LATHA P	Latha P
46	21IABCM143	LAVANYA S	Lavanya S
47	21IABCM145	LIKITH GOWDA G M	Likith Gowda G M
48	21IABCM146	LIMBANI RIDHI R	Limbani Ridhi R
49	21IABCM147	LOKITH K	Lokith K
50	21IABCM148	M ABHISHEK	Absent
51	21IABCM149	MADAN G	Madan G
52	21IABCM150	MADHAN KUMAR M	Absent
53	21IABCM151	MADHAVAN M	Absent
54	21IABCM152	MADHUMITHA B	Madhumitha B
55	21IABCM153	MAHESH J S	Mahesh J S
56	21IABCM154	MALINI M	Malini M
57	21IABCM155	MANI V	Mani V
58	21IABCM156	MANJULA M	Manjula M
59	21IABCM157	MANOHAR K	Absent
60	21IABCM158	MANOHAR N	Manohar N
61	21IABCM159	MANOJ KUMAR M	Manoj Kumar M
62	21IABCM160	MANOJ M	Manoj M
63	21IABCM161	MANOJ PREM R	Absent
64	21IABCM162	MANSOOR SHARIEFF	Mansoor Sharieff
65	21IABCM163	MANU-B R	Manu-B R
66	21IABCM164	MARK LEE	Mark Lee
67	21IABCM165	MARTHESHWARAN V	Martheshwaran V
68	21IABCM166	MARY BEULINE	Mary Beuline
69	21IABCM167	MARY PAVITHRA L	Mary Pavithra L
70	21IABCM168	MATTHEW J	Matthew J
71	21IABCM169	MAZAR AHMED	Absent
72	21IABCM170	MD A'THA UR REHMAN	MD A'THA UR REHMAN
73	21IABCM171	MD UZAIR ZULQUARNAIN	Absent
74	21IABCM172	MEERA A	Meera A
75	21IABCM173	MEGRAJ SINGH K	Megraj Singh K
76	21IABCM174	MELVIN JACOB S	Melvin Jacob S
77	21IABCM175	MELVIN KUMAR G	Absent
78	21IABCM176	MERCY ANISHA M	Mercy Anisha M
79	21IABCM177	MOHAMMED AFFAN RUAFI	Mohammed Affan Ruafi
80	21IABCM178	MOHAMMED AFTAB T	Mohammed Aftab T
81	21IABCM179	MOHAMMED FARDEEN KHAN	Fardeen
82	21IABCM180	MOHAMMED HAZIQ P	Absent
83	21IABCM181	MOHAMMED HUSSAIN M	Absent
84	21IABCM182	MOHAMMED KAIF	Absent
85	21IABCM183	MOHAMMED MAAZ	Maz
86	21IABCM184	MOHAMMED MUQITHULLA SHARIFF	Absent
87	21IABCM185	MOHAMMED RAFIUDDIN	Mohammed Rafiuddin
88	21IABCM186	MOHAMMED RAYYAN QURESHI	Absent
89	21IABCM187	MOHAMMED SAQLAIN	Mohammed Saqlain

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45	21IABCM045	CALEB	Caleb
46	21IABCM046	CHAITHANYA RAM S	Chaithanya
47	21IABCM047	CHANDAN N	Chandan
48	21IABCM048	CHANDANA R	Chandana
49	21IABCM049	CHANDRU M	Chandru
50	21IABCM050	CHANNA KESHAVA M	Channa Keshava M
51	21IABCM051	CHARULATHA	Charulatha
52	21IABCM052	CHEZHAN L	Chezhan
53	21IABCM053	CHEZHANA B K	Chezhana B K
54	21IABCM054	CHINNI PRASAD R V	Chinni Prasad R V
55	21IABCM055	CHIRAG SHEKHAR POOJARI	Chirag Shekhar Poojari
56	21IABCM056	DANIEL E	Daniel
57	21IABCM057	DANUSH M	Danush
58	21IABCM058	DARSHINI M	Darshini
59	21IABCM059	DASARI ADIKESAVA REDDY	Dasari Adikesava Reddy
60	21IABCM060	DEEPAK KUMAR C	Deepak Kumar C
61	21IABCM061	DEEPAK L	Deepak
62	21IABCM062	DEEPIKA D	Deepika
63	21IABCM063	DEEPTHI M	Deepti
64	21IABCM064	DEERAJ MANIKANTA P	Deeraj Manikanta P
65	21IABCM065	DELSON EMMANUEL S	Delson Emmanuel S
66	21IABCM066	DENISH B	Denish
67	21IABCM067	DHANUSH R	Dhanush
68	21IABCM068	DHANUSH S	Dhanush
69	21IABCM069	DHARSHAN M	Dharshan
70	21IABCM070	DILEEP M	Dileep
71	21IABCM071	EDWIN SUSHANTH E	Edwin Sushanth E
72	21IABCM072	EVANGELINE JUDY R	Evangeline Judy R
73	21IABCM073	FARDEEN KHAN	Fardeen
74	21IABCM074	FARZANA BEGAM Y	Farzana Begam Y
75	21IABCM075	FAZAL KHAN	Fazal
76	21IABCM076	FAZIL PASHA	Fazil Pasha
77	21IABCM077	GANESH A K	Ganesh A K
78	21IABCM078	GAUTHAM C	Gautham
79	21IABCM079	GAYATHRI S	Gayathri
80	21IABCM080	GEETHA SINGH R	Geetha Singh R
81	21IABCM081	GIDEON D	Gideon
82	21IABCM082	GOPAL KIRAN K	Gopal Kiran K
83	21IABCM083	GOPI SARAVANAN T	Gopi Saravanan T
84	21IABCM084	GOWARKAL SASIREKHA	Gowarkal Sasirekha
85	21IABCM085	GOWRAMMA G	Gowamma
86	21IABCM086	GOWTHAM R	Gowtham
87	21IABCM087	GUNASHEKAR	Gunashekar
88	21IABCM088	GURUPRASAD K N	Guruprasad K N
89	21IABCM089	HAMSA A	Hamsa
90	21IABCM090	HARITHAA NANDINI G	Haritha
91	21IABCM091	HARSHAVARDAN R	Harshavardan
92	21IABCM092	HARSHITH M	Harshith
93	21IABCM093	HARSHITHA V	Harshitha
94	21IABCM094	HARSHITHA V	Harshitha V

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DEPARTMENT OF COMMERCE
PARTICIPANT LIST FOR GUEST LECTURE

TOPIC TIME MANAGEMENT

DATE 28th JUN

NAME OF SPEAKER Dr. Syeda Tabassum S.G

SI No	REGISTER NO	NAME OF THE STUDENTS	CLASS / Sem	SIGNATURE
1	21IABCM095	HEMANTH KUMAR M		
2	21IABCM097	HUMERA FATHIMA		
3	21IABCM098	IGNATIUS ROZARIO		
4	21IABCM099	INDHUSHREE M		
5	21IABCM101	IRBAZ J		
6	21IABCM102	ISMAIL ZABIULLA R		
7	21IABCM103	JAGADESH VENKATAM A		
8	21IABCM104	JAGADISH J		
9	21IABCM105	JAI MADHAN K S		
10	21IABCM106	JAYASHREE D		
11	21IABCM107	JENNIFER PRINCY		
12	21IABCM108	JOEL		
13	21IABCM109	JOEL T		
14	21IABCM110	JOHN BREL M		
15	21IABCM111	JOHN IMMANUEL		
16	21IABCM112	JOSHUA T		
17	21IABCM113	JOSHUA A		
18	21IABCM114	JURERA MOHAMMED JABIR		
19	21IABCM115	JYOTI B MADAR		
20	21IABCM116	K MADESH		
21	21IABCM117	K SUMANTH REDDY		
22	21IABCM118	K SURAJ		
23	21IABCM120	KAJOL DINESH NAKARANI		
24	21IABCM121	KAMAL R		
25	21IABCM122	KAMALESH M		
26	21IABCM123	KARAN G		
27	21IABCM124	KARTHIK L		
28	21IABCM125	KARTHIK RAJ V		
29	21IABCM126	KARTHIK RAJA M		
30	21IABCM127	KARTHIK S B		
31	21IABCM128	KAVITHA K		
32	21IABCM129	KAVYA K M		
33	21IABCM130	KEERTHANA MURALI		
34	21IABCM131	KEERTHANA V		
35	21IABCM132	KEERTHI M		
36	21IABCM133	KESHAYAMURTHY J		
37	21IABCM134	KISHAN GURJAR		
38	21IABCM135	KISHAN KUMAR S		
39	21IABCM136	KRISHNA TEJA S		
40	21IABCM137	KRITHICK RAJ A		
41	21IABCM138	KRITHIKA P		

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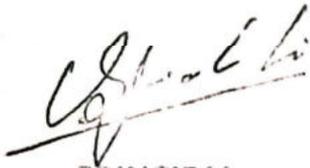
Date: 06.10.2021

Circular

The Department of Commerce (UG) is organising a Guest lecture on the "Attitude, Skills and Knowledge for the Workplace" by Madhusudan H, Manager-Placement on 12/10/2021 (Tuesday) for the fifth semester B.Com Students in the Multipurpose Seminar Hall at 12:00 pm.

Sign

Principal



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DEPT. OF COMMERCE
Indian Academy Degree College
Kalyan Nagar, BANGALORE - 43



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GUEST LECTURE REPORT ON THE TOPIC "ATTITUDE, SKILLS AND KNOWLEDGE FOR THE WORKPLACE" AS ON 12.10.2021

- ❖ **Title of the Event:** Guest Lecture
- ❖ **Place:** Multipurpose Seminar Hall
- ❖ **Date:** 12.10.2021
- ❖ **Time:** 12.00 pm
- ❖ **Name of the Resource Person:** Madhusudhan H, Manager-Placement
- ❖ **Beneficiaries:**

The guest talk was arranged for the Third-semester B. Com students.

- ❖ **Broad Aim of the Event:** Attitude, Skills and knowledge at the workplace empower students to collaborate and work together in order to collectively meet company objectives and as well as an Individual objectives. In turn, this leads to enhancing employee efficiency and productivity at the workplace.

❖ **Objectives:**

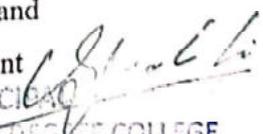
1. To make them aware of the technical and non-technical skills required at the workplace.
2. To build a positive attitude in the minds of the students.
3. To educate about the knowledge required and an attitude of an individual for facing interviews & jobs.

❖ **Outcomes:**

1. To impart the knowledge of technical and non-technical skills among students.
2. To inspire the students to pursue soft skills certified courses.
3. To help students in career visioning and planning through employment skills.

❖ **Brief Report**

The Department of UG Commerce, Indian Academy Degree College organized a guest lecture program for third-semester B. Com students on the topic "Attitude, Skills and knowledge at the workplace" on 12-10-21 by Madhusudhan H, Manager-Placement


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Mr. Madhusudhan H, addressed students and explained what are the technical and non-technical skills required, as he told them your work ethical, your attitude, your communication skills, your emotional intelligence and a whole host of other personal attributes are the soft skills that are crucial for career success. He also told students to pursue technical courses like MS-Excel, SAP, Investment banking, etc. Problem-solving, delegating, motivating, and team building is all much easier if you have good soft skills. He highlighted that nowadays an individual must have soft skills to survive in the corporate world. He also explained how soft skills can influence everything from the way employees communicate with customers to the way they solve problems internally. He encouraged students to take some training in soft skills.

Almost all students attended the program with good interest and got inspired by Madhusudan. During the session, he also conducted activities like brainstorming where all the students participated. The feedback was collected at the end of the session from the beneficiaries for catering to further needs & improvements. This session was an inspiring experience for the students.



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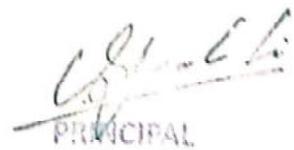
PROFILE OF THE SPEAKER

- NAME: Madhusudhan H
- DESIGNATION: Manager-Placement, IADC-A
- BRIEF PROFILE :

Nearly 12 years of extensive cross-functional experience in successfully and consistently delivering the responsibilities of training students to face the interviews and get placed in jobs, currently spearheading as Manager-Placement, IADC-A, Bangalore, India

Competent and diligent professional with the capability to handle a wide range of assignments ranging from Fuel Aptitude Test Workshop, Organising Seminars for enhancing skill development for final year students, Activities under Placement Cell, Centralized Campus Placement Drives, Training and Personality Development, Industrial Visits, Internship Program, etc.

A charismatic team leader /player, training, guiding and motivating teams of professionals achieving enhanced efficiency entailing maximum productivity through exceptional consensus building, exceptional interpersonal skills, analytical mind, comprehensive problem detection/ solving abilities



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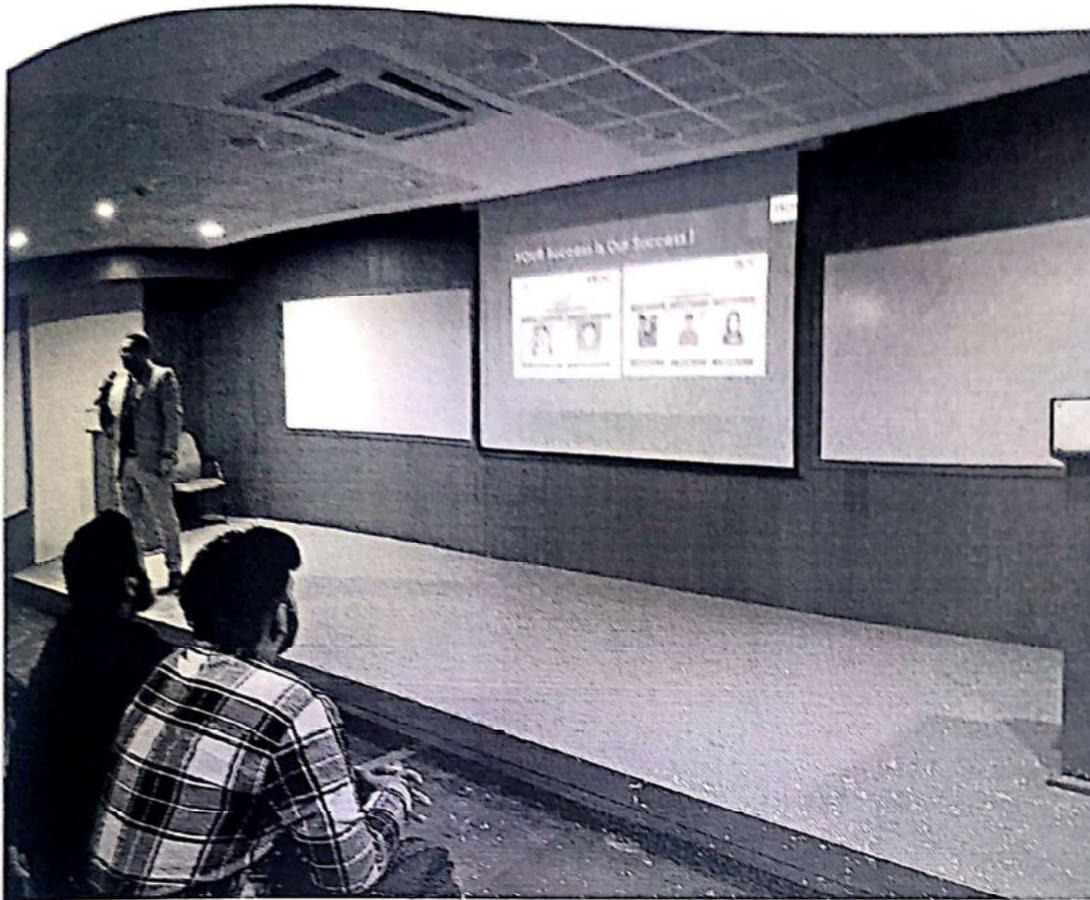
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GUEST LECTURE PICTURES ON THE TOPIC "ATTITUDE, SKILLS AND KNOWLEDGE FOR THE WORKPLACE" AS ON 12.10.2021



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GUEST LECTURES

Speaker : Madhusudan - H
Designation : Manager - Placement
Topics : Attitude, Skills and Knowledge
Nature of Audience : 3rd Sem B.Com
Date & Time : 12/10/21
Views of the Speaker : Students were patient throughout the session.
Were energetic.

Madhu
Signature of the guest

Views of the beneficiaries

It was useful, and we all have an idea to follow our goals.

It was very useful & very inspire one.

Remarks

The session was interactive and informative. Had a valuable time.

This session was
inspiring & helpful & motivating.

MADHUSUDAN
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PARTICIPANT LIST FOR GUEST LECTURE

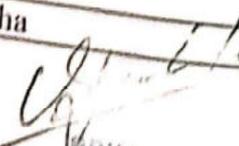
DATE:
CLASS: III A

ORIG
NAME OF SPEAKER

SER. NO	REG NO.	NAMES	SIGNATURE
1	20IABCM001	Aadesh Sagar Naidu	Aadesh
2	20IABCM002	Abdul Nawaz Burhan	Abdul Nawaz
3	20IABCM003	Abdul Rahman	Abdul Rahman
4	20IABCM004	Abdul Zayed S	Absent
5	20IABCM005	Abhishek Gaur A	Absent
6	20IABCM006	Abhishek Ram R	Absent
7	20IABCM007	Abida Tazeen	Abida
8	20IABCM008	Abraham J	Abraham J
9	20IABCM009	Agnes Seniorita	Absent
10	20IABCM010	Ahmad Yousuff Pasha	Ahmad
11	20IABCM011	Aishwarya M	Aishwarya
12	20IABCM012	Ajay H	Ajay H
13	20IABCM013	Akash P	Akash
14	20IABCM014	Akshaya S	Absent
15	20IABCM015	Alex Stanley V	Alex Stanley V
16	20IABCM016	Alwin Jack	Alwin Jack
17	20IABCM017	Ameena Afra	Ameena
18	20IABCM018	Amtul Laiba	Absent
19	20IABCM019	Ananya R	Absent
20	20IABCM020	Aneasha C	Absent
21	20IABCM021	Anjali B	Absent
22	20IABCM022	Anthony Augustine A	Anthony
23	20IABCM023	Aparna A	Aparna
24	20IABCM024	Arbaaz Khan	Arbaaz
25	20IABCM025	Arfa Mustaqeem	Arfa Mustaqeem
26	20IABCM026	Arika M	Arika M
27	20IABCM027	Arun B	Arun
28	20IABCM028	Arun B S	Arun B S
29	20IABCM029	Arun Kumar D P	Arun Kumar
30	20IABCM030	Athar Yusuf Iyub Khan	Athar
31	20IABCM031	Azad Singh Np	Absent
32	20IABCM032	Barkath Rasool Khan	Barkath
33	20IABCM033	Belliappa Ma	Belliappa
34	20IABCM034	Bharath Kumar V	Bharath
35	20IABCM035	Bharathi M N	Bharathi
36	20IABCM036	Bhavya R	Bhavya
37	20IABCM037	Calvina L	Calvina
38	20IABCM038	Caryn Rozario	Caryn
39	20IABCM039	Chandru J	Absent
40	20IABCM040	Chandru S	Chandru S

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41	20IABCM041	Charan Abishek A	Absent
42	20IABCM042	Charan M	Absent
43	20IABCM043	Chris Betz Allison Fernandez	Absent
44	20IABCM044	Christopher Melvin A	Absent
45	20IABCM045	D Suji	Suji
46	20IABCM046	Darshan Gowda S	Absent
47	20IABCM047	Darshan P	Absent
48	20IABCM048	Darshini A	Absent
49	20IABCM049	Darshitha R	Absent
50	20IABCM050	Deepak C P	Absent
51	20IABCM051	Deepika R	Deepika R
52	20IABCM052	Deva Kumar R	Devakumar R
53	20IABCM053	Devendra Pillay	Devendra P
54	20IABCM054	Dhanaraj G	Absent
55	20IABCM055	Dhanush Rao V	Dhanush V
56	20IABCM056	Dharshana Anusha A	Dharshana A
57	20IABCM057	Dhikshitha Bhavana T	Dhikshitha T
58	20IABCM058	Divya N	Divya N
59	20IABCM059	Divya P	Divya P
60	20IABCM060	Divya Singh D	Divya Singh D
61	20IABCM061	Dorothy Ruth L	Dorothy Ruth L
62	20IABCM062	Fathima Uzra Begum	Absent
63	20IABCM063	Fathimath Jumna Aseen C A	Absent
64	20IABCM064	Fawaz Ahmed Shariff	Absent
65	20IABCM065	Fazil Pasha	Absent
66	20IABCM066	Francis Xavier P	Fazil
67	20IABCM067	Frank Dailn	Frank
68	20IABCM068	G Prejin	G Prejin
69	20IABCM069	Gagan M	Absent
70	20IABCM070	Gagan S	Absent
71	20IABCM071	Ganesh A	Absent
72	20IABCM072	Ganesh Suthar J	Absent
73	20IABCM073	Gautham R	Gautham R
74	20IABCM074	Gayathri K	Gayathri K
75	20IABCM075	Gladson S	Gladson S
76	20IABCM076	Glen Elestein Fernandez	Absent
77	20IABCM077	Gnanesh M V	Gnanesh M V
78	20IABCM078	Goutham G	Absent
78	20IABCM254	Silpi Kavitha	Absent


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 BANGALURU-560093

DATE:

CLASS: III B

NAME OF SPEAKER

S.NO	REG NO.	NAMES	SIGNATURE
1	20IABCM079	Gowtham M	
2	20IABCM080	Gs Dakshitha	
3	20IABCM081	Hari P	
4	20IABCM082	Hari Prashanth K	
5	20IABCM083	Harish M	
6	20IABCM084	Harish M	
7	20IABCM085	Harshith T	
8	20IABCM086	Harshitha R	
9	20IABCM087	Heevan S	
10	20IABCM088	Hephzibah E	
11	20IABCM089	Hrithick D N	
12	20IABCM090	Idress Ahmed	
13	20IABCM091	Immanuel S	
14	20IABCM092	Irfan Basha	
15	20IABCM093	Izhan Parvez	
16	20IABCM094	Jaihind M	
17	20IABCM095	Janardhanrao L	
18	20IABCM096	Janavi J	
19	20IABCM097	Jayavardhan J	
20	20IABCM098	Jeevan Sudha S	
21	20IABCM099	Jeevika S	
22	20IABCM100	John Ashier A	
23	20IABCM101	Johnson S	
24	20IABCM102	Jonas S	
25	20IABCM103	Jyothi H	
26	20IABCM104	K Vyshnu	
27	20IABCM105	Kaif Ulla Khan	
28	20IABCM106	Kamalesh V	
29	20IABCM107	Karan Pichandi	
30	20IABCM108	Karishma Banu	
31	20IABCM109	Karthick Raj M	
32	20IABCM110	Karthick V	
33	20IABCM111	Karthik S	
34	20IABCM112	Karthik V	
35	20IABCM113	Kasthuri M	

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36	20IABCM114	Kavana K M	Absent Kaviya
37	20IABCM115	Kaviya V	Absent Absent
38	20IABCM116	Khalid Mulla	Absent Absent
39	20IABCM117	Kiran Kumar S	Absent Kiran Kumar S
40	20IABCM118	Kiran Kumar S J	Absent Kiran Kumar S J
41	20IABCM119	Kiran R	Absent Absent
42	20IABCM120	Kishan Kumar	Absent Absent
43	20IABCM121	Kishore Kumar S	Absent Kishore Kumar S
44	20IABCM122	Kishore M	Absent Kishore M
45	20IABCM123	Laiba Zainab	Absent Laiba Zainab
46	20IABCM124	Lakshmi Prasanna L	Absent Lakshmi Prasanna L
47	20IABCM125	Lalith Kumar C	Absent Absent
48	20IABCM126	Lavanya B	Absent Lavanya B
49	20IABCM127	Lithika A	Absent Lithika A
50	20IABCM128	Lohith S	Absent Lohith S
51	20IABCM129	Lokesh Kumar C Padhiary	Absent Lokesh Kumar C Padhiary
52	20IABCM130	M Atisha	Absent M Atisha
53	20IABCM131	Madhumitha C	Absent Madhumitha C
54	20IABCM132	Mahalakshmi P	Absent Absent
55	20IABCM133	Malini S	Absent Mahalakshmi P
56	20IABCM134	Manju B	Absent Malini S
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58	20IABCM136	Manoj Kumar J	Absent Manoj Kumar E
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62	20IABCM140	Maria Gabriela A	Absent Manoj Roy Michael
63	20IABCM141	Maryharshitha C	Absent Absent
64	20IABCM142	Mathewraj	Absent Mary Gabriela A
65	20IABCM143	Md Afreed	Absent Mathewraj
66	20IABCM144	Md Kaif	Absent Md Afreed
67	20IABCM145	Meenakshi Bhaskar	Absent Md Kaif
68	20IABCM146	Meghana H	Absent Meenakshi Bhaskar
69	20IABCM147	Mehak	Absent Md. Kaif
70	20IABCM148	Melvin L	Absent Meenakshi
71	20IABCM149	Mohamed Aftab S	Absent Meghana H
72	20IABCM150	Mohammed Abiyan	Absent Mehak
73	20IABCM151	Mohammed Affan	Absent Absent
74	20IABCM152	Mohammed Farhan	Absent Mohammed Affan
75	20IABCM153	Mohammed Kazim	Absent Mohammed Farhan
76	20IABCM154	Mohammed Likhman	Absent Mohammed Kazim
77	20IABCM155	Mohammed Mujahid Zain	Absent Mohammed Likhman
78	20IABCM156	Mohammed Rayan Ul Haq	Absent Mohammed Mujahid Zain

INDIAN ACADEMY OF
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PARTICIPANT LIST FOR GUEST LECTURE

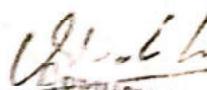
NO. OF SPEAKER

DATE:
CLASS: III C

REG NO.	NAMES	SIGNATURE
20IABCM157	Mohammed Sadiq A	Absent
20IABCM158	Mohammed Sufiyan Shariff	Absent
20IABCM159	Mohammed Yaseen	Mohammed Yaseen
20IABCM160	Mohan Raj R	Mohan Raj R
20IABCM161	Mohanraj B	Mohanraj B
20IABCM162	Monika U	Absent
20IABCM163	Monish Kumar R	Absent
20IABCM164	Monish S B	Monish S B
20IABCM165	N Nitesh Kumar	Absent
20IABCM166	N Nitish Rao	Absent
20IABCM167	Nadeem Ahmed	Absent
20IABCM168	Naveen Ashirwad S	Naveen
20IABCM169	Nelson Paul R	Absent
20IABCM170	Nickle Joshua J	Absent
20IABCM171	Nikhil R	Absent
20IABCM172	Niranjan G	Niranjan G
20IABCM173	Nisarga Srinivasa	Absent
20IABCM174	Nithin L	Absent
20IABCM175	Nithin N	Nithin N
20IABCM176	Nithin S	Nithin S
20IABCM177	Nithya Kalyani G	Nithya Kalyani G
20IABCM178	Numan Khan	Numan Khan
20IABCM179	Pallavi M	Absent
20IABCM180	Pavithra N A	Pavithra N A
20IABCM181	Pooja S	Pooja S
20IABCM182	Poojitha B	Poojitha B
20IABCM183	Prakalya N	Prakalya N
20IABCM184	Prakruthi P	Prakruthi P
20IABCM185	Prashanth M	Absent
20IABCM186	Prashanth M	Prashanth M
20IABCM187	Prashanth N	Absent
20IABCM188	Prathibha S	Absent
20IABCM189	Praveen David T	Praveen David T
20IABCM190	Praveen Kumar P	Praveen Kumar P
20IABCM191	Praveen Kumar P	Absent

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36	201ABCM192	Praveen Kumar S	Praveen Kumar S
37	201ABCM193	Preethi V	Preethi V
38	201ABCM194	Prithvi B	Prithvi B
39	201ABCM195	Priya A	Priya A
40	201ABCM196	Priya Shahi A	Priya Shahi A
41	201ABCM197	Priyanka P	Priyanka P
42	201ABCM198	Priyanka R	Priyanka R
43	201ABCM199	Pushparaj B	Pushparaj B
44	201ABCM200	R Prakash	R Prakash
45	201ABCM201	R Pushpa	R Pushpa
46	201ABCM202	Raghav M	Raghav M
47	201ABCM203	Rahul S	Rahul S
48	201ABCM204	Rajesh L	Rajesh L
49	201ABCM205	Rakesh Kumawat M	Rakesh Kumawat M
50	201ABCM206	Ram Valaram Chaudhary	Ram Valaram Chaudhary
51	201ABCM207	Ramesh R	Ramesh R
52	201ABCM208	Ramya B	Ramya B
53	201ABCM209	Ranjan S	Ranjan S
54	201ABCM210	Reena Agnes A	Reena Agnes A
55	201ABCM211	Richard Allen L	Richard Allen L
56	201ABCM212	Ricky Martin S	Ricky Martin S
57	201ABCM213	Ritish Garrison	Ritish Garrison
58	201ABCM214	Rinu Sonar	Rinu Sonar
59	201ABCM215	Rohith Denzil T	Rohith Denzil T
60	201ABCM216	Roshan Kumar V	Roshan Kumar V
61	201ABCM217	Rutvik K V N S	Rutvik K V N S
62	201ABCM218	S Jai Surya Vel	S Jai Surya Vel
63	201ABCM219	S K Nadeem M	S K Nadeem M
64	201ABCM220	S Praveen	S Praveen
65	201ABCM221	S Rahul Sam	S Rahul Sam
66	201ABCM222	S Sowmya	S Sowmya
67	201ABCM223	Sahana S	Sahana S
68	201ABCM224	Sahithya V	Sahithya V
69	201ABCM225	Saifulla Baig	Saifulla Baig
70	201ABCM226	Saima Firdose Fazeel	Saima Firdose Fazeel
71	201ABCM227	Samuel M	Samuel M
72	201ABCM228	Sanchana C G	Sanchana C G
73	201ABCM229	Sandeep C	Sandeep C
74	201ABCM230	Sandeetha S	Sandeetha S
75	201ABCM231	Sanjay A C	Sanjay A C
76	201ABCM232	Sanjay Kumar N	Sanjay Kumar N
77	201ABCM233	Sanjay S	Sanjay S
78	201ABCM234	Sasikala A	Sasikala A


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PARTICIPANT LIST FOR GUEST LECTURE

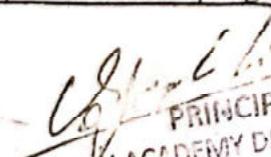
TOPIC
NAME OF SPEAKER

DATE:
CLASS: III D

SL NO	REG NO.	NAMES	SIGNATURE
1	20IABCM235	Sasikumar R	
2	20IABCM236	Satish C	
3	20IABCM237	Sattar Sharieff	
4	20IABCM238	Seema Begum F	
5	20IABCM239	Selvin S	
6	20IABCM240	Shabaaz G	
7	20IABCM241	Shahid S	
8	20IABCM242	Shaik Naqeeb N	
9	20IABCM243	Shakthi M	
10	20IABCM244	Sharukhan B	
11	20IABCM245	Shashank Singh	
12	20IABCM246	Shiva Hari L	
13	20IABCM247	Shivani B	
14	20IABCM248	Shreeyas S	
15	20IABCM249	Shreyas S	
16	20IABCM250	Shuaibuddin	
17	20IABCM251	Shwetha S	
18	20IABCM252	Sikanderulla Khan	
19	20IABCM253	Silna	
20	20IABCM255	Sneha G	
21	20IABCM256	Soloman S	
22	20IABCM257	Sonia	ABSENT
23	20IABCM258	Srinivas G	ABSENT
24	20IABCM259	Srinivas M S	ABSENT
25	20IABCM260	Srinivasulu V	
26	20IABCM261	Steffy Avanthika S	
27	20IABCM262	Stephen J	ABSENT
28	20IABCM263	Sudharshan V S	ABSENT
29	20IABCM264	Sudhir S	
30	20IABCM265	Sugan Kumawat J	
31	20IABCM266	Suhail Khan	
32	20IABCM267	Sujay R	
33	20IABCM268	Sulochana E	
34	20IABCM269	Sumayya A	
35	20IABCM270	Sumithra K	

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36	20IABCM271	Sunil Kumar D	Sunil Kumar D
37	20IABCM272	Sunil Sen S	Sunil Sen S
38	20IABCM273	Sunny Nishad	Sunny Nishad
39	20IABCM274	Supriya S	Supriya S
40	20IABCM275	Suraj C R	Suraj C R
41	20IABCM276	Suresh G	Suresh G
42	20IABCM277	Suresh Kumar E	Suresh Kumar E
43	20IABCM278	Swathi M	Swathi M
44	20IABCM279	Sweety S	Sweety S
45	20IABCM280	Swetha G	Swetha G
46	20IABCM281	Syed Abdul Haseeb	Syed Abdul Haseeb
47	20IABCM282	Syed Ahmed Kaif	Syed Ahmed Kaif
48	20IABCM283	Syed Ahmed Pasha	Syed Ahmed Pasha
49	20IABCM284	Syed Anas Sunain	Syed Anas Sunain
50	20IABCM285	Syed Arbaz Pasha	Syed Arbaz Pasha
51	20IABCM286	Syed Huzaifa	Syed Huzaifa
52	20IABCM287	Syed Jaffar Basha	Syed Jaffar Basha
53	20IABCM288	Syed Kabeer	Syed Kabeer
54	20IABCM289	Tabassum Fathima	Tabassum Fathima
55	20IABCM290	Tarun S	Tarun S
56	20IABCM291	Tejashwini Y	Tejashwini Y
57	20IABCM292	Thara A	Thara A
58	20IABCM293	Uma Mahesh S	Uma Mahesh S
59	20IABCM294	Umme Haani	Umme Haani
60	20IABCM295	Usha N	Usha N
61	20IABCM296	V Mohammed Kashif	V Mohammed Kashif
62	20IABCM297	Vaishnavi S	Vaishnavi S
63	20IABCM298	Varsha Rani	Varsha Rani
64	20IABCM299	Varshini N	Varshini N
65	20IABCM300	Vasanth Kumar R	Vasanth Kumar R
66	20IABCM301	Vasanth Kumar S	Vasanth Kumar S
67	20IABCM302	Veena V	Veena V
68	20IABCM303	Venila H K	Venila H K
69	20IABCM304	Vignesh V	Vignesh V
70	20IABCM305	Vijay V	Vijay V
71	20IABCM306	Vikram V	Vikram V
72	20IABCM307	Vinay N	Vinay N
73	20IABCM308	Vishal M	Vishal M
74	20IABCM309	Vishal Singh	Vishal Singh
75	20IABCM310	Vishwanath S	Vishwanath S
76	20IABCM311	Wajahath Ali Khan	Wajahath Ali Khan
77	20IABCM312	Yogesh S	Yogesh S


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GUEST LECTURE REPORT ON THE TOPIC "SOFT SKILLS FOR THE WORK PLACE" AS ON 12.10.2021

- ❖ **Title of the Event:** Guest Lecture
- ❖ **Place:** Multipurpose Seminar Hall
- ❖ **Date:** 12.10.2021
- ❖ **Time:** 2.00 pm
- ❖ **Name of the Resource Person:** Prof Afzal Basha
- ❖ **Beneficiaries:**

The guest talk was arranged for the fifth-semester B. Com students.

- ❖ **Broad Aim of the Event:** Soft Skills at the workplace empower students to collaborate and work together in order to collectively meet company goals and objectives. In turn, this leads to improved employee efficiency and heightened productivity at the workplace.

❖ **Objectives:**

1. To make them aware of the soft skills required at the workplace.
2. To create interest among students in learning soft skills.
3. To educate about the important skills required for interviews & jobs.

❖ **Outcomes:**

1. To impart the knowledge of soft skills among students.
2. To inspire the students to pursue soft skills certified courses.
3. To help students in career visioning and planning through employment skills.

❖ **Brief Report**

The Department of UG Commerce, Indian Academy Degree College organized a guest lecture program for fifth-semester B. Com students on the topic "soft skills for the workplace" on 12-10-21 by Prof. Afzal Basha.

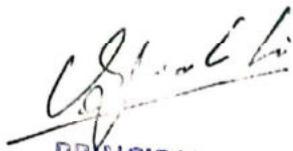
Prof. Afzal Basha addressed students and explained what soft skills is he told them Your work ethic, your attitude, your communication skills, your emotional intelligence and a whole

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Most of other personal attributes are the soft skills that are crucial for career success. Problem-solving, delegating, motivating, and team building is all much easier if you have good soft skills. He highlighted that nowadays an individual must have soft skills to survive in the corporate world. He also explained how soft skills can influence everything from the way employees communicate with customers to the way they solve problems internally. He encouraged students to take some training in soft skills.

Almost all students attended the program with good interest and got inspired by Prof. Afzal Basha. During the session, he also conducted activities like brainstorming where all the students participated. The feedback was collected at the end of the session from the beneficiaries for catering to further needs & improvements.



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PROFILE OF THE SPEAKER

- **NAME:** Prof. Afzal Basha
- **DESIGNATION:** Associate Professor IADC-A
- **BRIEF PROFILE :**

A young and dynamic Marketing, Sales, Operations & Business Development Professional academically proficient with a master in Business Administration specializing in Marketing determined to carve a niche in the field of Marketing/ Store Management /Business Development.

Nearly 15 years of extensive cross-functional experience in successfully and consistently delivering the responsibilities of Business Development, Marketing strategies, Market Share, Customer Satisfaction, Developing Marketing Strategy, Market Research, Sales Operation, Merchandising strategies, Store Management, currently spearheading as Assistant Professor, Indian Academy School of Management Studies, Bangalore, India

Competent and diligent professional with the capability to handle a wide range of assignments ranging from Business Development, Event Management, Marketing, Store Management, Sales Management, Brand Management, PR, Strategic Planning, Market Research and complete range of Marketing activities. Presented a paper entitled 'Supplier Relationship Management' in National Seminar.

A charismatic team leader /player, training, guiding and motivating teams of professionals achieving enhanced efficiency entailing maximum productivity through exceptional consensus building, exceptional interpersonal skills, analytical mind, comprehensive problem detection/ solving abilities

EXTRA CURRICULAR ACTIVITIES


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- Recognition Certificate from Ecommerce Company.
- BEST BOE Winner Award from Landmark Group.
- SMEP Winner Award from Landmark Group.
- Best Guest Talk appreciation letter from the Biotechnology department
- Extra Miler awards from ERNST & YOUNG (4 Numbers)
- Published 6 Papers in national & international journals, currently pursuing Phd (In management) at Bharathidasan University,
- Acted as Resource Persons for various Guest talk & judging the events.

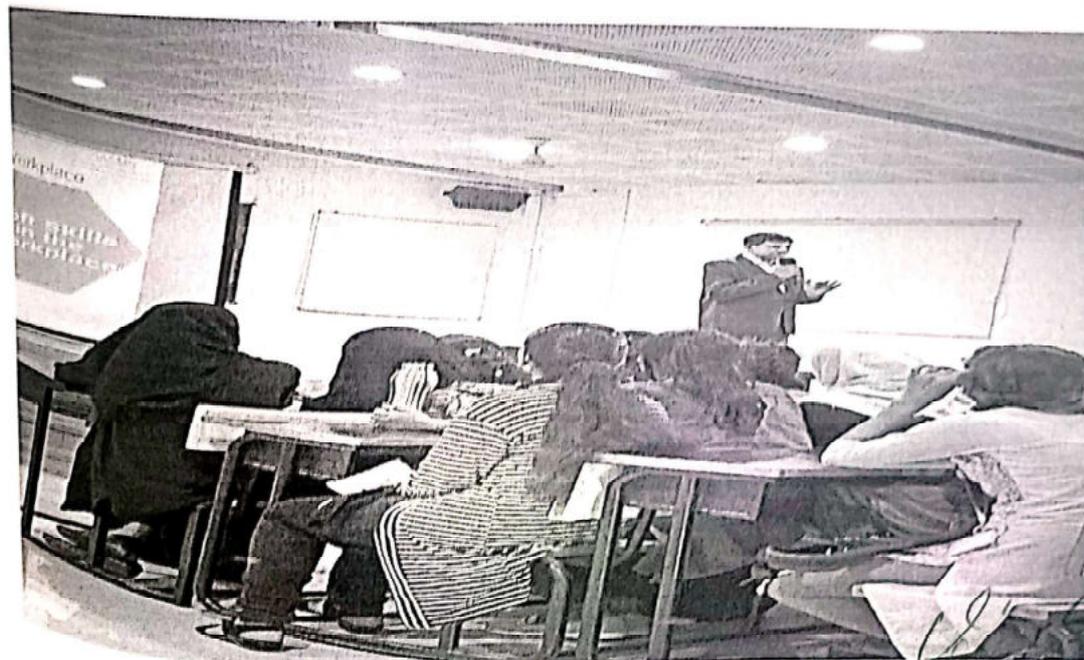


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GUEST LECTURE PICTURES ON THE TOPIC "SOFT SKILLS FOR THE WORK PLACE" AS ON 12.10.2021



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GUEST LECTURES

Speaker : Prof. AFZAL BASHA
Designation : ASSISTANT Professor
Topics : Soft Skills for the workplace
Nature of Audience : Vth Sem. B.Com
Date & Time : 12/10/21 2:15 pm
Views of the Speaker : Good Interactive Students


Signature of the guest

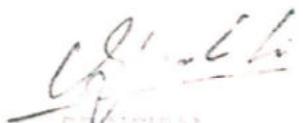
Views of the beneficiaries

The session was interactive and informative

The session was knowledge & gained lots new strategy

Remarks

Good Interactive Student & Participants


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PARTICIPANT LIST FOR GUEST LECTURE

NAME OF SPEAKER

DATE:

CLASS: V A

REG NO.	NAMES	SIGNATURE
19IABCM008	ABHISHEK GOWDA C	
19IABCM010	ADARSH	
19IABCM011	AFRID A	
19IABCM014	AISHWARYA SRIDHAR	- Absent
19IABCM015	AJAY L	
19IABCM016	AJITH S	
19IABCM018	AKSHITHA A	
19IABCM021	ALEX ANTHONY A	
19IABCM025	AMITH SINGH L S	
19IABCM027	ANAS AHMED	
19IABCM028	ANDEA SUSAN P A	
19IABCM029	ANJALI R	
19IABCM032	ANUSH N	
19IABCM033	ANUSHA K A	
19IABCM042	ARVIND M	
19IABCM045	ASHWINI G	
19IABCM046	ASHWINI V	
19IABCM050	BHARATH B	
19IABCM055	CHANDANA C	
19IABCM057	CHANDU G	
19IABCM059	CHARAN M	
19IABCM060	CHETHAN GOWDA H S	
19IABCM070	DHARANI T	
19IABCM076	DINAKARAN S	
19IABCM083	FAISAL PASHA	
19IABCM085	FATIMA NADEEM	
19IABCM092	GOWTHAM D	
19IABCM094	GOWTHAM R	
19IABCM095	GOWTHAMI PRIYA P	
19IABCM096	GUNASHEKAR K	
19IABCM097	HARISH KHAN	
19IABCM107	JANNET PREVIKA A	
19IABCM109	JOHN PETER R	
19IABCM111	JOSHVA D	
19IABCM114	JYOTHI KRISHNA V	
19IABCM118	KAVITHA R	
19IABCM122	KEERTHIKA A	
19IABCM123	KHAMIL BHUHARI N	
19IABCM125	KIRAN KUMAR B	
19IABCM128	LALITH KUMAR S	

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41	19IABCM135	M ARCHANA VYSHALI	Archana
42	19IABCM137	MADHUMITHA H	Madhumitha
43	19IABCM147	MARIA ALPHONSA R	Maria
44	19IABCM158	MOHAMMED ARAFATH C	Arafath
45	19IABCM163	MOHAMMED HANZALA AHMED	Hanzala
46	19IABCM168	MOHAMMED MOIZ PASHA	Moiz
47	19IABCM169	MOHAMMED MOYEED	Moyeed
48	19IABCM170	MOHAMMED NOUMAN	Nouman
49	19IABCM172	MOHAMMED SABIR	Sabir
50	19IABCM173	MOHAMMED SAFI PASHA	Safi
51	19IABCM183	MONISHA T	Monisha
52	19IABCM184	MOUHAMED CAMARA	Mouhamed
53	19IABCM189	N MAHAVISHNU	N Mahavishnu
54	19IABCM198	NIKITHA L N	Nikitha
55	19IABCM201	NIRANJAN B	Niranjana
56	19IABCM213	PRABHAKARAN N	Prabhakaran
57	19IABCM219	PRASHANTH E	Prashantha
58	19IABCM224	PRIYANKA K	Priyanka
59	19IABCM226	PUNITH KUMAR U	Punith
60	19IABCM228	RADHA Y	Radha
61	19IABCM232	RAMESH	Ramesh
62	19IABCM233	RANJITH CA	Ranjith
63	19IABCM234	RANJITH KUMAR S	Ranjith
64	19IABCM236	RASHMI M	Rashmi
65	19IABCM239	RETHICK SURENDAR T	Rethick
66	19IABCM241	ROHITH A	Rohith
67	19IABCM248	SAMEER PASHA	Sameer
68	19IABCM258	SELSIYA CATHERINE	Selsiya
69	19IABCM265	SHANE LEE B	Shane
70	19IABCM270	SHIVA M	Shiva
71	19IABCM272	SHOHEB SIKANDER	Shoheb
72	19IABCM288	SUHAS S	Suhas
73	19IABCM294	SURENDAR S	Surender
74	19IABCM296	SURYA MADHUSUDHANAN P	Surya
75	19IABCM298	SWATHI S	Swathi
76	19IABCM300	SWETHA G S	Swetha
77	19IABCM308	TARUN B	Tarun
78	19IABCM315	V S BHOMIKA	V S Bhomika
79	19IABCM316	VARUN KUMAR S	Varun
80	19IABCM318	VARUN N	Varun
81	19IABCM319	VASANTH T	Vasanth
82	19IABCM320	VEDASHREE S	Vedashree
83	19IABCM322	VICTOR A	Victor
84	19IABCM323	VIDHYA N	Vidhya
85	19IABCM324	VIGIL VARGHESE	Vigil
86	19IABCM325	VIGNESH K	Vignesh
87	19IABCM327	VIGNESH KUMAR N	Vignesh
88	19IABCM328	VIGNESH R	Vignesh
89	19IABCM337	VISHWAS B	Vishwas
90	19IABCM339	YASHWANTH M	Yashwanth
91	19IABCM340	YASHWANTH M	Yashwanth

19IABCM 152



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PARTICIPANT LIST FOR GUEST LECTURE

TOPIC	NAME OF SPEAKER	REG NO.	NAMES	DATE:	CLASS: V C
SL.NO	REG NO.	NAMES	SIGNATURE		
1	19IABCM141	MALLIKA T S	<i>Mallika</i>		
2	19IABCM142	MANISH SINGH	<i>Absent</i>		
3	19IABCM143	MANTVASANTH M	<i>Mantva</i>		
4	19IABCM144	MANJUNATH P S	<i>Manjunath</i>		
5	19IABCM145	MANOJ M	<i>Absent</i>		
6	19IABCM146	MANU G	<i>Absent</i>		
7	19IABCM148	MARIYAM KHAN	<i>Mariyam</i>		
8	19IABCM149	MARY JENNIFER J	<i>Mary Jennifer</i>		
9	19IABCM150	MD QUTUB SHARIFF	<i>Qutub</i>		
10	19IABCM151	MD SAIF	<i>Saif</i>		
11	19IABCM152	MEGHA SHREE A R	<i>Absent</i>		
12	19IABCM153	MEGHA SHREE V	<i>Megha Shree V</i>		
13	19IABCM154	MEGHANA B	<i>Meghana</i>		
14	19IABCM155	MEGHANA M	<i>Meghana</i>		
15	19IABCM156	MICHAEL CHARLES P	<i>Michael</i>		
16	19IABCM157	MOHAMMED SULAIMAN	<i>Absent</i>		
17	19IABCM159	MOHAMMED FAHAD BAIG	<i>Absent</i>		
18	19IABCM160	MOHAMMED FAISAL	<i>Absent</i>		
19	19IABCM161	MOHAMMED FAISAL S D	<i>Absent</i>		
20	19IABCM162	MOHAMMED FAIZ	<i>Absent</i>		
21	19IABCM164	MOHAMMED HUSSAIN V P	<i>Absent</i>		
22	19IABCM165	MOHAMMED ISHAQ K	<i>Absent</i>		
23	19IABCM166	MOHAMMED ISMAIL	<i>Absent</i>		
24	19IABCM167	MOHAMMED JILAN	<i>Absent</i>		
25	19IABCM171	MOHAMMED OWAIZ	<i>Absent</i>		
26	19IABCM174	MOHAMMED WALEED	<i>Absent</i>		
27	19IABCM175	MOHAMMED YASEEN	<i>Absent</i>		
28	19IABCM176	MOHAMMED YOUNUS A R	<i>Absent</i>		
29	19IABCM177	MOHAMMED ZAHEER KHAN	<i>Absent</i>		
30	19IABCM178	MOHAMMED ABDULAZEEM A D	<i>Absent</i>		
31	19IABCM179	MOHSIN SAIT	<i>Mohsin</i>		
32	19IABCM180	MOHSIN ULLA KHAN	<i>Mohsin</i>		
33	19IABCM181	MONICA YONGHANG	<i>Monika</i>		
34	19IABCM182	MONIKA BEHERA B	<i>Absent</i>		
35	19IABCM185	MUDASSIR AHMED	<i>Absent</i>		
36	19IABCM186	MUHAMMED AMAN	<i>Munesh</i>		
37	19IABCM187	MUNESHWARI C	<i>N. Alekya</i>		
38	19IABCM188	N ALEKYA	<i>N. Alekya</i>		
39	19IABCM190	NARENDRA S	<i>Absent</i>		
40	19IABCM191	NAVANEETH N	<i>Navaneeth</i>		
41	19IABCM192	NAVEEN KUMAR A	<i>Absent</i>		
42	19IABCM193	NAVEEN KUMAR C	<i>Absent</i>		
43	19IABCM194	NAVEEN P	<i>Absent</i>		
44	19IABCM195	NAYANA S	<i>Absent</i>		
45	19IABCM196	NETHRAVATHY D	<i>Nethra</i>		
46	19IABCM197	NIKITHA K	<i>Nikitha</i>		

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47	19IABCM199	NIKITHA R	Nikitha-R
48	19IABCM200	NIKITHA T N	Nikitha T N
49	19IABCM202	NITHIN KUMAR B	Absent
50	19IABCM203	NITISH V	Absent
51	19IABCM204	NOUSHIN BANU	Absent
52	19IABCM205	OUSMANE KANTE	Absent
53	19IABCM206	PAUL JONATHAN D	Absent
54	19IABCM207	PAUL RAJ E	Absent
55	19IABCM208	PAVAN KUMAR	K Pavan
56	19IABCM209	PAVANA B N	PAVANA
57	19IABCM210	PAVITHRA S	PAVITHRA S
58	19IABCM211	POOJITHA G V	POOJITHA
59	19IABCM212	POSHMITHA A	Absent
60	19IABCM214	PRADEEP M	Absent
61	19IABCM215	PRAJWAL PAWAR J	Absent
62	19IABCM216	PRAKASH KUMAR S	Absent
63	19IABCM217	PRAKASH S	PRAKASH S
64	19IABCM218	PRAMOD G V	Absent
65	19IABCM220	PRAVEEN T	PRAVEEN T
66	19IABCM221	PRAVEEN A	PRAVEEN A
67	19IABCM222	PREETHI A	PREETHI A
68	19IABCM223	PREMA K	PREMA K
69	19IABCM225	PRUTHVI K	PRUTHVI K
70	19IABCM227	R SYLVESTER KEVIN	Absent
71	19IABCM229	RAHUL M	Absent
72	19IABCM230	RAISA SADAF	Absent
73	19IABCM231	RAJESH V	Absent
74	19IABCM235	RASHMI L	Absent
75	19IABCM237	RASHMITHA	RASHMITHA
76	19IABCM238	RAVI D	Absent
77	19IABCM240	ROBIN G	Absent
78	19IABCM242	ROSLIN V	Absent
79	19IABCM243	S SHYAM KUMAR	Absent
80	19IABCM244	SABA FARHEEN	Absent
81	19IABCM245	SABASTIAN CHRISTOPHER	SABASTIAN
82	19IABCM246	SADIYA KHANUM	SADIYA
83	19IABCM247	SAIF AHMED QURESHI	SAIF AHMED
84	19IABCM249	SANDEEP R	Absent
85	19IABCM251	SANDHYA N	SANDHYA N
86	19IABCM252	SANJAY K	Absent
87	19IABCM253	SANTOSH A	Absent
88	19IABCM254	SARANYA M	Absent
89	19IABCM255	SARVESH KUMAR S	Absent
90	19IABCM256	SATHISH KUMAR V	Absent
91	19IABCM257	SATHYA M	Absent
92	19IABCM259	SELVARAJ S	Absent
93	19IABCM260	SHAIK ARIF	Absent
94	19IABCM261	SHAIK FAIZAN	Absent
95	19IABCM262	SHAIK FAIZAN AHMED	Absent
96	19IABCM263	SHAIK MOIN QURESHI	Absent
97	19IABCM264	SHANAWAZ	Absent
98	19IABCM266	SHARANYA V	SHARANYA V

109 1

Kavya - P



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PARTICIPANT LIST FOR GUEST LECTURE

DATE: _____
CLASS: V B

NO	REG NO.	NAMES	SIGNATURE
1	19IABCM001	A AJAY KUMAR	Ajay
2	19IABCM002	ABDOUL GADIROU DIALLO	Absent
3	19IABCM003	ABDUL RAZAQ R	Absent
4	19IABCM004	ABDUL REHAMAN	Absent
5	19IABCM005	ADHAY SAGAR HYSANI	Adhaya
6	19IABCM006	ADHISHIK	Absent
7	19IABCM007	ADHISHIK G S	Adhishik
8	19IABCM009	ADHISHIK A	Absent
9	19IABCM012	AFSIYA BEGUM	Afsiya
10	19IABCM013	AHMED HHSAN A	Absent
11	19IABCM017	AKASH S	Absent
12	19IABCM019	ALAM KHAN	Absent
13	19IABCM020	ALAN RICHARD S	Alan Richard
14	19IABCM022	ALISHA HERMAIN	Alisha
15	19IABCM023	ALLAHA BAKASH	Absent
16	19IABCM024	AMANI IT'CHA JEROME	Absent
17	19IABCM026	AMUDHA S	Absent
18	19IABCM030	ANJU R	Anju
19	19IABCM031	ANTHONY DASS Y	Anthony
20	19IABCM034	APARNA N	Aparna
21	19IABCM035	APPASWAMY D	Appaswamy
22	19IABCM036	APPITHA ARUL MARY Y	Appitha
23	19IABCM037	APSARA ARYAL B	Apsara
24	19IABCM038	ARCHANA N	Archana
25	19IABCM039	ARFA UMME SALITH	Arfa
26	19IABCM040	ARUN M	Arun
27	19IABCM041	ARUN U	Arun
28	19IABCM043	ARVIND M	Arvind
29	19IABCM044	ARVIND T	Arvind
30	19IABCM047	B RAJU	B Raju
31	19IABCM048	BHANUPRIYA N	Bhanu
32	19IABCM049	BHARATH A	Bharath
33	19IABCM051	BHARATH KUMAR G	Bharath
34	19IABCM052	BHARATH P	Bharath
35	19IABCM053	BHARATHRAJ K	Bharath
36	19IABCM054	C VIVAN VISHNU KUMAR	Chivvan
37	19IABCM056	CHIANDINI S	Chian
38	19IABCM058	CHARAN ABISHEK A	Charan
39	19IABCM061	CHETHAN S	Chethan
40	19IABCM062	DAISY J	Daisy
41	19IABCM063	DAKSHAYANI M	Dakshaya
42	19IABCM064	DEEPAK R	Deepak
43	19IABCM065	DEEPAK B	Deepak
44	19IABCM066	DEEPAK C	Deepak
45	19IABCM067	DEEPAK K	Absent
46	19IABCM068	DEEPAK S	Deepak
47	19IABCM069	DHANRAJ B SUTHAR	Dhanraj

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48	19IABCM071	DHARSHAN BV	Absent
49	19IABCM072	DIELIME DIMITRI DIABATE	Absent
50	19IABCM073	DILIP	Dilip
51	19IABCM074	DILIP KUMAR	Dilip Kumar
52	19IABCM075	DILIP KUMAR J	Absent
53	19IABCM077	DINESH KUMAR S	Dinesh
54	19IABCM078	DISHA ANIL KUMAR	Disha
55	19IABCM079	DIVYA G	Divya
56	19IABCM080	EMMANUVEL S	Absent
57	19IABCM081	EZEKIEL M	Ezekiel
58	19IABCM082	FAHEEMA HUSSAIN	Faheema
59	19IABCM084	FARDAN MAIMEN	Fardan
60	19IABCM086	FAZAL KHAN	Absent
61	19IABCM087	FIGO GABRIEL J	Fig
62	19IABCM088	GIRISH M	Girish
63	19IABCM089	GNANANANDA S	Nandu
64	19IABCM090	GOUTHAMCHAND PAWAR	Goutham
65	19IABCM091	GOWTHAM C	Absent
66	19IABCM093	GOWTHAM M	Absent
67	19IABCM098	HARISH N	Absent
68	19IABCM099	HERICK JONES J	Herick
69	19IABCM100	HRITHIK SAMUEL R	HRithik
70	19IABCM101	IMMANUAL R	Immanuel
71	19IABCM102	IMMANUEL ABHISHEK S	Immanuel
72	19IABCM103	ISAAC DANIEL D	Isaac
73	19IABCM104	JAISON A	Jaishan
74	19IABCM105	JANARDHAN R P	Janardhan
75	19IABCM106	JANAVJ T P	Janavj
76	19IABCM108	JOHN PETER	John
77	19IABCM110	JONATHAN ROBERT	Jonathan
78	19IABCM112	JOY LAWRENCE V	Joy
79	19IABCM113	JYOTHI A	Jyothi
80	19IABCM115	K SUDHIR	K Sudhir
81	19IABCM116	KARTHIK K	Karthik
82	19IABCM117	KARTHIKEYAN N	Karthikeyan
83	19IABCM119	KAVITHA V	Kavitha
84	19IABCM120	KAVYA M R	Kavya
85	19IABCM121	KAVYA P	Kavya
86	19IABCM124	KIRAN JAGADISH	Kiran
87	19IABCM126	KIRAN KUMAR P S	Kiran
88	19IABCM127	KIRAN P	Kiran
89	19IABCM129	LATHA SHREE	Latha
90	19IABCM130	LAVANYA G R	Lavanya
91	19IABCM131	LAZAR R	Lazar
92	19IABCM132	LOKESH KUMAR L	Lokesh
93	19IABCM133	LOKESH M	Lokesh
94	19IABCM134	M AJITH	Ajith
95	19IABCM136	M SANDEEP	Sandeep
96	19IABCM138	MAHER ALLAM KHAN	Maher
97	19IABCM139	MAJARUDDIN M	Majaruddin
98	19IABCM140	MALINI S	Malini

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PARTICIPANT LIST FOR GUEST LECTURE

SL. NO	REG NO.	NAMES	SIGNATURE
1	19IABCM267	SHARON S	Sharon S
2	19IABCM268	SHARON WILSON	Sharon Wilson
3	19IABCM269	SHASHI KUMAR S	Shashi Kumar S
4	19IABCM271	SHIVAM P PANDEY	Shivam P Pandey
5	19IABCM273	SHRAVANI N	Shravani N
6	19IABCM274	SHRAVYA VARSHITHA T N	Shravya Varshitha T N
7	19IABCM275	SHRUTHI J	Absent
8	19IABCM276	SHRUTHI RANA A	Shruthi Rana A
9	19IABCM277	SHUBANGINI P	Shubangini P
10	19IABCM278	SINDHU DEEKSHITHA L	Sindhu Deekshitha L
11	19IABCM279	SINDHU V	Sindhu V
12	19IABCM280	SINDHU V	Absent
13	19IABCM281	SNEHA M	Sneha M
14	19IABCM282	SOWMYA K	Sowmya K
15	19IABCM283	SPOORTHY B	Spoorthy B
16	19IABCM284	SRINATH S	Absent
17	19IABCM285	STEPHEN RAJ	Stephen Raj
18	19IABCM286	STEPHEN RAJ A	Absent
19	19IABCM287	SUCHETHA K	Absent
20	19IABCM289	SUJEET KUMAR MANDAL	Sujeet Kumar Mandal
21	18IABCM171	PAUL DINAKARAN	Absent
22	19IABCM290	SUJITH KUMAR S	Absent
23	19IABCM291	SUMA J	Suma J
24	19IABCM292	SUNIL P	Sunil P
25	19IABCM293	SUREKHA J	Absent
26	19IABCM295	SURESH R	Absent
27	19IABCM297	SWAPNA RANI ROUT	Swapna Rani Rout
28	19IABCM299	SWEATHANJALI K	Sweathanjali K
29	19IABCM301	SYED AFRIDI	Syed Afridi
30	19IABCM302	SYED ASIF	Absent
31	19IABCM303	SYED FARDEEN	Absent
32	19IABCM304	SYED JAFFER SADIQ	Absent
33	19IABCM305	SYED SHOAB UD DIN SHA R	Absent
34	19IABCM306	TAHER ANSAR KHAN	Taher K
35	19IABCM307	TANVEER PASHA A	Tanveer Pasha A
36	19IABCM309	TARUN KUMAR	Tarun Kumar
37	19IABCM310	TEJAS D	Tejas D
38	19IABCM311	THANCHUINGAM SHITHUNG	Absent
39	19IABCM312	THEOPHILUS THOMAS A	Thomas A
40	19IABCM313	TRISHANK PRABHU	Absent
41	19IABCM314	V B VISHAL	V B Vishal
42	19IABCM317	VARUN M	Absent
43	19IABCM321	VENKATESH C R	Venkatesh C R
44	19IABCM326	VIGNESH A	Absent
45	19IABCM329	VIGNESH V	Vignesh V
46	19IABCM330	VIJAY K	Absent

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47	19IABCM331	VIJAY R	Vijay R Absent
48	19IABCM332	VIJAY V	Absent
49	19IABCM333	VIJAYA KUMAR S	Vijaya K
50	19IABCM334	VINOD KUMAR K	Absent
51	19IABCM335	VINOD KUMAR P	Vinod P
52	19IABCM336	VINODINI R	Absent
53	19IABCM338	YAMUNA K	Absent
54	19IABCB001	AJAYVARGHEESE	Ajay V
55	19IABCB002	AKSHAY M	Absent
56	19IABCB003	ALLAN JOSEPH	Allan
57	19IABCB004	ANGEL REENA S	Angel
58	19IABCB005	ARUL MATHI M	Arul
59	19IABCB006	ARUN KUMAR G	Arun G
60	19IABCB007	ARUN KUMAR N	Arun N
61	19IABCB008	ASFIYA SHAKIR	Asfiya
62	19IABCB009	BARSHEED KHAN	Absent
63	19IABCB010	CHANDRASHEKAR B	Chandra
64	19IABCB011	CHANDRASHEKAR M	Chandra
65	19IABCB012	DEEPIKA CJ	Deepika
66	19IABCB013	H S DEEPIKA	Deepika
67	19IABCB014	HARI KRISHNA S	Hari
68	19IABCB015	JOHN WILLIAM V	John
69	19IABCB016	K DIVYA BHARATHI	K. Divya
70	19IABCB017	K S JAGADEESHWAR	K. Jagadeeshwar
71	19IABCB018	KAVERI V	Kaveri
72	19IABCB019	KENNETH S	Kenneth
73	19IABCB020	LIJO STEPHEN	Lijo
74	19IABCB021	MAHANTESH S PATIL	Mahantesh
75	19IABCB022	MAMTHA R	Mamtha
76	19IABCB023	MARK DELBERT J	Mark
77	19IABCB024	MOHAMMED AZHAR	Absent
78	19IABCB025	MOHAMMED YASEEN	Absent
79	19IABCB026	MONICA PARNOAL	Absent
80	19IABCB027	NANDINI S	Absent
81	19IABCB028	NAVEEN KUMAR C S	Naveen
82	19IABCB029	NAVEEN R	Naveen
83	19IABCB030	PAVAN A KOLKAR	Pavan
84	19IABCB031	PRIYANKA T	Priyanka
85	19IABCB032	RACHANA VIJAYALAKSHMI BR	Rachana
86	19IABCB033	RITHIKA R	Rithika
87	19IABCB034	SANDHYA S C	Sandhya
88	19IABCB035	SHAHEED BAIG	Shaheed
89	19IABCB036	SHAKTHI KUMAR A	Absent
90	19IABCB037	SHARATH KUMAR A	Absent
91	19IABCB038	SHARIFA KHATUN	Absent
92	19IABCB039	SHERWIN PAUL S	Sherwin
93	19IABCB040	SHYLA S	Shyla
94	19IABCB041	SNEHA S	Sneha
95	19IABCB042	SRIKANTH P	Srikanth
96	19IABCB043	SYED SADIQ PASHA	Syed
97	19IABCB044	VHAVLE PRANAY MANOJ KUMAR	Absent
98	19IABCB045	VIDYA K	Absent
99	19IABCB046	XAVIER D	Xavier

INDIAN ACADEMY

Degree College - Autonomous

Department of Biochemistry

Date: 20-12-2021

Ref.No.

Circular

This is to inform that Department of Biochemistry, Indian Academy Degree College-Autonomous is organizing an Industrial Visit for V semester B.Sc. (GBcBt & GBcMb) students on 23rd December 2021.

Objectives of Industrial Visit:

1. To provide an exposure to the students about the use of biochemical techniques involved in industry real-time.
2. To show the students about seed processing methodologies like seed purity testing, testing hybrids and parental lines and marker assisted trait selection (MATS), complete seed processing methods like physical purity, germination, viability, and moisture content.

Name of the industry:

Indo American Hybrid Seeds
Sy No 13/4 & 14, 7th Km
Banashankari-Kengeri Link Road,
Channasandra, Rajeshwarinagar,
Bengaluru, Karnataka 560098

Departure time: 9.30am

Arrival time: 4.00pm

I request all the concerned Department HOD's and teachers to make a note of the same and support.

HEAD
Department of Biochemistry
Dr. Ananda Varadachari
I.A.D.C. and Centre For
Prof. & HOD-Biochemistry
Research & Post Graduate Studies
Bangalore-560 043

HOD's Signature

1. Biotechnology
2. Microbiology
3. Genetics
4. Subject teachers



Dr. Srinidhi.K. Parthasarathi

Principal

PRINCIPAL
INDIAN ACADEMY DEGREE COLLEGE
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HENNUR MAIN ROAD, KALYAN NAGAR
BANGALORE-560043, KARNATAKA

INDIAN ACADEMY

Degree College - Autonomous

Department of Biochemistry

Report on the Industrial Visit to "INDO-AMERICAN HYBRID SEEDS PVT. LTD."

Date of the Visit: 23-12-2021.

Target Students: B.Sc V semester GBcMb & GBcBt.

No. of students: 48 students

Place of Industrial Visit: "INDO-AMERICAN HYBRID SEEDS PVT. LTD." in Banashankari- Kengeri link road, Rajeshwari Nagar, Bengaluru-98,

Aim of the Visit:

Main aim of industrial visit is to provide an exposure to students about practical working environment. They also provide students a good opportunity to gain full awareness about industrial practices.

Learning Objectives:

1. Objectives of industrial visit is to provide students an insight regarding internal working of hybrid seed production.
2. To acquaint students to know things more practically, through interaction with the professionals and know their working methods and employment practices.

Profile of Industry / Institution:

Indo-American Hybrid Seeds (India) Pvt Ltd. Came into existence on the 4th of November, 1965 which was established by our Chairman Padma Shree Dr. Manmohan Attavar. Its primary concern was to supply seeds of the highest quality to the American market. 50 years later, although serving the Indian market chiefly its focus is resolved: Quality is their Priority. IAHS is mainly involved in the development and production of hybrid seeds of vegetables, flowering plants, field crops, and ornamental plants.

In 1973, IAHS F1 hybrids of Capsicum Bharath and Tomato Karnataka were the first hybrid vegetable seeds to be released into the Indian market. Over the years, through specific, precise research and development IAHS has developed wide range of products that are engineered to adapt to various agro-climatic conditions, thus enabling IAHS to cater not only domestic but also international markets.

IAHS Research, development & Biotechnology is highly focused with the latest technology to bring out the purest quality of seeds. The highly determined R&D team is focused to develop products based on farmer requirements in different parts of the country. The team involves highly dedicated breeders who constantly strive for the quality of the products in the field, in transit, as well as in the market. Mostly the team works on vegetable crops like tomato and hot pepper, field crops like Rice, Maize and Sweet Corn. Apart from the good quality produce the team concentrates on multiple disease resistances and abiotic and biotic stress tolerance.

IAHS has Biotechnology department which predominantly works on marker assisted backcross breeding to introduce desirable genes into the elite breeding lines. It also carries out DNA fingerprinting of high value hybrid seeds to detect inbreeds, varietal trueness and for the identification of heterotic lines. With the latest technology and equipment, the Biotechnology department supports IAHS very own R&D wing, together fulfilling the IAHS promise of quality. The Biotechnology Laboratory of IAHS has been recognized by the Department of Scientific and Industrial Research (DSIR), Ministry of science and technology, and the Government of India. The IAHS Biotechnology department also provides student training programs involving DNA fingerprinting, Marker Assisted Trait Selection (MATS), Recombinant DNA Technology, and plant tissue culture for undergraduate and postgraduate students. It also offers seed purity testing for varieties, hybrids and parental lines.

IAHS has the First Indian ISTA-accredited seed testing laboratory, authorized to issue Orange International Seed Lot Certificates to both public and private seed companies in India since October, 2002. As per the requirements, the lab can carry out tests for physical purity, germination, viability and moisture content. IAHS also undertakes custom production of vegetable seeds both for overseas and domestic companies through its vast extensive network of farmers covering several agro-climatic zones. The process involves strict supervision at all the stages of production and processing. The seeds thus produced undergo stringent tests for seed quality, soil-borne diseases and genetic purity.

Curriculum Connect:

Industrial visit has its own importance in the career of a student who is pursuing a professional degree. It is considered as a part of college curriculum and gives a comprehensive knowledge of both theory and practical's, especially for a particular subject they are studying in a particular semester when the visit is organized. Industrial visit is considered as one of the efficient methods under teaching-learning practices. The main reason behind this is to help students know things more practically, through interaction with the professionals and know their working methods and employment practices. Visiting different industries actually help students to build a good relationship with those industries and thus help them explore job opportunities subsequently in the same or related industries.

About the visit:

On 23rd of December 2021, 50 students of final year BSc. GBcMb/Bt, along with two faculty members Department of Biochemistry (Mrs. Pushpa Reddy and Mrs. Dilshad) of Indian Academy Degree Autonomous visited **INDO-AMERICAN HYBRID SEEDS PVT. LTD.** in Banashankari- Kengeri link road, Rajeshwari Nagar, Bengaluru-98

We left our college at 9.30 am and travelled in a comfortable IADCA bus. Reached **INDO-AMERICAN HYBRID SEEDS PVT. LTD** by 11.45 am. We were assembled and taken to the corporate office. Soon after which the students had an interactive session with Dr. Madhusudan , the purpose of the session was to acknowledge about the company's profile, achievements and techniques employed by them to deliver quality products.

He explained different cell theories, (Apical cell theory, Tunica corpus theory, Histogen theory). He also stated that parenchyma cells are the best preferred cells for tissue culture and importance of plant hormones in the technique. Key role of meristematic cells in the process of culturing.

Later the students were taken to visit the primary and secondary hardening unit where the tissue cultured saplings were gradually shifted to adapt the environmental condition outside the laboratories. Here the plantlets were maintained in polyhouse tunnels which provided optimum conditions for the growth. Then these were shifted to secondary hardening unit where they are supplied with adequate amount of biofertilizers and were irrigated manually. The cooling pads and fans were used to suck in the moisture and maintain relative humidity of the unit. The students understood the basic foundation of plant tissue culture techniques and the controlled factors required for the efficient plant tissue culturing such as temperature, relative humidity, fertility factors, Aseptic conditions etc. which was efficiently maintained in primary hardening unit and secondary hardening unit followed by acclimatization. It also emphasized botany where the plants were grown vegetatively through its tissues. They also promote Urban farming and kitchen gardening. Followed by students were taken to the botanical garden where they observed varieties of plants like marigold, salvia, petunia, cactus, chrysanthemums, Geraniums and several other ornamental plants.

Learning Outcomes:

The theoretical knowledge is not enough for making a good professional career hence this industrial visit provided students a practical perspective of an insight of producing hybrid seeds of crops and ornamental plants, also challenges faced by usual plant and seed breeders.


Dr. Ananda Vardhan.H.

Prof. & HOD-Biochemistry

HOD

Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Bangalore-560 043



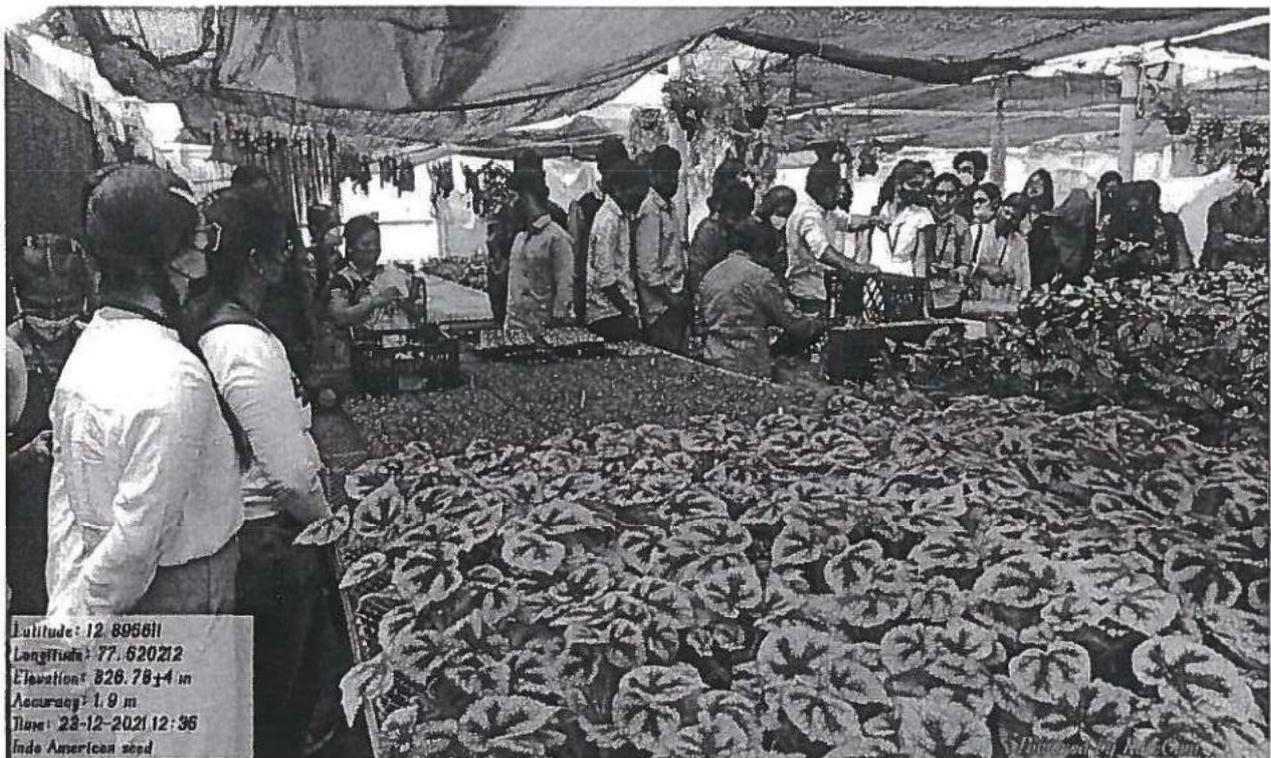

Dr. Srinidhi.K. Parthasarathi

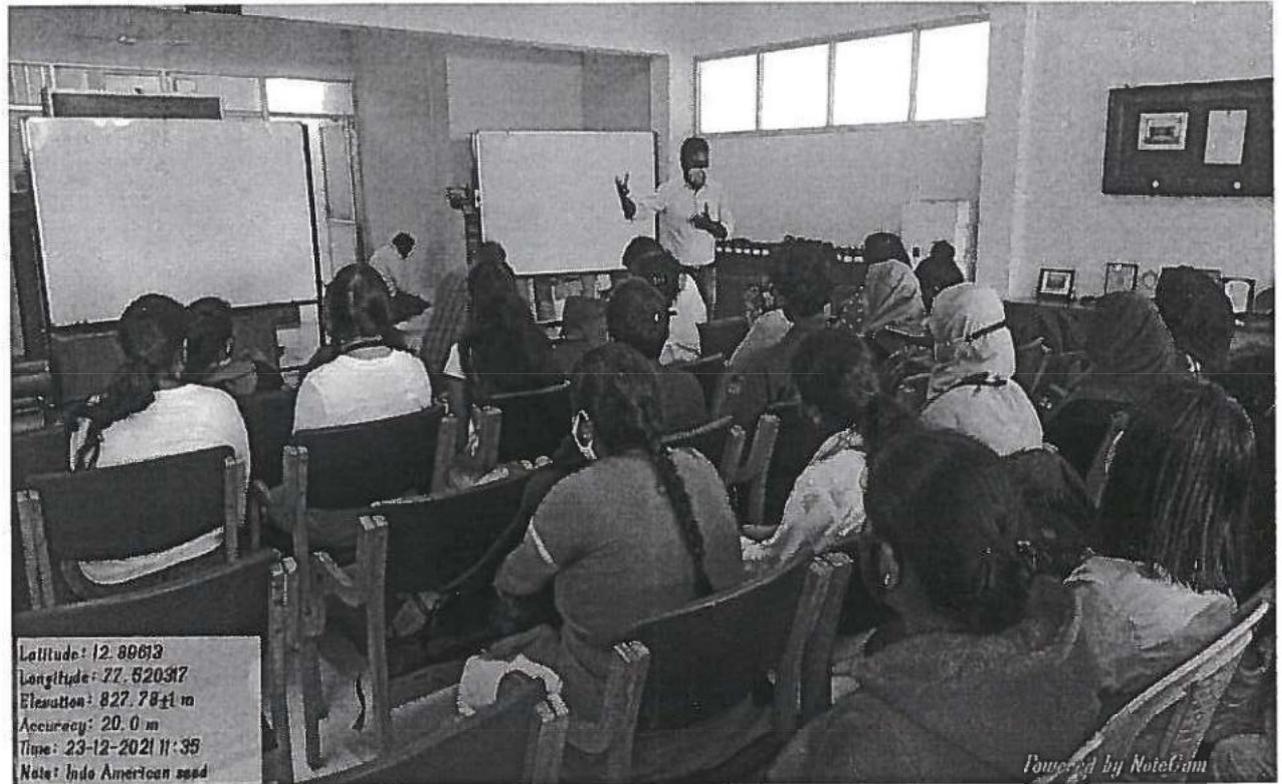
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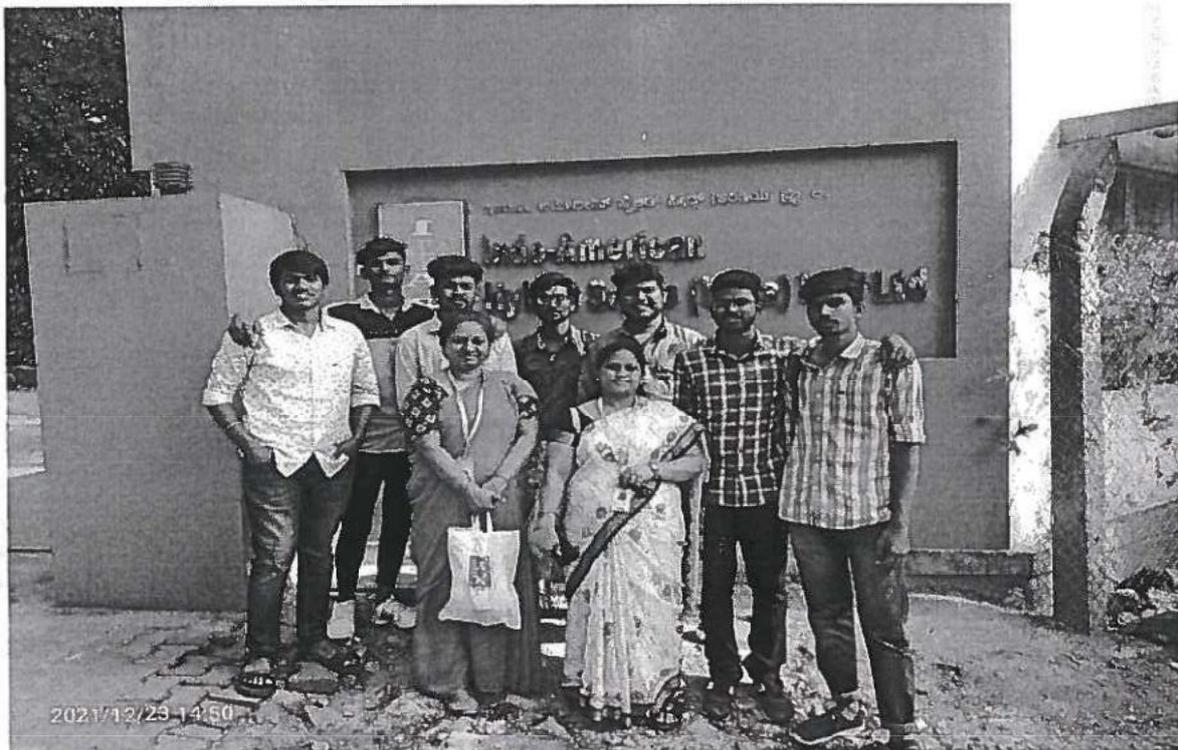
PRINCIPAL
INDIAN ACADEMY DEGREE COLLEGE
AUTONOMOUS
HENNUR MAIN ROAD, KALYAN NAGAR
BANGALORE-560043, KARNATAKA

Photos

Industrial Visit to “**INDO-AMERICAN HYBRID SEEDS PVT. LTD.**” in Banashankari-Kengeri link road, Rajeshwari Nagar, Bengaluru-98,







The experience of the industrial visit was really fantastic and unforgettable. It was reverberating experience which cherish all of us. Students got valuable information from this industrial visit and returned to college by 4:00 PM.

INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF BIOCHEMISTRY

Students attendance for industrial Visit to Indo American Hybrid Seeds, Sy No
13/4 & 14, 7th Km, Banashankari-Kengeri Link Road, Channasandra,
Rajeshwarinagar, Bengaluru on **23-12-2021** Class : B.Sc.V (GBcBT/Mb)

Sl.No.	Name of the student	Register number	9.15am	11.30am	1.30pm	3.30pm
1	ADRIJA	19IABSC001	Ab	Ab	Ab	Ab
2	AMANEE	19IABSC003	Ab	Ab	Ab	Ab
3	AMLAN	19IABSC004	✓	✓	✓	✓
4	AMRUTHA	19IABSC005	✓	✓	✓	✓
5	BALAJI	19IABSC006	✓	✓	✓	✓
6	CHALLA	19IABSC007	✓	✓	✓	✓
7	CHANDRA	19IABSC008	✓	✓	✓	✓
8	CHRISTINA	19IABSC009	Ab	Ab	Ab	Ab
9	DESHMUKH	19IABSC010	✓	✓	✓	✓
10	DISSANAYAKE	19IABSC011	✓	✓	✓	✓
11	YOGITHA	19IABSC012	Ab	Ab	Ab	Ab
12	GILAJIRLA	19IABSC013	✓	✓	✓	✓
13	GODAUDA	19IABSC014	✓	✓	✓	✓
14	HRIDASWARA	19IABSC015	Ab	Ab	Ab	Ab
15	JONNAKUTI	19IABSC016	✓	✓	✓	✓
17	KAVYA	19IABSC018	✓	✓	✓	✓
18	KIPA	19IABSC019	✓	✓	✓	✓
19	KUSUMA	19IABSC020	✓	✓	✓	✓
20	LOGANATHAN	19IABSC021	✓	✓	✓	✓
22	MADHUCHANDRA	19IABSC023	Ab	Ab	Ab	Ab
24	MOULI	19IABSC025	✓	✓	✓	✓
25	NAGALAKSHMI	19IABSC026	✓	✓	✓	✓

26	PATEL	19IABSC027	✓	✓	✓	✓
27	PAVITHRA	19IABSC028	Ab	Ab	Ab	Ab
28	SAI	19IABSC029	✓	✓	✓	✓
29	SARANYA	19IABSC030	✓	✓	✓	✓
30	SETTY	19IABSC031	✓	✓	✓	✓
31	SHIVANKAR	19IABSC032	✓	✓	✓	✓
32	SHIZA	19IABSC033	✓	✓	✓	✓
33	SIMRAN	19IABSC034	✓	✓	✓	✓
34	SOUNDARYA	19IABSC035	✓	✓	✓	✓
35	SOWMYA	19IABSC036	✓	✓	✓	✓
36	SUBHASHRE	19IABSC037	✓	✓	✓	✓
37	SAGAR PATNAIK	19IABSC038	✓	✓	✓	✓
38	AFZA	19IABSC058	✓	✓	✓	✓
39	BISMI	19IABSC060	Ab	Ab	Ab	Ab
40	DEBOPRIYO	19IABSC061	Ab	Ab	Ab	Ab
41	ELISETTY	19IABSC062	✓	✓	✓	✓
42	GANGA	19IABSC063	Ab	Ab	Ab	Ab
43	INDHU	19IABSC064	✓	✓	✓	✓
44	JANITA	19IABSC065	✓	✓	✓	✓
45	ARSHIYA	19IABSC066	✓	✓	✓	✓
46	MADIHA	19IABSC067	✓	✓	✓	✓
47	MOHAMMED FASIL	19IABSC068	✓	✓	✓	✓
48	MOHAMMED MANSOOR	19IABSC069	✓	✓	✓	✓
49	MUSKAAN	19IABSC070	✓	✓	✓	✓
50	NEERAJ	19IABSC071	Ab	Ab	Ab	Ab
51	PERAMUNA	19IABSC072	✓	✓	✓	✓
52	PRATYASHA	19IABSC073	Ab	Ab	Ab	Ab
53	PRITI	19IABSC074	✓	✓	✓	✓
54	RITHIKA	19IABSC075	✓	✓	✓	✓
55	RISAV	19IABSC076	Ab	Ab	Ab	Ab

56	RISHITHA	19IABSC077	✓	✓	✓	✓
57	RIYA	19IABSC078	✓	✓	✓	✓
58	SANIYA	19IABSC079	✓	✓	✓	✓
59	SANJITHA	19IABSC080	✓	✓	✓	✓
60	SUDARSAN	19IABSC081	✓	✓	✓	✓
61	SWETHA	19IABSC082	✓	✓	✓	✓

Teacher Co-ordinators:

1) Mrs. Dilshad Begum

2) Dr. Pushpa.K.

HoD-Biochemistry

Dr. Ananda Vardhan.H.

HEAD

Department of Bio-Chemistry

I A.D.C. and Centre For

Research & Post Graduate Studies

Bangalore-560 043



BENGALURU NORTH UNIVERSITY

ಬೆಂಗಳೂರು ಉತ್ತರ ವಿಶ್ವವಿದ್ಯಾಲಯ

In association with

INDIAN ACADEMY
Degree College - Autonomous

Invitation

We cordially invite you to One Day State Level Seminar on

NEP 2020

Focus on Holistic Education with Emphasis on Physical Education, Sports and Yoga as a curriculum subject in National Educational Policy

30th September 2021 at 11.00 am.

Chief Guest

Dr. Kumuda D

Vice Chancellor (I/C),
Bengaluru North University

Guest of Honour

Dr. Venkatesha Murthy V KAS

Registrar - Bengaluru North University

Shri K.Y Venkatesh

Padma shri Awardee

International Para Olympian and Medalist

Presided by

Dr. T. Somasekhar

Chairman, Indian Academy Education Trust

Technical Session –I

Dr. Srinidhi K Parthasarathi

Principal, IADC-A

Technical Session –II

Sri. Srikanth R

Director (I/C), Directorate of Physical Education, BNU



PROGRAM SCHEDULE

- MC- Prof. Mary Sharmila
- 11:00 am - Invocation song - Mr. Kenneth
- 11:02 am - Lighting of Lamp
- 11:05 am - Welcome Address
Prof. Shalini.S, Vice –Principal. IADC-A
- 11:08 am - Keynote address
Dr. Venkatesha Murthy V KAS
Registrar - Bengaluru North University
- 11:15 am - Chief Guest address
Dr. Kumuda D
Vice Chancellor (I/C), Bengaluru North University
- 11:30 am - Guest Speaker.
Shri K.Y Venkatesh
Padma shri Awardee
International Para Olympian and Medalist
- 11:45 am - Presidential Address -
Dr.T.Somasekhar
Chairman, Indian Academy Education Trust
- 12:05pm - Technical session -I Topic- Role of Yoga in Holistic Human Development.
Dr. Srinidhi .K. Parthasarathi
Principal, IADC-A
- 12:25 pm - Technical session -II
Topic- Implementation of Physical, Education
Sports and Yoga as Curriculum Subject
Sri. Srikanth R
Director (I/C), Directorate of Physical Education, BNU
- 12:45 pm - Question & Answer Session
- 12:55 pm - Vote of thanks
Prof. Jaffer Mohammed, Principal –IAEC

Registration link:- <https://forms.gle/aa98uzMa36F2DV6DA>

INDIAN ACADEMY

Degree College - Autonomous

In Association with



Bengaluru North University

Department of Physical Education

REPORT

One day State Level Seminar on “**Focus on Holistic Education with Emphasis on Physical Education, Sports, and Yoga as a curriculum subject in National Education Policy**” organised on 30th September 2021.

The seminar was organised by Indian Academy Degree College - Autonomous in association with **Bengaluru North University** and its Directorate of Physical Education along with Physical Education Directors Association of BNU.

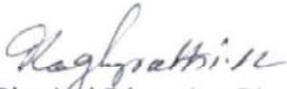
The seminar had the august presences of Dignitaries from Bengaluru North University includes **Dr. Komuda D.** Vice-Chancellor (I/C), **Dr. Venkatesha Murthy V**, Registrar, both of them addressed the gathering and **Dr. Somasekar T**, Chairman of Indian Academy Group of Institution gave special remarks on the theme of the seminar.

Dr. Srinidhi K Parthasarathy, Principal of Indian Academy Degree College – Autonomous was the First Resource person who spoke on the importance of yoga in the Holistic development of the students personality, he also stressed on making yoga as part of curriculum subject as mentioned in National Education policy. He further said that Yoga and our ancient wisdom is the treasure to be shared to the world and noted that our

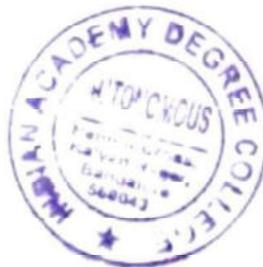
Honourable Prime minister has asked the UNO to observe UN yoga Day on 21/06/2021. He concluded that the education system has big responsibility to inculcate values and character among students.

Mr. Srikanth R, Director I/C, Directorate of Physical Education highlighted on need to upgrade the skill set of Physical Education Directors. From being coach/ instructors to teachers of Physical education and stressed that there is going to be scope for adding Sports and Yoga as curriculum subjects. He mentioned how Physical education can be offered as core subject under National Education Policy and can be major subject in Degree level and also make it part of elective subject for other degree programme. One of the important points he highlighted was to incorporate sports keeping the constraints of infrastructure in the institution. He stressed on the point that something to offer for every institution as sports would tap on the positive energy of students taking away from negative habits and indulgences.

There were 110 participants delegates from various parts of the state and the seminar went much longer than expected and it was a grand success. The host institution provided all the hospitality includes refreshments and sumptuous lunch with seminar kit. The participants have given good feedback of the seminar starting from the theme and resource persons and their deliverance and the more important hospitality. The seminar concluded that there is more to be done on ground to constitute Board of Studies for sports and yoga so that it can be curriculum subject.


Physical Education Director

DIRECTOR OF PHYSICAL EDUCATION
INDIAN ACADEMY DEGREE COLLEGE
AUTONOMOUS
HENNUR CROSS, KALYAN NAGAR,
BANGALORE - 43.




Principal
Indian Academy Degree College
Autonomous
Hennur Cross, Kalyan Nagar
Bangalore - 560043

INDIAN ACADEMY

Degree College - Autonomous

Department of Biochemistry

Date : 15-09-2021

To,

The Principal,

Indian Academy Degree College (Autonomous),

Bengaluru - 560043

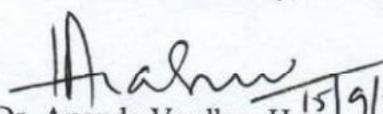
SUB: Permission for industrial visit for II Sem M.Sc Biochemistry students

Respected Sir,

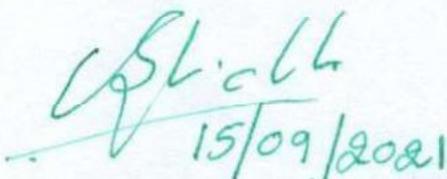
We would like to organize an industrial visit for our II Semester M.Sc students to Biozeen, Kothanur Post, Bengaluru, on 17th September, 2021 between 2 PM to 4 PM, in order to expose them to research and industrial environment.

I request you to kindly permit us to conduct this industrial visit.

Yours sincerely,


Dr. Ananda Vardhan H. 15/9/21.

(HOD-Biochemistry)


15/09/2021
PRINCIPAL
INDIAN ACADEMY DEGREE COLLEGE
AUTONOMOUS
HENNUR MAIN ROAD
BANGALORE - 43



HEAD
Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Bangalore-560 043

INDIAN ACADEMY

Degree College - Autonomous

Department of Biochemistry

Report on "Industrial visit to BIOZEEN"

Date of the event	: 17 th September 2021
Students	: II Semester M.Sc. Biochemistry Students
No. of students	: 15
Place of industrial visit	: BIOZEEN BIOTECH LABS PVT. LTD, BANGALORE

Aim of the event: Purpose of visit to Biozeen labs was to provide opportunity for PG students to witness industrial setup of bioprocess equipment, their management and use. It was also aimed at giving students a look at training facilities available for them in industry.

Learning Outcomes:

After the industrial visit, students are aware of the scale of industrial processes and equipments required, processes required for in-place fermenter technologies.

About the event:

On receiving permission from BIOZEEN BIOTECH LABS, Kothanur, Bangalore, 15 Students of II Sem MSc (Biochemistry) along with two faculty members (Dr Suma T.K & Dr C. Naveenkumar) visited Biozeen labs on 17th September 2021. The Biotech training head and his team took the students first to the conference room and gave a brief introduction about BIOZEEN and its working arena as well as the training programs they offer. Then we were taken to their production department where we visited each and every section one by one to mammalian cell culture technology, bacterial fermentation technology (small scale fermenters, pilot plant fermenters, autoclave room, cleaning room etc), downstream and upstream processing technology, sterilization and filtration technology.

Biozeen is a biopharmaceutical services company that provides production support, process support and training support to biopharmaceutical and biologics industry. They design and build customized efficient bioprocess equipment such as fermenters, bioreactors and allied equipment. Capabilities of the company are

- Automation and integration of multiple unit operations

- Fermentation equipment
- Cleaning in place (CIP)
- Sterilization in place (SIP)

Multiple processes both upstream and downstream are seamlessly integrated with equipment from multiple vendors for multiple unit operations. With core capability in biologics/biopharmaceutical processing, the Bioprocess team at BIOZEEN delivers bioprocess solutions that ensure operational efficiency, process integrity and optimized throughput. They also provide comprehensive and in-depth practical training in bioprocessing for the biopharmaceutical and biologics industry.

The main focus was laid by Biozeen staff on opportunities available for graduates and post graduates and the flexibility they offer in providing trainings and internships to students which is crucial for life sciences. All their programs are developed in association with various industries and are designed to bridge the gap between theoretical knowledge and its industrial applications. Training programs are also tailored to suit the requirements of each individual batch of trainees. These include upstream processing, downstream processing, bioprocess engineering and utility management that is specific for the biopharmaceutical and biologics industry.

Their training programs cater to a wide range of participants associated with the different fields of biotechnology. Trainings can be customized based on student's requirement while some courses are available online also. They provide a unique learning experience in a real-life environment which enables trainees to master the skills necessary for working and excelling in their jobs.

The interactive session and elaborate explanation of instrumentation (Technology) available in BIOZEEN took over 2 hours. The student got ideas on how to approach in the industries, Jobs, Opportunities availability in Life Sciences for future prospects.

Coordinators

Dr. C. Naveenkumar *[Signature]*

Dr. Swma. T.K. *[Signature]*

[Signature]

Head of Department

Department of Bio-Chemistry
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Bangalore - 560 007

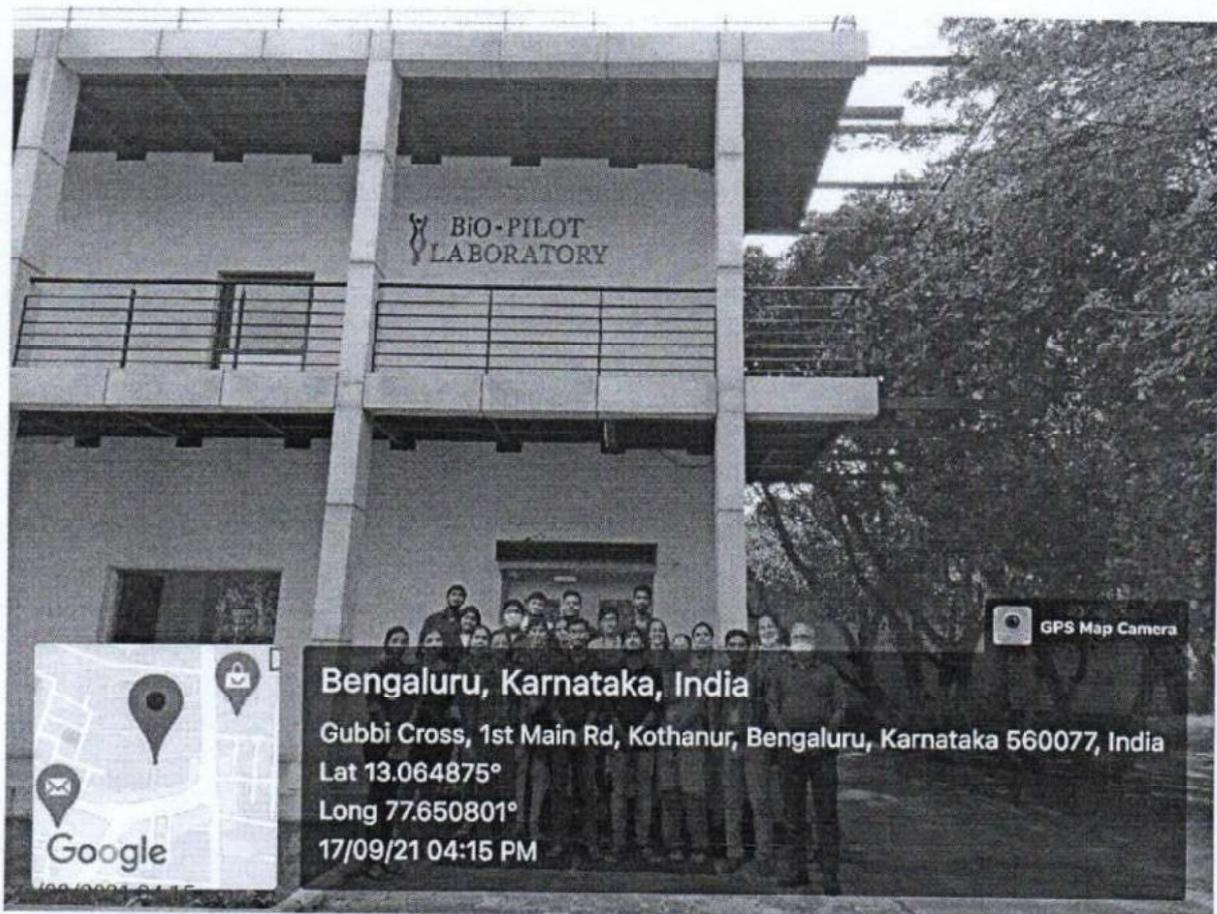
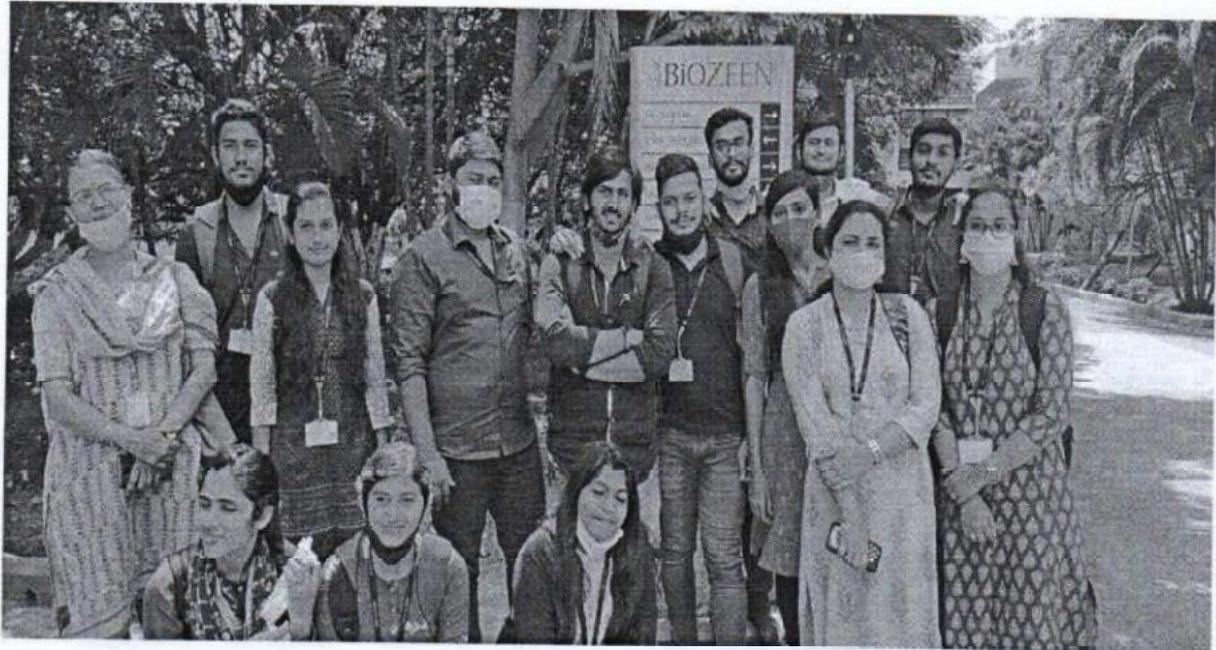


INDIAN ACADEMY

Degree College - Autonomous

Department of Biochemistry

Report on "Industrial visit to BIOZEEN"



Bengaluru, Karnataka, India

Gubbi Cross, 1st Main Rd, Kothanur, Bengaluru, Karnataka 560077, India

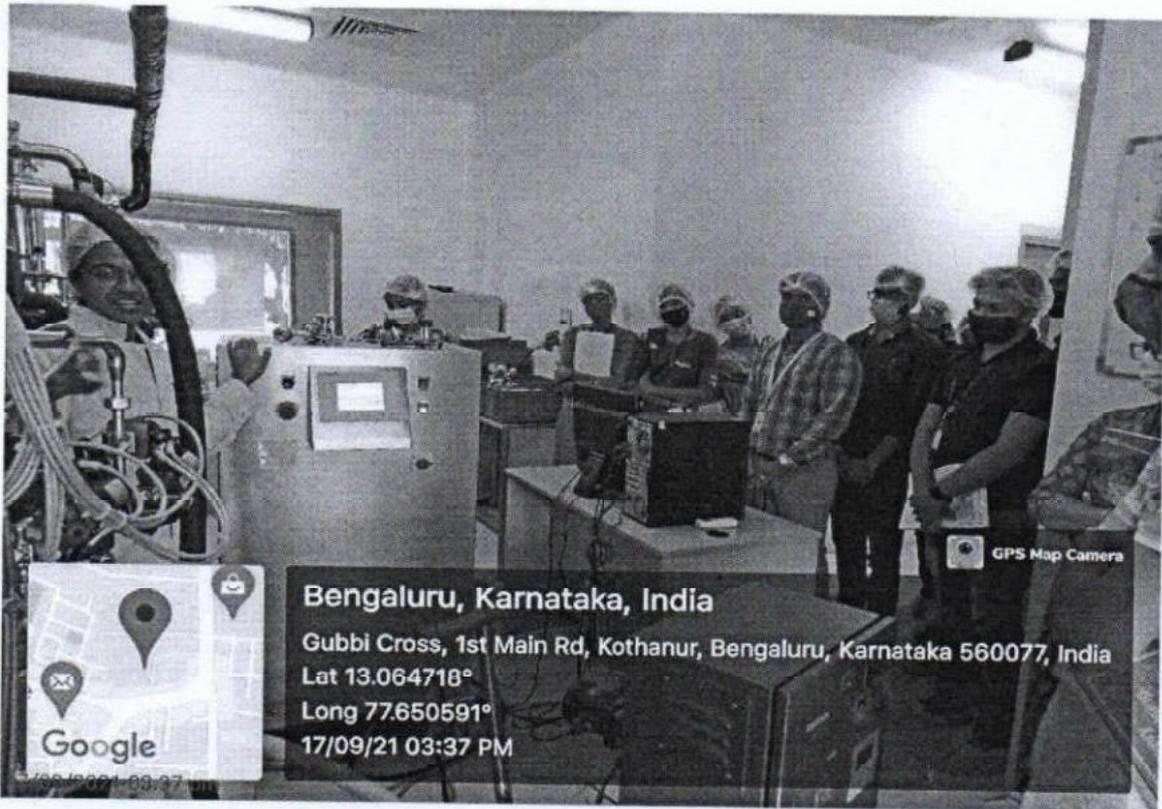
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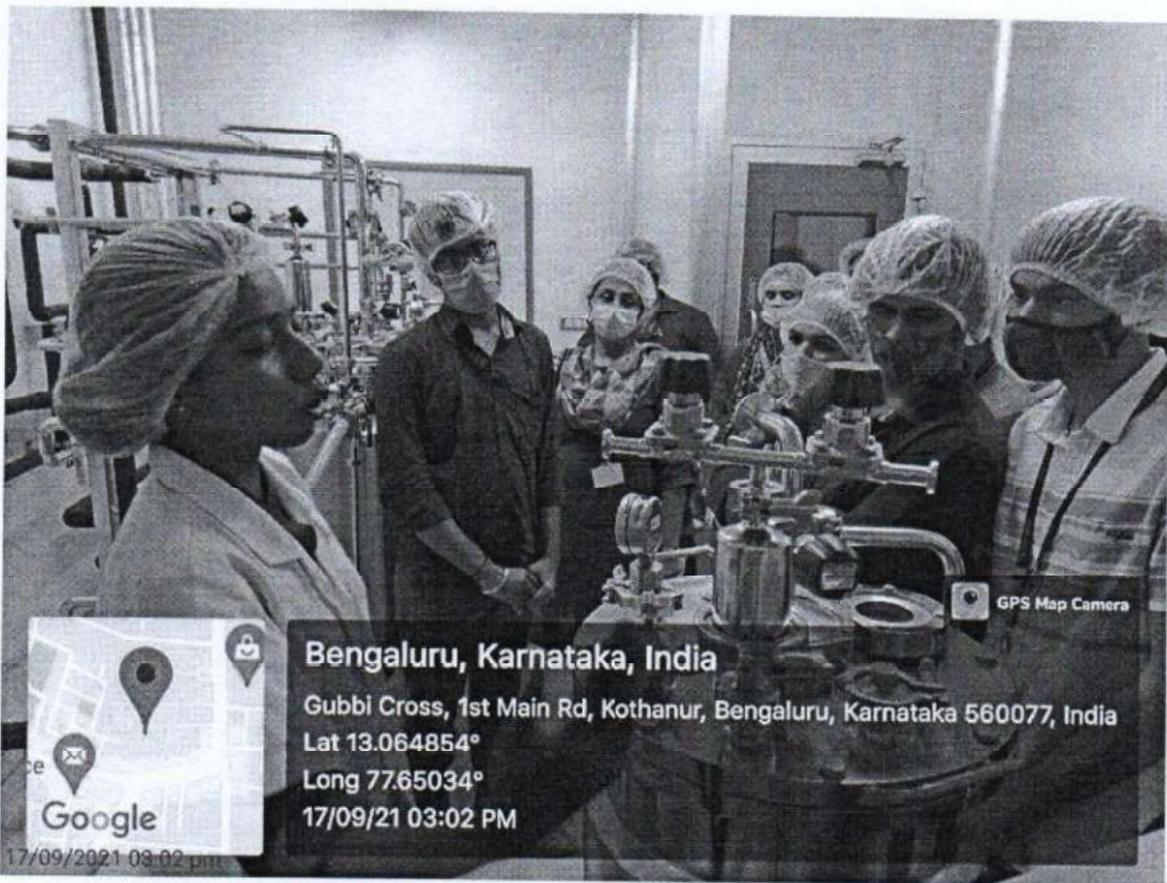
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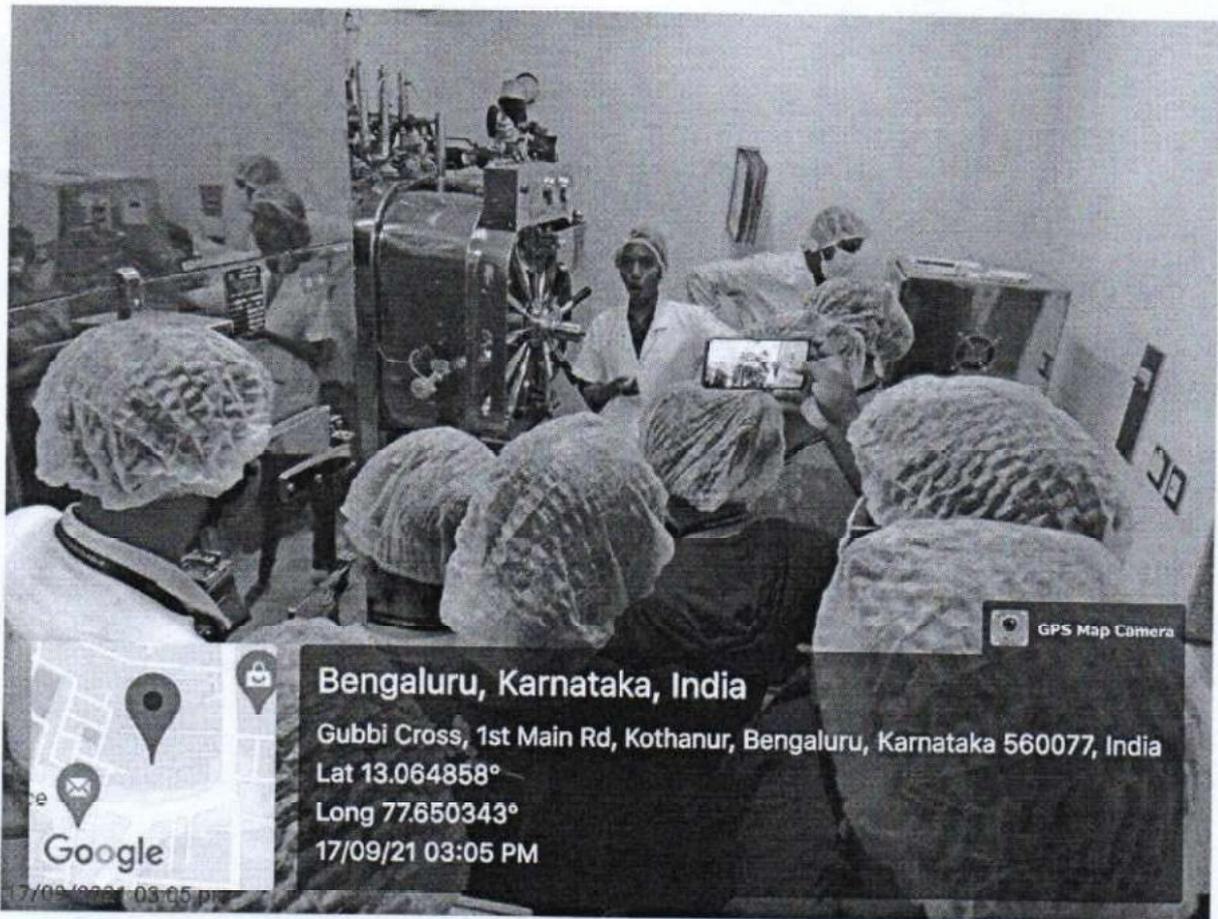
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Bengaluru, Karnataka, India

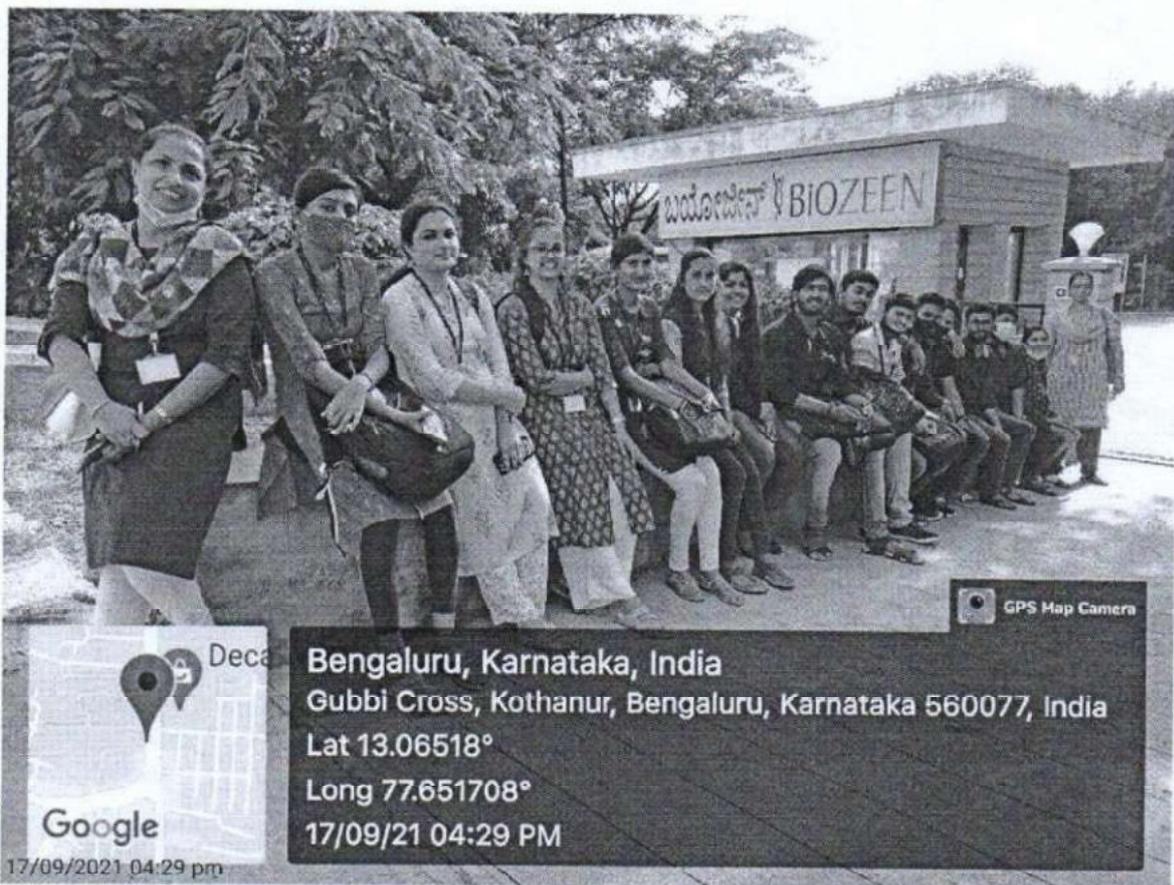
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Bengaluru, Karnataka, India

Gubbi Cross, Kothanur, Bengaluru, Karnataka 560077, India

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Long 77.651708°

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INDIAN ACADEMY

Degree College - Autonomous

Department of Biochemistry

Industrial visit to Biozeen, Bengaluru

17th Sept 2021

II Sem MSc Biochemistry Student List

SI No	Name	Reg No
1	Arpan Garain	20IAMOS009
2	Ashrith Kumar	20IAMOS010
3	Bhumika J	20IAMOS011
4	Bindu M	20IAMOS012
5	Gowtham Yadav	20IAMOS013
6	Harikrishnan	20IAMOS014
7	Mallikarjunaiah	20IAMOS015
8	Navya Shree	20IAMOS016
9	Pratibha	20IAMOS017
10	Rakshitha B	20IAMOS018
11	Ramya Bharadwaj	20IAMOS019
12	Rincy S	20IAMOS020
13	Ronit Bhattacharjee	20IAMOS021
14	Shaik Moinulla	20IAMOS022
15	Sharmistha Dutta	20IAMOS023

Coordinators

Dr. C. Navneenkumar *lln*

Dr. Suma.T.K. *KB*



[Signature]
Head of Department

Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Bangalore, 560 043

INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF BIOCHEMISTRY

Date: 12-08-2021

To,

The Principal,
Indian Academy Degree College-Autonomous
Bangalore-43

Subject: Permission to conduct a **Student awareness webinar series**

Respected sir,

Our Department would like to organize a Webinar on “**Research, Entrepreneurial and Job opportunities in Life Sciences**” on 25-08-2021 for UG and PG students. I have attached the tentative flyer of the same for your reference. I kindly request you to permit us to organize this event sir, and also request you to permit us in taking the help of Institutional Designer team for finalizing the event flyer.

Kind Regards,

Ananda Vardhan 12/8/21

Dr. Ananda Vardhan.H

HOD-Biochemistry

HEAD

Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Bangalore-560 043



This webinar can be taken forward.
A.V.
13/08/2021

INDIAN ACADEMY

Degree College - Autonomous

Report on Students Awareness Webinar on “Research, Entrepreneurial and Job Opportunities in Life Sciences”.

Department of Biochemistry

Date of the event: 25th August 2021

Target Students: B.Sc. and M.Sc. Students across India.

Aim of the event: Understanding about wide range of job opportunities in Biology sector.

Learning Outcomes: Students understood the current trends happening in life science field for job opportunities.

About the event: The Department of Biochemistry, Indian Academy Degree College – Autonomous, Bengaluru organized a Students Awareness Webinar. The topic of the webinar was “Research, Entrepreneurial and Job opportunities in Life Sciences”. More than 150 participants joined in response to the invitation of the organizers of the webinar Dr. Srinidhi K Parthasarathi, Principal, Indian Academy Degree College – Autonomous; Prof. Anandha Vardhan H, Head, and Faculty members of the Department of Biochemistry, Indian Academy Degree College- Autonomous, Bengaluru. The Student Awareness Webinar held on Wednesday 25th August 2021 began at 9.30 am.

The entire webinar was divided into 3 topics and the contents were delivered as follows,

Session 1: “Innovations and Market Trends in Biological research”

Session 2: “Essentials of Biopreneurship”

Report of webinar:

Speaker I: Dr.H.G.Nagendra

Topic: "Innovation & Market Trends in Biological Research"

The session 1 lecturer was given by Dr. H. G. Nagendra is a valuable member and eminent researcher in the Department of Biotechnology Engineering, Sir M. Visvesvaraya Institute of Technology University, Bengaluru. Dr. Nagendra's laboratory is devoted to the area of Biophysics, Bioinformatics, Nanotechnology and Structural Biology of diseases which his group has made many significant contributions. First, he enlightened the students by focusing on the importance of science and technology. He covered almost all the concept of the modern biological research as an early career where in student learnt a greater understanding of market trends needs for research. They also learnt about the how discoveries in the biological research lab can benefit everyone in society - saving lives, creating jobs and promoting education. He suggested with an inter – disciplinary approach directed at research skills for communication to understand new developments and evaluate the implications for business and society. The entire group was involved in a number of educative and interesting activities which if implemented in the classroom can make the research career concepts very interesting and simple to understand. Resource person were introduced to essential skills that needs to be cultivated in young learners for success in this generation.

Speaker II: Dr.Pratima Khandelwal

Topic: "Essentials of Biopreneurship"

The session 2 was started by Dr. Pratima Khandelwal, Founder of Fly High Educational Excellence Services (an MSME unit), Bengaluru. The session was interactive one. The students were taught about soft skills, goal based competencies for innovation, about emotional

intelligence, self motivation, communication, leadership, team work, flexibility, problem solving, Right attitude, Gear up technology, career shaping, also how to lead a happy life .All these aspects are focused as the elements of Biopreneurship. Students understood the concepts very well and at the end, all the students were also given a mini assessment test in the form of online quiz.. Overall the resource person motivated students to be an entrepreneur, made them understand the right choice for their own career options. They were also made to know many more essential skills in an interactive way to become a successful citizens.

Speaker III: Dr.Ananda Vardhan.H.

Topic: “In-Demand Bioscience Job opportunities”.

This session 3 was delivered by Dr.Ananda Vardhan.H. about Job opportunities in Life sciences. It was all about the selection of career path ahead for Life Science students. It spoke about the various routes like Academic careers and Non-academic careers. Jobs in Industry and many more Nonacademic career pathways can be Bioentrepreneurship, science public policy, science management, scientific community and public outreach. IPR, technology transfer. Academic Career include stepping into an educational institution in teaching profession or research fields.

Overall the students had a great learning experience through this webinar sessions. All the three sessions are wonderful that imparted the best knowledge and motivated young minds to select appropriate career path.

https://youtu.be/SOZ54_0WH3s video link for webinar




HEAD
Department of Bio-Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Bangalore 560043

Session 3: "In-Demand Bioscience Job opportunities"

Speaker profiles:

Speaker 1: Prof.H.G.Nagendra



Dr. H. G. Nagendra is a Professor and Head in the Department of Biotechnology Engineering, Sir M. Visvesvaraya Institute of Technology University, Bengaluru. He did his PhD in Biophysics (1991-1997) under the supervision of Prof. M. Vijayan, from Indian Institute of Sciences (IISc), Bengaluru. He did his first postdoctoral research (Aug 1997 to June 1998) in Molecular Biophysics Unit, Indian Institute of Sciences (IISc), Bengaluru. Later, he was awarded the prestigious BOYSCAST Fellow award from DST to support his second postdoctoral research (March 2000 to March 2001) in the department of Biochemistry, Cambridge University, UK. He is an eminent person has 37 nominations to various executive bodies. Presently, he is a Chairman in Board of Studies for the Biotechnology, VTU for 2021-2022 and a Fellow for Research Journal of Biotechnology. He is a dynamic Biologist, extensively worked in the area of Biophysics, Bioinformatics, Nanotechnology and Structural Biology of diseases. He has 22 years of teaching experience and 27 years of research experience. He has 52 number of research publications in peer-reviewed international journals and filed 2-patents. He successively received research project funds from various funding agencies such as UGC, CSIR, DST, DBT, etc., and completed 11 number of research projects. Presently, one on-going project on "Package and practices to rear grade Eri

silkworm and formulation of nutraceutical recipe comprising of the same” and 114.33 lakhs fund released from DST-GoI.

Speaker II: Dr.Pratima Khandelwal

Dr. Pratima Khandelwal is the Founder of Fly High Educational Excellence Services (an MSME unit), Bengaluru that rests on capacity building of teachers and students at higher educational institutions. She carries collective 21+ years of teaching, mentoring, research in Food Technology and leadership experience earned at Thapar Institute (Patiala) and in Bengaluru at Science and Engineering institutions under Bangalore University and VTU respectively. She holds MSc



and PhD in Food Technology from country's first agricultural university- GB Pant University of Agriculture & Technology, Pantnagar. She has guided doctoral, Masters and BE students and published many research works on Synbiotics, Food product development and Pedagogy. She is the inventor of two patents and is on the editorial board of two international journals. Since 2018, she's into techno & empathetic pedagogy and has been upskilling teachers and students across the Indian subcontinent. She has contributed at Infosys, BITS-Pilani, Biocon Academy, Aatmanirbhar Bharat based training of trainers, National Agricultural and AICTEATAL FDPs. She's also empaneled in NPTEL IIT Madras exclusively for Soft Skills training. She carries passion and pragmatism for offering tools and techniques with trainees deriving multi-dimensional benefits.

Speaker III: Dr.Ananda Vardhan.H.



Dr. Ananda Vardhan Hebbani is a Professor & HOD at the Department of Biochemistry, Indian Academy Degree College, Bangalore. He has an enriching experience of 19+years in teaching and research, which includes teaching both for UG, PG and Engineering UG students. Sir has guided more than 15 UG and over 20 PG project works and ensured that major of his project works give a rewarding academic return to his students either in form of a Publication or a Paper Presentation Dr.Anand has received PhD in Biochemistry from Sri Krishnadevaraya University, Anantapur and part of his research work was also carried out at Memorial University of Newfoundland. St John's, Canada. He is a life member in Society of Biological Chemists (SBC), India, and a Scientific Advisory Board member for DR Biosciences, Bangalore. His research expertise includes Toxicology, Membrane Biochemistry and Infection Biology and has got over 20 indexed international publications. He also has filed two patents, and has 6 bank submissions to his credit. Dr.Anand has got 4 funded projects from KSCST and also was one of the coinvestigator for MODROBS fund from AICTE

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Registrations

Date: 25th August 2021

18iabsc068	8113887758	Biochemistry	B.Sc	6	IADC A
Tejashwini R	9900590241	Microbiology	M.Sc	4	Indian Academy Degree College Autonomous
Rishitha P	7019647451	GBcMb	B.Sc	4	Indian academy
E.pallavi	9553084824	Genetics,biochemistry,microbiology	B.Sc	4	Indian academy degree college-Autonomous
Patel Vrunda Ajaykumar	814560474	Biochemistry	B.Sc	5	Indian Academy Degree College
KOUSER SULTANA	9902535594	Microbiology	B.Sc	5	Indian academy degree college Autonomous
	9478898	GBcBt	B.Sc	4	IADC-A
18IABSC027	6296885251	GBcBt	B.Sc	6	Shravan Curie
Priti Verma	9591434604	Life Science Department	B.Sc	4	Indian Academy Degree College Autonomous
Loganathan G	9108086532	Biochemistry	B.Sc	5	Indian academy degree college
Amit kumar Rajwar	6299122542	Biotechnology	M.Sc	4	Indian academy degree college
Bhoomika	7892619090	Microbiology	M.Sc	4	Indian academy
Arshiya fathima	8825820582	Biochemistry	B.Sc	4	IADCA
Janita Mabel	9740562339	GBcMb	B.Sc	4	Indian Academy Degree College Autonomous
Sagar	9353872383	Gbcbt	B.Sc	4	Indian academy degree college
Manvi Bhupesh Singhal	+918160596544	Bsc(genetics)	B.Sc	4	M S RAMAIAH COLLEGE OF ARTS SCIENCE AND COMMERCE
Afza	8095563239	Luv science	B.Sc	4	Indian academy degree college
Chaithanya S K	7619573978	Life Science	B.Sc	4	Indian Academy Degree College
Chaithra M L	+917338475016	Biotechnology	M.Sc	4	Indian academy degree college
Neeraj Krishna V R	9113587906	Microbiology	B.Sc	5	Indian academy degree College
ANUSKA BANERJEE	9641336877	BSC genetics	B.Sc	4	MS Ramaiah college of arts ,science and commerce
PARAMPREET KAUR	+917988849415	Biotechnology	M.Sc	4	Ramaiah University of Applied sciences
Tejal T	9742984560	Biotechnology	B.Sc	5	Ramaiah University of Applied Sciences
Anusha k	9916049789	Life and allied health sciences	B.Sc	5	MS Ramaiah university of applied sciences



(Handwritten Signature)

PRINCIPAL
Indian Academy Degree College
Autonomous
Hennur Cross, Kalyan Nagar
Bangalore - 560043

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Date: 25th August 2021

Name of the participant	Contact number	Course	Class	Sem	College name
J. Sai nikhitha	7981441342	GBCBT	<u>B.Sc</u>	6	Indian academy degree college
S. Vishal	9448591653	Biochemistry	<u>M.Sc</u>	4	Indian Academy Degree College - Autonomous
Srihari S	9535180027	Biochemistry	<u>B.Sc</u>	6	Indian academy degree College
Navyashree N	9606119729	Biochemistry	<u>M.Sc</u>	2	Indian academy degree College
P.Samreen	7259796696	Biotechnology	<u>M.Sc</u>	2	Indian Academy Degree College Autonomous
Sanjana Kumari	7859081711	Biochemistry	<u>B.Sc</u>	6	Indian academy degree College
Amarnath Satheesh	8220115736	Chemistry/Biochemistry	Others	6	Ramaiah College of Arts, Science and Commerce
Kavya.S	7022494329	Genetics biochemistry microbiology	<u>B.Sc</u>	6	Indian academy degree College of autonomous
Divya Nair	6266264130	Biotechnology	<u>M.Sc</u>	2	IADC-A
yes	7795006654	Bio chemistry	<u>M.Sc</u>	4	Indian academy degree college
Madeeha Tabassum	9380180284	Biochemistry	<u>B.Sc</u>	6	Sheshadripuram First Grade college
Yashaswini R	9740562046	BSc life sciences	<u>B.Sc</u>	4	Ramaiah college of Arts , Science and commerce
Sangeetha	7349175365	Biochemistry	<u>M.Sc</u>	4	Maharani Cluster University
Likhitha S	8310664491	Genetics	<u>B.Sc</u>	2	Ms ramaiah college of arts science and commerce
Sahana C	9916179232	Biochemistry	<u>B.Sc</u>	6	Indian Academy degree college
Rachana S	9141745206	BiSBt	<u>B.Sc</u>	3	Maharani Cluster University
Rituparna Sinha	08472950093	Biotechnology	<u>M.Sc</u>	4	Indian Academy Degree College Autonomous
Sijin mathew	08606314373	Biochemistry	<u>B.Sc</u>	6	Indian academy degree college
Hridaswara Sivaprasad	8921494925	Life Science	<u>B.Sc</u>	4	Indian Academy Degree College Autonomous
Anushka Dutta	8099210628	Genetics	<u>B.Sc</u>	4	Ms Ramaiah College of Arts, Science and Commerce
G Yogitha	8790961842	GBcBt	<u>B.Sc</u>	4	Indian academy degree college
Angeleena	9131974501	Microbiology	<u>M.Sc</u>	4	Indian Academy degree college-A

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Grace Peniel A Raju	7829936965	Life sciences	B.Sc	6	IADCA
Kaskurthi Joshna Rani	9113651246	Lifesciences	B.Sc	6	Indian academy degree college -Autonomous
Saba	9481179430	Genetics	B.Sc	6	Indian academy degree college
Gagana	9148433739	Biotechnology biochemistry genetics	B.Sc	6	Indian academy degree college
RANJITH KUMAR GS	8747877273	GBCMB	B.Sc	6	INDIAN ACADEMY DEGREE COLLEGE-AUTONOMOUS
GULNAZ	9611320232	Department Of Biochemistry	B.Sc	6	Indian academy degree college
S. R. Shradha	9531988602	Biochemistry	B.Sc	4	IADC-A
Alagammai. R	9008728787	Biotechnology	M.Sc	3	Ramaiah University of Applied Sciences
Sai Pavani S	7349451495	BSc biotechnology, biochemistry, genetics	B.Sc	4	Indian academy degree college
Akshaya R	+918660826393	Molecular and Cellular biology	M.Sc	3	Ramaiah University of applied sciences
Sarveshwar	7893757409	Bsc	B.Sc	5	Indian Academy Degree College
Mohammed ali asgar	9591519591	Biochemistry	B.Sc	6	Iadca
Revathi.g	9900576971	FLAHS	B.Sc	5	Ramaiah University of applied science
Sateesh ns	9535345526	Biochemistry	B.Sc	6	Iadc-a
Kavin	9940898216	Biotechnology	M.Sc	3	Ramaiah University of applied science
Prabhu Darshan	9964591950	Department of Molecular Biology.	Others	6	Yuvaraja's College, University of Mysore.
Monideepa Guha	+917000671241	Biochemistry	B.Sc	6	Indian Academy Degree College - Autonomous
Deeksha P Hebbar	9448100366	Molecular biology	M.Sc	6	Yuvaraja college
Deepanraj s p	9042144205	Biotechnology	M.Sc	2	Ramaiah university of applied sciences
Anagha subbaraya	7760083525	Biotechnology	B.Sc	4	Yuvaraja's college, Mysore
Sangeetha Haridas	7259993289	Biotechnology	B.Sc	4	Yuvaraja's College
Saniyaafreen	9901388007	Lifescience	B.Sc	5	Indian academy degree college

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Smarty boy Shahid	6361559103	Biochemistry	B.Sc	3	Indian academy degree college
YAKSHITHA. P	7349522083	BIOTECHNOLOGY	B.Sc	4	Seshadripuram first grade college
RESHMA ROSNI SAHOO	9178867055	BIOTECHNOLOGY, FLAHS	B.Sc	3	MS RAMAIAH UNIVERSITY OF APP.
Kalyani Bhat	8073855213	Biotechnology	B.Sc	4	M.S RAMAIAH UNIVERSITY OF APP
Sandeep reddy k v	8431446031	life science	B.Sc	2	MS ramaiah institute of applied science
Nivedita Kumbar	9110294595	Biotechnology	B.Sc	4	Indian academy
Amrutha	8867130898	Molecular biology	M.Sc	2	M.S.Ramaiah University of applied scien
SPOORTHI KARUR	7411918920	Molecular Biology	M.Sc	2	Mysore university
Subhashree. M	8884595203	Science	M.Sc	2	Manasagangotri
Yashwanth.R	7795270512	Dos in Molecular Biology	B.Sc	4	Indian academy degree college autonomc
Anjani M	9916089919	Molecular Biology	M.Sc	2	Manasagongotri, Mysore University
PRIYADARSHINI.N.R.	8088627069	Molecular Biology	M.Sc	4	University of Mysore manasagangothri
Reshmi Das	8697169751	Genetics	M.Sc	4	Manasa Gangotri ,UOM
Jayanth Y G	9.19739E+11	Department of studies in Molecular Biology	B.Sc	6	M. S. Ramaiah College of Arts, Science :
Christina Elsa Thomas	8156996827	Genetics	M.Sc	4	University of Mysore
Najmus sehar	8310132455	Biochemistry	B.Sc	6	Indian Academy Degree college
Ruchith	6361829984	Molecular biology	M.Sc	4	University of mysore
RIYA BHUNIA	8336988215	Life science	M.Sc	3	Yuvarajas college
Dr. Selvam Arjunan	7760867365	Biotechnology	B.Sc	4	INDIAN ACADEMY DEGREE COLLE
Yukta	9845287324	BSc.	Others	6	MSRUAS
Madhumitha S	9481889203	Biotechnology	B.Sc	4	Indian academy
Uma H A	8494977748	Biochemistry	M.Sc	4	MS Ramaiah University of Applied scien
Akanksha Appaiah	7899852150	Biotechnology	M.Sc	6	Mysore University
Deekshith V R	9.19743E+11	DOS in Biochemistry	Others	1	PES University
Akansha Singh	8237313569	Biotechnology	M.Sc	6	Manasa Gangotri, University of Mysore
Samia Chatterjee	6290950061	Bsc Lifescience	M.Sc	4	Msruas
Ashwini M	7338118175	Biochemistry	B.Sc	1	Indian Academy Degree College Autono
Harshith K G	6361780031	Molecular biology	B.Sc	6	Maharani Science College
Marepalli Divya	9550320998	Life sciences	M.Sc	5	Yuvaraja's College
Chidananda R S	9686593042	Post Graduation	M.Sc	4	Ms Ramaiah College of Arts Science An
Manjunatha S S	8904201858	Biotechnology	M.Sc	4	Jss college of science,Ooty road Mysore
Amlan Hossain	9836751317	Life sciences	Others	4	Bangalore University
MOHAMMAD Fasil	7592935080	Life science	B.Sc	3	Indian Academy Degree College - Auton
Alody P	9481488474	Msc Biochemistry	B.Sc	3	Indian academy degree college autonomc
Shreya Nahata	9.17038E+11	Biotechnology	M.Sc	2	M S Ramaiah College of Arts, Science ar

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Date: 25th August 2021

Amrutha.M	9916023142	Science Faculty of health and applied sciences	M.Sc	2	MS Ramaiah universty of applied science
Sakina	9574808255	Chemistry	B.Sc	1	Indian academy degree college autonomo
Risha Ponnanna	9.17205E+11	Chemistry	M.Sc	2	Ramaiah university
Sinchana	7483746522	Chemistry	M.Sc	4	Acu
Priyanka Priya	8861311934	Chemistry	M.Sc	2	Adichunchanagiri University
Priyadarshini H N	9740076268	Chemistry	M.Sc	2	ACU
Lakshmi P	6363938554	Biochemistry university of Mysore	M.Sc	2	ACU
Vishnu KT	9008783014	School of natural sciences	M.Sc	2	University of Mysore
VINAY A R	7815944880	Msc in chemistry Adhichunchanagiri university	M.Sc	4	ACU
Nithyashree D B	8147027243	university	M.Sc	4	ADICHUNACHANAGIRI UNIVERSIT
Poojashree Y K	7204279582	ACU	M.Sc	1	School of natural science
Harshitha K	7795476890	Biochemistry	M.Sc	2	School of natural science
Annesha Banerjee	9775047666	Bsc. Genetics	M.Sc	2	Manasagangotri, University Of Mysore
Ashwini Gowda	9606614239	Chemistry	B.Sc	2	MS Ramaiah college of arts science and
Meghana HL	9902397539	Chemy	M.Sc	2	Adichunchanagiri University
Bhavana gowda	8549984316	ACU	M.Sc	2	Natural science
Nishchitha.S	6361011489	Chemistry	M.Sc	2	School of natural science
Meghana	9481635542	ACU	M.Sc	2	ACU
Nagendra	9743003858	Chemistry	M.Sc	2	School of natural science
Apoorva m j	9738001999	Chemistry	M.Sc	6	Adhichunchanagiri university
Nisarga R	7975523806	Chemistry	M.Sc	2	Ac university
Hemanth Raj S	7353942898	Chemistry	M.Sc	6	AcuFNS
Hanisha	9481385368	Biotechnology	M.Sc	2	ACU School of Natural sciences
Bhoomika.R	8618421695	Chemistry	Others	6	Dayanand sagar college of engineering
Kavyarathna	6361936584	Biotechnology	M.Sc	4	School of natural science
Omedul Mondal	8101331273	Applied Genetics	Others	2	Dayananda Sagar College of Engineering
Rasya Bhat	7349767594	BT	M.Sc	4	Indian Academy Degree College
Kusuma. A.B	8792414144	Bio technology	Others	2	PES University
Dibya Bhattacharjee	9434631381	Biotechnology	B.Sc	6	Indiana Academy
Peramuna Gamage Harsha Madhusanka Chinthaka Gamage	9972619510	Microbiology Faculty of Natural science	M.Sc	2	MS RAMAIAH UNIVERSITY OF APP
Spandana UC	9113290028	science	B.Sc	4	Indian Academy Degree College
Ariba Hafeez	9964011159	Biochemistry	M.Sc	5	Adhichunchanagiri University
Tejaswini Achar	7676481376	Chemistry	B.Sc	5	INDIAN ACADEMY

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Shalom Rachel	9513821100	Bsc life science	M.Sc	3	Adhichunchanagiri University
Megha SY	7624946812	Biotechnology	B.Sc	5	Indian academy degree college
Bhoomika S	9481780117	Biotechnology (FLAHS)	B.Sc	4	MS Ramaiah University of Applied Scienc
Rajeetha A	7975946046	Msc. Biochemistry	B.Sc	2	MS Ramaiah university of applied scienc
Jonnakuti Bhanu Sagar	9550933561	Life Science	M.Sc	6	Dayananda sagar University
Soundarya Morc	7892238488	Biochemistry	B.Sc	2	Indian Academy Degree College
Ipsita Dey	8158085656	Genetics	B.Sc	4	IADCA
Ankitha	8762115393	Biotechnology(B.E.)	M.Sc	4	Indian Academy Degree College Autono
Aishwarya Gangoli	8073469280	Biochemistry	Others	5	Dayananda Sagar College of Engineering
Meghana.M.V	9880714904	Biochemistry	M.Sc	6	Maharani Lakshmi Ammanni College fo
Madiha	7625021949	Life Sciences	M.Sc	4	Maharani Lakshmi ammanni college for
Keerthana P	7019970664	Biochemistry	B.Sc	3	Indian Academy Degree College Autono
Nisha M	9900765566	BE Biotechnology	B.Sc	1	Maharani lakshmi ammanni college
Nagalakshmi m	7619459520	Biotechnology	Others	4	DSCE
Yashaswini R	9482604267	Microbiology	B.Sc	2	Indian academy degree college
Sruthi Krishna	9008727042	Microbiology	M.Sc	3	Dayananda Sagar Univcrsity
P. S. Vaghdevi	9740030334	Biochemistry	Others	6	Garden City University
Varsha Mahankar	7304141176	Genetics	M.Sc	2	Maharani Lakshmi Ammanni college for
Nanditha. N	9663176573	Biochemistry	M.Sc	3	IADCA
Aliya Nishat	9742004282	Lifescience	B.Sc	3	MLAc
Nidhi Honavar	8310829177	Biotechnology	B.Sc	5	Indian Academy Degree College Autono
Anish H S	8073559938	Biotechnology	M.Sc	2	Indian Academy Degree college
NamaMurali Praneetha	8790808075	School of basic and applied sciences	B.Sc	4	Ramaiah University of Applied Sciences
Prarthana Anand	8971494740	FLAHS	M.Sc	3	Dayananda Sagar University
DNSL UMA					
MOUNISHA	8309103885	MSc applied genetics	B.Sc	3	M S Ramaiah
Amrutha	8296692453	Molecular biology	M.Sc	3	Indian Academy degree college - autonoi
Prakruthi Udupa E.P	7019008841	Microbiology	M.Sc	2	Yuvaraja's college
Prakruthi sp	8951185233	Microbiology	M.Sc	2	Dayananda Sagar University
Nisha Ghorai	7407883395	Biotechnology	M.Sc	2	Dayananda Sagar University
Bhavya.M	7975129328	Biochemistry	M.Sc	4	Dayanand sagar university
Deepika K	9741087492	Biochemistry	M.Sc	4	Maharani Lakshmi ammani college
Nikita Kumari	9438811605	Life science	M.Sc	5	MLACW
Akshita Roy	9531959534	Chemistry	B.Sc	4	Maharani lakshmi ammanni college
Sanjeev Kumar P	8088188210	Molecular biology	B.Sc	4	Indian Academy Degree College
Keerthana.G	7019028315	Biochemistry	M.Sc	2	Yuvaraja's college

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PRANAY RAJA BHAD	9860248073	MSc Biotechnology	B.Sc	4	Maharani Lakshmi Ammanni College
Sonu Bansal	7022412740	Biotechnology	M.Sc	4	Indian Academy Degree College -Auton
MANJUNATHA V L	8105032325	Student	M.Sc	4	Indian academy degree college
Sadiya Zaki	8553099207	Biotechnology	M.Sc	2	Indian academy degree college
Ashifa Shirin	9.17988E+11	Biotechnology	M.Sc	2	Indian Academy degree college autonom
Satayu Devi	7002142875	Biotechnology	M.Sc	6	IADC
Veekshitha DC	7975274149	Biotechnology	M.Sc	4	Indian academy degree college
Mimansa Prajapati	7026532533	Biotech	M.Sc	4	Indian academy degree college autonomc
Ankita lakhera	7771880060	Biotechnology	M.Sc	5	Indian academy degree college
Rinki Saha	9752983030	M.sc biotechnology	M.Sc	3	Indian academy degree college Bangalor
Kalpana priyadarsini Das	9.19349E+11	Biotechnology	M.Sc	2	Indian Academy Degree College, Bangal
Abhinav.A.p	7306880451	Biochemistry	M.Sc	4	Indian academy degree College Autonom
Suman biradar	9538265512	Biotechnology	B.Sc	2	IADC-A
Devika.P R	6282771492	Microbiology	M.Sc	4	Dayananda Sagar university
Shaista Tasneem	6360786259	Biotechnology	M.Sc	2	Indian academy degree college autonomc
Sharon Sherly Samuel MS	7892131623	Biotechnology	M.Sc	4	Indian academy degree college
Ekkaladevi Sowjanya	9.18978E+11	Biotechnology	M.Sc	2	Indian Academy Degree college
Sowmya Murthy	9066162488	Microbiology	M.Sc	1	Indian academy
Kavya.M	9611371275	Biochemistry	M.Sc	4	Nrupathunga University
SHARINA NK	9108127167	Biotechnology	B.Sc	4	Indian Academy Degree College - Auton
KARTHIK REDDY C A	8861960698	Microbiology	M.Sc	1	Indian academy degree college
Fazeela Fathima	9738137030	Chemistry	M.Sc	3	Nrupathunga University Bangalore
Meeneri bobde	9422543324	Biotechnology	B.Sc	3	Goodwill Christian College For Women
Sushma S	9972582592	Microbiology	M.Sc	4	Indian academy degree autonomous colle
Prachi	7728981003	Biotechnology	M.Sc	1	Nrupatunga University
H N Deepa	9739355443	Biochemistry	M.Sc	2	Dayananda sagar university
KHADEERA KOUSER	8050979012	Science	Others	4	REVA UNIVERSITY
Aiyyalappa Thilothama	6360443047	Microbiology	B.Sc	6	Goodwills christian college for women
Muthukumaran	6360348983	B.voc	M.Sc	2	Nrupatunga university bengaluru
Vhatkar Pooja Vijay	8888316650	Biotechnology	Others	4	Maharani lakshmi ammanni college for v
Rachana B V	9972853500	Chemistry	M.Sc	6	Indian Academy Degree College Autono
Inchara S	9538507929	Biotechnology	B.Sc	6	GFGC, Channapatna
Writtik Maity	9735586605	Biotechnology	M.Sc	6	Indian Academy Degree College
Ms. Umme Rooman	8217355462	Department of Science	M.Sc	6	Indian Academy Degree College

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Date: 25th August 2021

Muskan bano	8197185878	Science	B.Sc	6	Goodwill Christian College For Women
Anusha VH	8884558907	Chemistry	B.Sc	2	Govrnmnt first grade college
Yashaswini H C	8073262853	Biotechnology	B.Sc	2	MES degree college of arts commerce an
Sharadchandra	8605941316	Biochemistry	Others	6	Sir M Visveswarya institute of technolog
Shiva sathya K.E	9353057032	BSC	M.Sc	6	Nagpur University
Deepthi.B	8660182961	Microbiology	B.Sc	3	Indian Academy Degree College-Autono
Shreekanth V	9482093370	Chemistry	B.Sc	4	Indian academy degree college - autonon
Harini Shree R	9886135336	Biotechnology	B.Sc	5	Indian Academy Degree College
Sudeepa Hore	9742671557	Biotechnology	B.Sc	4	Surana college
Triparna Mondal	7888621263	BSc Genetics	M.Sc	6	Dayananda Sagar University
Niyathi.V	9538329295	Chemistry, Zoology, Microbiology	B.Sc	4	MS Ramaiah College of Arts, Science an
Jyotiprakash mahanta	8073717948	life science	B.Sc	6	Indian Academy Degree College-Autono
Vaishnavi R	9611641968	Science	B.Sc	6	Indian academy degree college
Pavan Kumar RS	9964911354	Biotechnology	B.Sc	2	Govt First Grade College
Priyanka K	9741484558	Chemistry	M.Sc	4	Indian academy degree college bangalore
Harshita SS	8277726122	Chemistry	B.Sc	3	Government First Grade College, channa
Darshan v	7892228344	Life sciences	B.Sc	3	MAHARANT'S SCIENCE COLLEGE FO
Harshitha M A	7795435765	Molecular biology	B.Sc	3	Indian academy degree college
Supriya.S	9008648226	MLT	M.Sc	2	University of mysore
Annapurna N	7483114039	Radiation therapy	B.Sc	6	College of Allied health science (HCG)
N Shivakumar	7348920096	Allied health science	B.Sc	4	HCG college of allied health care science
Anagha J	8971335864	Microbiology	B.Sc	3	Saptagiri medical college and research ce
Bindu Prakash	8050438121	Medical Imaging Technology	M.Sc	3	Nrupathunga University
S Supritha	7348872546	Life science	B.Sc	2	Cauvery Institute of health sciences
Yamini.R	8088548985	Radiation therapy	B.Sc	3	Indian academy degree college
Aruna shekhar NC	7204613422	Biochemistry	B.Sc	4	HCG College Of Allied Health Science
Sreedhara Suryaja Iyer	9014832960	GENETICS	M.Sc	3	School of basic and applied sciences Day
Juhi Raju J	9663994751	Perfusion technology	B.Sc	3	Ms.Ramaiah college of arts, science and
GIBIN JACOB					
GEEVARGHESE	8086657246	Perfusion technology	B.Sc	6	Rajarajeshwari Institute of Allied Scienc
AL AMEEN A	7902518504	Bsc Renal Dialysis	B.Sc	1	RRMCH
Aparajita Dandin	7348821711	Anaesthesia	B.Sc	3	RAJARAJESWARI INSTITUTE OF AL
shaikwaseem	8884924440	Cardiovascular	B.Sc	6	Rajarajeshwari medical college and hosp
Sampriti Mandal	6296438109	Bsc Optometry	B.Sc	2	Rajarajeshwari medical College and hosp
Rajesh victor	7795339517	Perfusion technology	B.Sc	6	Rajarajeswari Medical college
Mohammed Akbar	8921183332	Respiratory	B.Sc	3	Raja Rajeshwari medical college

Report on Students Awareness Webinar on “Research, Entrepreneurial and Job Opportunities in Life Sciences”.

Registrations

Date: 25th August 2021

Varshitha A	9113664438	Biochemistry	B.Sc	6	Rrmch
Shreya Bhawe	8073592100	biotechnology	B.Sc	4	Rajarajeshwari medical college
Shayistha khan qureshi	8660882824	perfusion technology	Others	3	Dayananda sagar
Chaithra N	7483163088	Biotechnology	B.Sc	2	Rajareshwari medical college
MOHAMED SHAHEEM	9048160033	B.Sc Renal Dialysis Technology	B.Sc	3	Maharani Science College for women
Ankitha E Yadav	9986916145	Bsc.Cardiac care technology	B.Sc	1	RAJARAJESWARI INSTITUTE OF AL
AMEERSHIFAN K S	8086353132	Bsc.Respiratory theraphy	B.Sc	5	Sapthagiri institute of medical sciences a
Eragadinla giri	9515520092	Anesthesia	B.Sc	6	Rajarajeshwari medical College and hosp
SABAREESH P.S	9847386563	MLT	B.Sc	4	Sapthagiri medical College and research
Tejas H M	7975355488	Bsc	B.Sc	3	Sapthagiri Institute of Medical Sciences c
Adarsh Benny	9495287852	Biochemistry DOS in Molecular	B.Sc	3	Indian Academy Degree College
Jayaprakash Reddy G K	9740810700	Biology	M.Sc	2	Father Muller medical college DOS in Molecular Biology , University c
Sabith k	8943424372	MLT	M.Sc	4	Mysore
Anvitha edna ferros	7892772583	MLT	B.Sc	3	Sapthagiri institute of medical science an
Srisha	9964431148	Biochemistry	B.Sc	2	Father muller college of Allied health sci
Anantha	8105078014	Cardiac care Radiotherapy	B.Sc	1	Sapthagiri
Ashina	9847183300	technology	B.Sc	4	Sapthagiri institutions of medical science
Nithya Shree.H	7204405266	B.voc	B.Sc	3	Hcg college of allied health sciences
Sudharshan P	7892550914	AHS	Others	6	Maharani Lakshmi Ammani College for
Linju Johny	9400938136	Respiratory	B.Sc	6	RajaRajeswari Medical College and Hosj
Ahraaz ul Hasan	9741387107	Ott	B.Sc	2	RRMCH
Thaswitha.C	9663207930	Allied health science	B.Sc	1	Hcg college of allied health sciences
Mohammed Shijas	8848358435	Allied Health Science Medical imaging	B.Sc	3	Rajarajeshwari medical college and hosp
Vitrosy barreto	8080987381	technology	B.Sc	1	Rajarajeswari institute of allied health sci
Sanjayan	9.16235E+11	Bsc renal dialysis MLT(medical	B.Sc	4	Bgs gims
Abraham.M	9739241337	laboratory technician)	B.Sc	3	Bgs global Institute of medical science
Lokesh s	9606406088	Cardiac care technology	B.Sc	4	HCG
Saria Sanam	8792795443	Bsc anesthesia	B.Sc	2	BGS GIAHS MEDICAL COLLEGE
S Sri Balaji	7080482159	Anesthesia	B.Sc	2	Bgs global medical college and hospital
Seema Padhiary	7978741830	Biotechnology	B.Sc	6	Bgs global Institute of medical science
Yaran Allamyradov	9902495710	Genetics Neuroscience	M.Sc	1	Indian academy degree college
Roshan M	9663332927	technology	M.Sc	2	Iadc

Report on Students Awareness Webinar on “Research, Entrepreneurial and Job Opportunities in Life Sciences”.

Registrations

Date: 25th August 2021

Afreen Fathima	8183879064	Science	B.Sc	2	Ramaiah University of applied sciences
Syed Faisal Ahmed	9380596295	Cardiology Cardiac Care	B.Sc	1	Goodwill Christian college for women
Sephali Swain	9938775754	Technology	B.Sc	2	BGS Global Institute of Medical sciences
Veeralakshmi S	9538067955	Laboratory	B.Sc	3	SSSIHMS
Sagar MN	9620702800	Cardiology	B.Sc	4	HCG College of Allied Health Sciences
Sowmya.A.V	8618207465	Nursing	B.Sc	5	Rajarajeshwari medical college and hosp
Kavita K Pandya	9742446205	Biotechnology D. O. S in	M.Sc	2	Gopala gowda Shanthaveri college of nu
Nynika. S	9071503969	Biochemistry	B.Sc	3	M S Ramaiah University of Applied Scie
Srujana.R	6366185390	Biochemistry	M.Sc	6	Manasagangotri
Mallikarjunaiah	7795306282	Chemistry	B.Sc	2	Mahhharani Lakshmi Ammanni college f
Gitartha Sarma	8876091196	Microbiology	M.Sc	2	Indian academy degree College
Deepa shetty	9108175830	Biochemistry	M.Sc	2	Dayananda Sagar University
Pratibha	8607191908	Biochemistry	B.Sc	2	St. Ann's
Shaik Moinulla	8008075425	Biochemistry	M.Sc	2	Indian Academy Degree College- Auton
Akshaya kotian	9632924841	Medical laboratory technology	M.Sc	2	Indian Academy Degree College- Auton
Mythri	9964339712	Medical Laboratory technology	M.Sc	3	Father Muller college of allied health sci
LAVITA ELVITIA DSOUSA	8197916513	MEDICAL LABORATORY TECHNOLOGY	M.Sc	3	Father Muller College of Allied Health S
Nikhitha.J.L	7349065858	Medical laboratory technology	M.Sc	3	FATHER MULLER COLLEGE OF ALI
Krishna Inapakutiki	9.18897E+11	School of Applied sciences	M.Sc	5	Father muller college of allied health Sci
Vidya j	7892296398	Biochemistry	M.Sc	3	REVA University, Bengaluru
Safiya saleh saeed baeisa	7022220556	Biochemistry	M.Sc	3	Reva school of applied sciences
Amulya dev	9110482985	Department of biochemistry	B.Sc	3	Reva c
Harish.c	9019766362	School of biochemistry	B.Sc	3	Reva university
Hajeera	7338019493	Applied sciences	B.Sc	3	Reva University
Nithya jyothi p	8088574328	Applied science	B.Sc	4	Reva university
Tayaba sultana	9686138356	Department of biochemistry	B.Sc	3	Reva University
Venkata prasad K R	9206608539	Biochemistry	B.Sc	5	Reva university
Boisakhi Paul	6294614630	Msc. Biochemistry	M.Sc	1	Reva university
Mythali PL	8088327100	Biochemistry	M.Sc	6	REVA UNIVERSITY
Mamatha Malarvizhi B	9353292962	Biochemistry Department	M.Sc	6	Reva University

Report on Students Awareness Webinar on “Research, Entrepreneurial and Job Opportunities in Life Sciences”.

Registrations

Date: 25th August 2021

Sara suman khanum	9964072258	Life science	B.Sc	2	Indian Academy Degree College- Autono
Sriram Shingnapure	8999885835	Biochemistry	B.Sc	2	Indain academy degree college
Shovan Meher	9.19079E+11	Bsc	B.Sc	2	Indian Academy Degree College- Autono
Kamini G	8095652752	Science	B.Sc	2	Indian Academy Degree College
Chandana. P. V	7411550670	Life science	B.Sc	2	Indian academy degree college autonomc
Sodh	8730903954	CZMB	B.Sc	2	IADCA
Alaina Ara	6362651693	Science	B.Sc	2	IADAC
Annora Blessy	9019494664	Science	B.Sc	2	Indian academy degree college
Manisha sri	6360437510	Lifescience	B.Sc	2	Indian Academy Degree College
Ramya Bharadwaj V	8095638400	Biochemistry	B.Sc	6	Indian academy
Adithi	9108907183	Microbiology	M.Sc	2	IADC
Ranjith Kumar RADHIHA RAVICHANDAR	7619110624	Life science	B.Sc	5	Indian Academy Degree College
Jeeshan Ahmed	9486879404	BIOTECHNOLOGY	B.Sc	2	Indian academy degree College autonom
TEJASWINI S	7975588340	Bsc Czbt	Others	6	SRMIST CHENNAI
NIKSHITHA.M	8867154978	Biotechnology honour	B.Sc	2	Indian Academy Degree College Of Autc
Yashaswini Mb	6360359464	Biochemistry	B.Sc	2	Ramaiah University of applied science
Nancy Naymoi A	9945698419	Molecular Biology	B.Sc	2	Iadac
Yashodha T K	9019857967	Czmb	M.Sc	2	Yuvaraja's College
Thavasi.M	7019316283	Biotechnology	B.Sc	2	Indian academy degree college
J satya narayana	8123518141	Bsc	M.Sc	4	Indian academy
Sukanya Ramesh Bhat	9738061239	Bsc life science	B.Sc	2	Indian academy degree college -Autonon
Mahima.S	8310244238	Biochemistry	B.Sc	2	Indian academy degree college autonomc
Gowtham Yadav N	8088313509	Chemistry	B.Sc	2	Indian academy degree college
Bindu M	9606212350	Biochemistry	B.Sc	2	Goodwills Christian College for women
N.S.Shivani	7019470923	Msc biochemistry	M.Sc	6	Indian academy degree College autonom
Rakshitha BN	9019933638	Lifesciences	M.Sc	6	IADC A
Aleesha A	8073573497	Msc Biochemistry	B.Sc	2	Indian academy degree college
Albert mulenga	9895907062	Life Sciences	M.Sc	2	Indian academy degree college autonomc
Rincy S	9591802789	Biochemistry	B.Sc	2	Indian Academy Degree College-Autono
Bhumika J.R	8892496966	Biochemistry	B.Sc	2	Indian academy degree college autonomc
Ashrith Kumar A RONIT BHATTACHARJE	8317449965	Biochemistry	M.Sc	6	Indian academy degree college
Priyanka Rai	8861497703	Biochemistry	M.Sc	2	Indian academy degree college autonomc
ARPAN GARAIN	7001582044	Biochemistry	M.Sc	3	Indian Academy degree college
Anusha Islam	6363925898	Biochemistry	M.Sc	3	INDIAN ACADEMY DEGREE COLLE
	6294249316	Biochemistry	M.Sc	3	Indian Academy Degree College
	6362326354	B.Sc. RTT	M.Sc	2	INDIAN ACADEMY DEGREE COLLE

Report on Students Awareness Webinar on "Research, Entrepreneurial and Job Opportunities in Life Sciences".

Registrations

Date: 25th August 2021

Hemanth.y	7997179647	Ott	B.Sc	4	Reva University
Chandrakala L	6363350535	Biochemistry	B.Sc	4	HCG
Nandini R	9945320244	MLT	Others	2	mLAC
Sourabh Kumar	9871235458	Cardiac Care Technology	B.Sc	6	HCG Institute of allied health sciences B.
Debsattam Karan	9.1961E+11	B.Sc. Cardiac Care Technology	B.Sc	1	BGS Global Institute of Medical Science
Priyadarshini S	7625025921	Biochemistry	B.Sc	3	BGS GLOBAL INSTITUTE OF MEDIC
Saroja M	94481081125	Haematology	M.Sc	6	Reva university
Veena K A	9480355841	Student	B.Sc	6	HGG
Veena A	9902783916	Science	M.Sc	4	Athena college of nursing
Vineet Anand	7349	Applied Sciences	B.Sc	5	Reva university
krishnapriya kakumani	7899025762	biotechnology	B.Sc	5	M.S Ramaiah
Mukilan.L	9965828342	Biotechnology	Others	3	sir M visvesvaraya institute of technolog
Likhitha S	7022262423	Biochemistry School of	M.Sc	2	Indian academy degree College, hennur c
Anusha v	9620592716	biochemistry	B.Sc	1	Reva University
Bhagyashree	7483827022	MLT bsc	B.Sc	2	Reva university
Bhavani	7022203213	Biochemistry	B.Sc	6	HCG allied health sciences
Raj Krishnan. R	9745160171	MLT	B.Sc	2	Reva
Shri raksha	8095059633	Life sciences	B.Sc	3	Sapthagiri institute of medical science &
Umme Aliya Afsheen	9108365999	Ahs	M.Sc	5	REVA COLLEGE
Pooja C	8107633469	Microbiology	B.Sc	3	BGS GIMS
SHESHADRINAYAKA K B	7406925806	Student School of applied sciences (Biochemistry)	M.Sc	2	Oxford college of science
Thyaba Surur	9886814629		B.Sc	6	HCG
SUBHIKSHA M BHARADWAJ	9108511771	BIOTECHNOLOGY	B.Sc	6	Reva University
Roshini Begum I	7996783860	BVOC	B.Sc	6	M S RAMAIAH UNIVERSITY OF APF
SUGANTHA ANGEL	9164547877	Biochemistry	B.Sc	6	Maharani Lakshmi Ammanni College Fo
Tasmiya riyaz	7483400774	Life science	B.Sc	6	Indian academy
Pavan kumar	9.16366E+11	Life science	B.Sc	6	Indian academy degree autonomous colle
REDDY MANJULA. P	9019935007	Biochemistry	B.Sc	6	Indian academy degree College
Joel d john	7592014784	Life sciences	B.Sc	6	INDIAN ACADEMY DEGREE COLLE
Chandana	7483822988	Bsc gbcbt	B.Sc	2	Indian academy degree college
A Monisha	9353050031	Bsc biotechnology	B.Sc	6	Indian academy degree college
Mettu Sunisha	9502909170	Bsc GBcbt	B.Sc	6	Indian Academy Degree College Autono
Vandana. S	7026475118	Lifescience	B.Sc	6	Indian academy degree college autonomc

Report on Students Awareness Webinar on "Research, Entrepreneurial and Job Opportunities in Life Sciences".

Registrations

Date: 25th August 2021

Sharanya.S	9110869692	Bsc RTT Radiotherapy	B.Sc	3	HCG college of Allied Health Sciences
Satvik	8669159258	technology	B.Sc	6	HCG college of allied health sciences
Kavya N N	7022137283	Natural science	B.Sc	5	HCG college of allied health sciences
Revathi.S	9980097630	Biochemistry	M.Sc	6	ACU

cap

INDIAN ACADEMY

Degree College - Autonomous

Department Of Chemistry

Circular

Department of Chemistry is organizing a *National Webinar* for all the UG and PG students on *28th August 2021 at 11.00am*. All the students and faculty are invited for the online Webinar and shall join the Webinar through Zoom link.

Resource Person	Title
Dr. G.S. Suresh, Professor and Head Department of Chemistry NMKRV college for Women Bangalore	“Design and Applications of Nanomaterials”

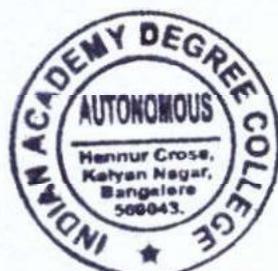
Faculty in Charge: Prof. Latha V (7760860048)

Dr. Monika Bajpai (9986917529)

HOD

HEAD

Department of Chemistry
I.A.D.C. and Centre For
Research & Post Graduate Studies
Autonomous - 560043



Principal

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Indian Academy Degree College
Autonomous
Hennur Cross, Katyan Nagar
Bangalore - 560043

INDIAN ACADEMY

Degree College - Autonomous

Department of Chemistry

Report on the Guest Lecture: Design and Applications of Nanomaterials

Date of the Guest Lecture: 28-08-2021

Target Students: M.Sc semester students

Resource Person: Dr. G. S. Suresh

Venue: Seminar Hall-II

Content

Dr. G. S Suresh delivered a talk on Design and Applications of Nanomaterials and its interdisciplinary aspect on 28/08/2021. His talk was focused on Nanomaterials of Extremely small particles (Greek-dwarf), size 1-100 nm. Nanostructures of any structure with one dimension measuring in the Nanometer range. Nanomaterials are unique in properties like optical, magnetic and electric. As size and shape plays important role in optical properties (Example gold) nanospheres, nanorods, nanoshells, nanocages, nanostars optical properties changes (colour changes depending on the shape also) nanocubes, nanorods, nanowires, nanoplates are synthesized in our laboratory. The investigation of the applications of newer techniques in the designing of newer drugs was also discussed in detail. All the M.Sc. chemistry students were immensely benefitted and encouraged to take up research in future.

Learning Objectives:

To create awareness among students about future challenges and industry demands.

To get students familiarized with various career paths in the subject area.

Guest lecture can be used to make classes more approachable and appealing to students.



INDIAN ACADEMY
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DEPARTMENT OF CHEMISTRY

In association with Institution's Innovation Council, MHRD, Govt. of India

Organises

A National Webinar

On

DESIGN AND APPLICATIONS OF NANOMATERIALS



Dr. G.S. Suresh

Professor and Head, Department of Chemistry
NMKV college for Women, Bangalore



11.00 am



28 August 2021

- Target Audience - UG - PG Students and Faculty members
- Participants will receive e-certificates on submission of feedback forms at the end of the webinar

Zoom Webinar ID : 873 3322 2303

Passcode : 09sb/n

Organising Committee

Dr. Srinidhi K Parthasarathi

Principal
Indian Academy Degree College - Autonomous

Dr. K Shyam Sunder

Professor & Head, Dept. of Chemistry
Indian Academy Degree College - Autonomous

Event Coordinators

Prof. Latha V

7760860048

Dr. Monika Bajpai

9986917529

FOR QUERIES, PLEASE CONTACT : EVENT COORDINATORS

www.indianacademy.edu.in

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Brief Resume of Dr. G.S. Suresh



Dr. G.S. Suresh obtained his Master's degree from Bangalore University in Organic Chemistry in the year 1987. He obtained double M. Phil degrees, one in Physical chemistry from Bangalore University in 1998 and the second one from S. K. University in 2000 in Organic chemistry. He was completed his Ph. D work in Electro-Organic chemistry at S. K. University in 2002. He worked as a Postdoctoral research fellow under the guidance of Prof. S. Sampath, Indian Institute of Science, Bangalore for two years from 2002 to 2004. Later he joined the laboratory of Prof. D. Aurbach, Bar-Ilan University, Israel for his Second Postdoctoral research work for more than two years during the year 2005 to 2007. He was also worked as a JSPS-INSIA Visiting Scientist with Prof. Tetsuya Osaka, Department of Applied Chemistry, Waseda University, Japan during 2010. He visited Singapore and Malaysia for presenting papers in the conferences.

Currently, He is working as an Associate Professor and head of the department of chemistry at NMKRV College for Women, Bangalore and he has 34 years of teaching experience.

Under the guidance of Dr. G.S. Suresh, ten students have obtained their Ph. D degree and at present three students have submitted their Ph.D thesis. Dr. Suresh

has completed seven Major Research Project worth of nearly 3.0 crores, funded by Department of Science and Technology and Department of Atomic Energy, UGC , Government of India and Vision Group on Science and Technology, Government of Karnataka.

He has published more than fifty research papers in the peer reviewed international journals and presented more than 100 papers in various National and International conferences of which 12 papers have received the best paper award. Dr. Suresh has one US Patent on "**A Rechargeable Magnesium Battery systems**" to his credit.

His research Interest includes:

Electrochemistry in Materials Science, Advanced Nano Materials for Electrochemical Energy Conversion and Storage, Batteries - Rechargeable Li and Lithium ion cells, Rechargeable Magnesium cells, Synthesis and Characterization of Electrochemically active nanomaterials used in Batteries, Organic synthesis and applications of organic compounds in lithium ion Batteries. Electrochemical Sensors and Biosensors, Electrochemistry of Conducting Polymers in particular, their Application in the area of Chemical and Biosensors, Electrodeposition, Biosynthesis and Synthesis of nanoparticles by Sonochemistry, Study of Antioxidants activities of plant extracts, Application of biomaterials as enzyme immobilizing matrix, Electrochemical detection of cancer and anticancer properties of plants extracts.


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INDIAN ACADEMY

DEGREE COLLEGE - AUTONOMOUS

DEPARTMENT OF MICROBIOLOGY

Report on Role of IoT in Agriculture

Date: 29th June 2021

Resource person: Dr. Senthil Kumar

Head & Associate Professor

PG and Research, Department of Botany

St. Joseph's College (Autonomous)

Tiruchirappalli

Topic: 'Role of IoT in Agriculture'

Objectives

- To understand the different smart farming approaches
- To get an overview of the IoT applications in agriculture
- To acquire knowledge on the different IoT based devices used in agriculture and their benefits

Outcome: At the end of the session students were able to

- Identify the main areas of agriculture where IoT technologies are used
- Understand the importance of connected technology to increase the yields and reduce inefficiencies.
- Gain a better understanding on precision agriculture
- Describe the infrastructure requirements for adopting IoT in agriculture
- Analyze the research efforts and projects related to the application of IoT

Report: Department of Microbiology organised a guest talk on 'Role of IoT in Agriculture' on Tuesday, 29th June 2021. The programme commenced at 10.00 am with the welcome address by Prof. Rajarajan, Head, Department of Microbiology followed by the talk by the guest speaker. The speaker gave a brief introduction on the emergence of smart farming

approaches in agriculture that make the life of farmers easy and allows them to remotely monitor the crop field by sensors. He introduced IoT and its benefits that can boost organic agriculture. The speaker emphasised on the most common IoT applications in smart agriculture like sensor-based systems for monitoring crops, soil, fields, livestock, storage facilities or any important factor that influences the production. Students were interested to know more about smart agriculture vehicles, drones, robotic agriculture etc. He also added informed them about connected agricultural spaces like hydroponics or smart green houses. Students interacted with the resource person very well and were keen to know more about the applications of IoT. The programme came to an end with the vote of thanks by Dr. Malaiyarasa Pandian, Professor. The session was an informative one.


Head
Department of Microbiology,
Indian Academy Degree College
Hennur Cross, Hennur Main Road
Bangalore-560043


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Hennur Cross, Kalyan Nagar
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INDIAN ACADEMY DEGREE COLLEGE

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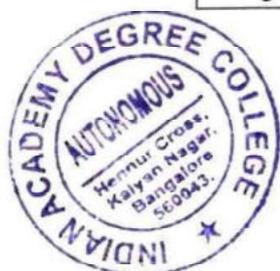
Recognized by Govt. of Karnataka & Affiliated to Bangalore University

DEPARTMENT OF MICROBIOLOGY

'Future perspectives of Biotechnology'

II B.Sc., Microbiology

S.NO	REGD. NO.	NAME
1	17IABSC039	BHANUSHREE C
2	17IABSC040	CHAITHANYA.M
3	17IABSC041	CHETHANKUMAR K G
4	17IABSC043	KOTESHWARI M
5	17IABSC044	KRUPA S
6	17IABSC045	MASEERA NAAZ
7	17IABSC046	MEGHANA M C
8	17IABSC047	NEHA GUPTA
9	17IABSC049	PAVITHRA,S
10	17IABSC050	PUNITHA S
11	17IABSC051	REBECCA V
12	17IABSC052	T SANDHYA
13	17IABSC053	VIDYA DHAR SOREN
14	17IABSC054	VISHNU J
15	17IABSC055	ADITYA NARAYAN SINGH
16	17IABSC056	ANJANA.J
17	17IABSC057	CHAITHANYA B N
18	17IABSC058	EKANAYAKE WASALA MUDIYANSELAGE AMANDA
19	17IABSC060	HARIKRISHNAN
20	17IABSC061	HARSHITHA C K
21	17IABSC062	JEEVALATHA G Y
22	17IABSC063	JOSHUA S
23	17IABSC064	KAVINDA ANURANGA WIJESEKERA
24	17IABSC065	M MAYUKHA
25	17IABSC066	MEJDI ABDULRAHMAN ABDALLA ALSHARIF
26	17IABSC067	MISHAL P A
27	17IABSC068	OMER MEIDEEN JABEER AFZAL AHAMED
28	17IABSC069	PRIYANSHI SINGH
29	17IABSC070	QURATH UL AIN
30	17IABSC071	RUTHIK M S
31	17IABSC072	S.VYSHALI
32	17IABSC074	VYSHNA A P
33	17IABSC075	YARAN ALLAMYRADOV
34	17IABSC076	YUVARAJ G




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Indian Academy Degree College
Hennur Cr.


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INDIAN ACADEMY DEGREE COLLEGE - AUTONOMOUS

DEPARTMENT OF MICROBIOLOGY

CIRCULAR

MB/2021-22/012

12/04/2022

The guest lecture is being organized for all the B.Sc. and M.Sc. life science students on **20th April 2022 at 10 AM** under the aegis of Star College Program. All the students and faculty are invited to the online guest lecture.

Resource person	Title
Dr. MUYEED AHMED, S. M.Sc., Ph.D. Co-Founder & CTO, Biotherm Flavours & Fragrances LLP, Bangalore Bioinnovation Center, Helix Biotech Park, Electronic City, Phase -1, Bangalore - 560100.	My Journey to Entrepreneurship - Biotherm Flavours and Fragrances

Note: All the students and faculty (Life Sciences) of IADC-A shall join the guest lecture through the following Google Meet link: <https://meet.google.com/nzt-mcyj-xzn>

Co-ordinator

STAR - College
Coordinator

HOD
Head

Department of Microbiology
Indian Academy Degree College
Hennur Cross, Hennur Main Road
Bangalore-560043

Principal

PRINCIPAL
INDIAN ACADEMY DEGREE COLLEGE
AUTONOMOUS
HENNUR MAIN ROAD
BANGALORE - 43



CURRICULUM VITAE

Dr. MUYEED AHMED, S. M.Sc., Ph.D.

Co-Founder & CTO,
Biotherm Flavours & Fragrances LLP,
Bangalore Bioinnovation Center,
Helix Biotech Park,
Electronic City, Phase -1,
Bangalore – 560100.
Mobile: + 91-9886362270
Email: muyeed.ahmed@gmail.com



QUALIFICATION PROJECT DESCRIPTION

Ph. D. Forestry (Forest Biotechnology): 2008-2012 from Institute of Wood Science & Technology (ICFRE), Bangalore affiliated to Forest Research Institute, Dehradun.

Thesis Title “Studies on genetic fidelity of in vitro propagated plants of Bambusa bambos (L.) Voss. and Dendrocalamus stocksii (Munro) M. Kumar, Remesh & Unnikrishnan using DNA markers”.

Thesis Details: Standardization and refinement of axillary shoot proliferation and somatic embryogenesis methods of micropropagation in Bambusa bambos and Dendrocalamus stocksii and standardization of molecular marker techniques (RAPD and ISSR) for detection of somaclonal variations in tissue culture regenerated plants at different time intervals for production of true to type plants.

Diploma in Protein Technology & Analytical Chemistry, Presidency College, Bangalore.

M.Sc. Biotechnology from Presidency College, Bangalore.

B.Sc., Biotechnology from BHS First Grade College, Bangalore.

WORK & RESEARCH EXPERIENCE

Entrepreneur as co-founder of new start-up Biotherm Flavours and Fragrances LLP. Incorporated in year 2019. Awarded with BIG, BIRAC, DBT funding of 5 million INR for project “Novel approach for extraction of secondary metabolites from Vetiver”. Developed method for extraction of new molecules from Vetiver plants, which is in pipeline for patenting.

1. Previously worked as Project Coordinator at PoinTech Pens & Energy Pvt., Ltd., Bangalore. Heads life science projects of the company. Established new commercial grade Plant Tissue Culture Laboratory with production capacity of 2 Million plants/year. Genetic improvement of tree species for enhanced productivity. Identify molecular tools for analyzing genetic disorders. Development formulation of Organic & Bio-fertilizers and Organic and Bio-pesticides. Establish links with government and private research institutes for



INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF MICROBIOLOGY

GUEST LECTURE ON

“MY JOURNEY TO ENTREPRENEURSHIP - BIOTHERM FLAVOURS AND FRAGRANCES”

PLACE:

Department of Microbiology, Indian Academy Degree College - Autonomous, Bengaluru

DATE: 20-04-2022

TIME: 10 AM - 11.15 AM

NAME OF THE RESOURCE PERSON:

Dr. MUYEED AHMED, S. M.Sc., Ph.D.

Co-Founder & CTO,

Biotherm Flavours & Fragrances LLP,

Bangalore Bioinnovation Center,

Helix Biotech Park, Electronic City, Phase -1,

Bengaluru – 560100.

BROAD AIM OF THE EVENT:

The broad aim of the event is to become an entrepreneurs to take risk, exercise initiative opportunities by planning, organizing and innovating to create new products.

OBJECTIVES

1. Develop and strengthen the quality of entrepreneurship.
2. Understand the process and procedure involved in setting up incubation centres.
3. Acquire the necessary managerial skill required to run the bioinnovation unit

OUTCOMES

1. Familiarize the students with the latest programs of the government authorities in promoting small and medium industries.
2. Imparts essential knowledge of how to start one's own business venture and the various facts that influence successful setting up and operations.
3. Realize skills and inspiration for developing an entrepreneurial mindset.



BRIEF DETAILS ABOUT THE EVENT

Department of Microbiology organized a guest lecture on, "My Journey to Entrepreneurship - Biotherm Flavours and Fragrances" on 20th April 2022. The guest lecture was organized by Dr.S.Maheswari and it was conducted on online through Google Meet. The speaker was too young entrepreneur Dr. Muyeed Ahmed of Bangalore Bioinnovation Center. The Head of Department of Microbiology Prof.P.Rajarajan introduced the guest speaker to the audience. The session started with introduction to "entrepreneurship". How one should be passionate about making their ideas work. The speakers also spoke about the prerequisites of starting a business and running it in a profitable manner. All this was explained by discussing start-up stories of McDonald's as well as his own journey. Not all entrepreneurs are successful; there are definite characteristics that make entrepreneurship successful.

Ability to take a risk- Starting any new venture involves a considerable amount of failure risk. Therefore, an entrepreneur needs to be courageous and able to evaluate and take risks, which is an essential part of being an entrepreneur.

Innovation- It should be highly innovative to generate new ideas, start a company and earn profits out of it. Change can be the launching of a new product that is new to the market or a process that does the same thing but in a more efficient and economical way.

Visionary and Leadership quality- To be successful, the entrepreneur should have a clear vision of his new venture. However, to turn the idea into reality, a lot of resources and employees are required. Here, leadership quality is paramount because leaders impart and guide their employees towards the right path of success.

Open-Minded- In a business, every circumstance can be an opportunity and used for the benefit of a company.

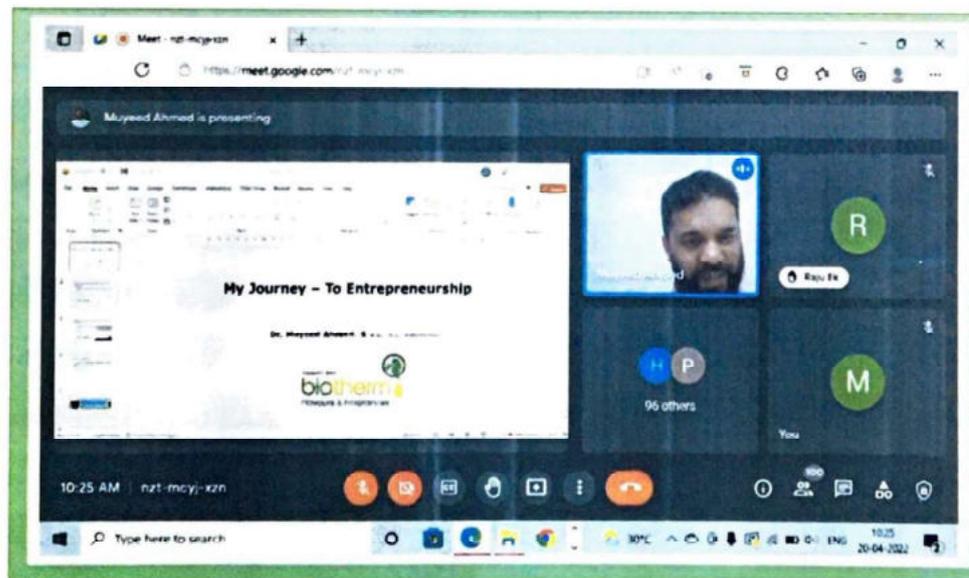
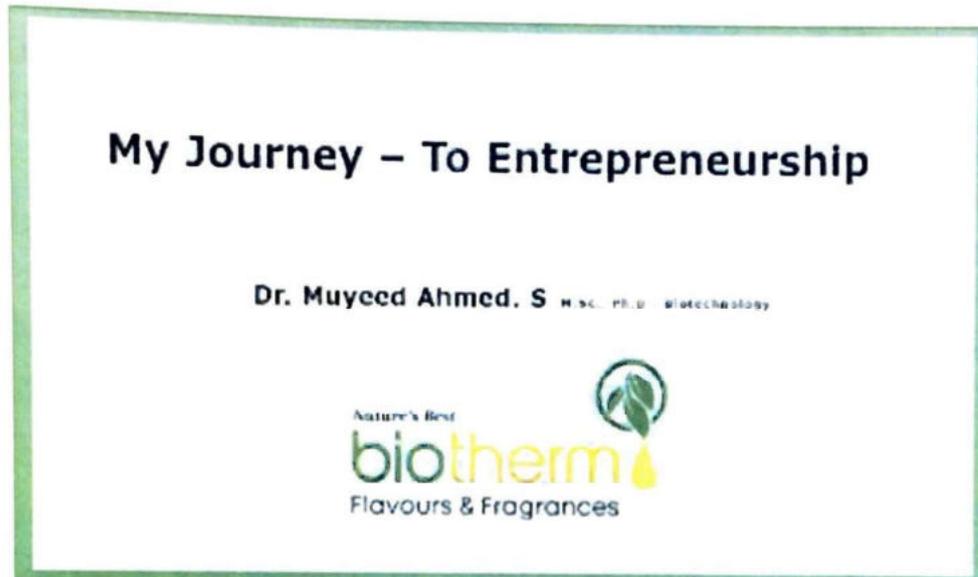
Flexible- An entrepreneur should be flexible and open to change according to the situation. To be on the top, a businessperson should be equipped to embrace change in a product and service, as and when needed.

Know your Product-A company owner should know the product offerings and also be aware of the latest trend in the market. It is essential to know if the available product or service meets the demands of the current market, or whether it is time to tweak it a little. Being able to be accountable and then alter as needed is a vital part of entrepreneurship.

The quest lecture was attended by Dr.S.Anu Kiruthika (Microbiology), Dr. H. Paramesh (Biotechnology), Dr.Suma T K (Biochemistry), Dr. Ananda Vardhan H (Biochemistry). The



guest lecture was concluded by question and answer session which was answered politely by the speaker. The guest lecture was motivated the students to be become a entrepreneur. The session was informative and interactive. The session ended with the vote of thanks proposed by Dr.Sahithya K. This session was attended by 97 students from BSc, and MSc, Life sciences.



S. Maheswari
Co-ordinator

Dr.S.MAHESWARI



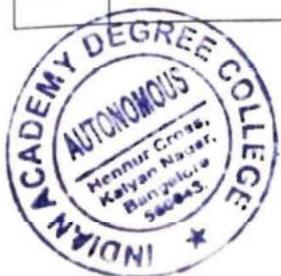
P. Rajarajan
HOD

P.RAJARAJAN

Department of Microbiology
Indian Academy Degree College
Hennur Cross, Hennur Main Road
Bangalore-560043

LIST OF STUDENTS PARTICIPATED IN GUEST LECTURE

S.No	STUDENTS NAME	S.No	STUDENTS NAME	S.No	STUDENTS NAME
1	ANJANA. J	33	BRUNDA B	65	RANJITH KUMAR T V
2	ANKITA BISWAS	34	CHANDRAKALA .L	66	TECHI SODH
3	ARSHIYA M.E.	35	DIVYA R	67	HARI KEERTHANA
4	ASWESHVARAN R.	36	HARISH K R	68	JEEVITHA G
5	AYESHA. G	37	JOYCE MADALENE	69	K. VANITHA
6	BAWANSHISHA SYIMLIEH	38	KEERTHI VARMA	70	KALOMBO KAZADI MARDOCHEE
7	BHANUSHREE C	39	M P SANDHYA	71	NIDA KHAN
8	CHAITHANYA.M	40	MADDINI MONALISHA	72	NIKITHA V YADAV
9	DEEKSHA P	41	MONALISA S	73	RACHITHA K
10	DEVIKA P R	42	PAVAN KUMAR A	74	RAHUL C
11	AMANDA KAKUSANDA EKANAYAKE	43	POOJA PANDEY	75	RUDRAKSHINI S
12	HARSHITHA.C.K.	44	RAGHAVI K V	76	SHALINI V H
13	HEMANATHAN	45	RAHUL E	77	SHRAVANI
14	JAVEETH.J	46	RAKSHA R	78	SYEDA ASMA TAJ
15	KATHERIN SYLVIA.R	47	RANJITH KUMAR G S	79	THANUSHA R
16	KOTESHWARI.M	48	RUKSANA S	80	VANDANA S
17	MEGHANA PASTEY	49	SANJOTA K PETKAR	81	ADITYA
18	MONISHA IYAPPAN	50	SHALINI M	82	AIMEN
19	N B KARTHIK	51	SHASHANK V	83	AISHWARYA
20	NEHA GUPTA	52	SHILPA	84	ARCHANA
21	PRAKASH B	53	SIDRA KHOUSIN	85	ARIBA
22	PRIYANSHI SINGH	54	SUKANYA DUTTA	86	BHAGYASHREE
23	QURATH UL AIN	55	VAISHNAVI GANAPATI ACHARYA	87	BHANUPRAKASH
24	RABINA SAIT	56	NHIKIL IA	88	BHANUSHREE



25	SINDHU	57	ADITHI PRASAD	90	BHAVANI
26	T. MERCY SCORLET	58	ALAINA ARA	91	CHANDAN
27	T. MOULI	59	CHANDANA P V	92	BHAVYA
28	ALICE SHEBA S	60	DEEPTHI B	93	DIVYA
29	ANUSHA KP	61	ADITHI PRASAD	94	GOKUL
30	ASHWINI. V	62	MANISHA SRI K	95	JAYASURYA
31	B PRIYANKA	63	N S SHIVANI	96	KAVYASHREE
32	BELLARI JASWANTH	64	NANCY NAYMOI A	97	URMILA

Killadi

Co-ordinator
Dr. S. MAHESWARI



[Signature]
HOD

Department of Microbiology,
Indian Academy Degree College
Hennur Cross, Hennur Main Road
Bangalore-560043

[Signature]

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INDIAN ACADEMY

Degree College - Autonomous

GUEST LECTURES

Speaker : Dr. Muzeed Ahmad S
Designation : M.Sc., Ph.D
Topics : My Journey to Entrepreneurship -
Biotherm Flavours & Fragrances
Nature of Audience : B.Sc., & M.Sc., Life Science Students
Date & Time : 20th April 2022 at 10-11:15 Am.
Views of the Speaker :

Signature of the guest

Views of the beneficiaries :- The talk was very enlightening as the speaker shared his experience on starting a startup company & his journey to become an entrepreneur. It gave us valuable insight on how to tackle obstacles & become an entrepreneur.
Remarks

The lecture was interacting but need to be even more good if it was offline. Looking forward to visit the company.



Chaitanya.M
M.Sc 3rd SEM

INDIAN ACADEMY

Degree College - Autonomous

GUEST LECTURES

Speaker : Dr. Mayeed Ahmed S

Designation : M.Sc., Ph.D

Topics : My Journey to Entrepreneurship -
Biotherm flavours & fragrances

Nature of Audience : B.Sc., & M.Sc., Life Science Students

Date & Time : 20th April 2022 at 10-11.15 AM.

Views of the Speaker :

Signature of the guest

Views of the beneficiaries

The Guest Lecture was very good. It provided the knowledge of R&D Industrial Section. Working and designing a protocol for experiments were its objective and knowledge developing was effective. Key person was a good speaker and the knowledge and idea about purification of any sample was interesting.

Remarks

The session was very interesting and good. The key resource person, delivered his R & D research sector very well and created interest among us to pursue the career in R&D sector.



Shashab
Msc. Microbiology
Ist Semester.

INDIAN ACADEMY

Degree College - Autonomous

Department of Microbiology

Institutional Visit to Agharkar Research Institute

Date: 16.12.2021

Class: III sem M.Sc., Microbiology students

Objective:

The objective of the institutional visit is to grasp knowledge in the area of bioenergy generation using anaerobic microorganisms and techniques involved.

About the Institute:

The Agharkar Research Institute, founded in 1946 as the Maharashtra Association for the Cultivation of Science Research Institute, was renamed in 1992 as the Agharkar Research Institute (ARI) in honour and memory of the Founder Director, the late Professor Dr. Shankar Purushottam Agharkar. The ARI is an autonomous research institution fully funded by the Department of science and Technology (DST) government of India, since 1966. It operates under the overall umbrella of the Maharashtra Association for the Cultivation of Science (MACS). The current research and development activities of ARI span across all areas of life sciences spread over six different themes, namely Biodiversity & Paleobiology, Bioenergy, Bioprospecting, Developmental Biology, Genetics & Plant Breeding, and Nano bioscience. The institute has a distinguished faculty, modern infrastructural facilities, well-equipped laboratories.

Anaerobic cellulolytic and methanogenic organisms from gober gas plants were reported for the first time in India by the microbiology group of the Agharkar Research Institute. A specialized culture collection of anaerobic organisms was also established. The current research activities of the Bioenergy group are focused on "exploring and exploiting microorganisms for sustainable energy

About the Visit:

The visit started with a brief introduction to the concept of anaerobic microbes, their isolation from different environments, and their significance in bioenergy production. Introduction also included the information about facility operations, pre-processing technologies, feedstock types and sources, biogas cleaning systems, biogas production/uses, and solid/liquid digestate uses. Dr. Vikram demonstrated the techniques involved in the preparation of anaerobic media and inoculation of anaerobic microbes in to sterilized media. In addition, Dr. Vikram also demonstrated the analysis of products produced by anaerobic metabolism using advanced instruments such as high-performance liquid chromatography, gas chromatography and mass spectroscopy and liquid chromatography.

Outcome:

Students gained practical knowledge on the anaerobic preparation of media and the techniques involved in the cultivation of anaerobic microorganisms. Students also experienced the operation of Gas chromatography and High-Performance Liquid Chromatography.

Dr. P. Malaiyarasa Pandiyan 

Dr. K. Sahithya 

Faculties In-Charge


Prof. P. Rajarajan

HoD



M.Sc., Microbiology students in Agharkar Research Institute, Pune

INDIAN ACADEMY

Degree College - Autonomous

Department of Microbiology

List of students

Class: III Sem M.Sc., Microbiology

Date: 16.12.2021 AN

Industry/Institute Name: Agharkar Research Institute, Pune

Staff In-charge: Dr. P. Malaiyarasa Pandiyan & Dr. Sahithya K

Sl. No.	Reg. No.	Student Name	Attendance
1	20IAMOS060	Anjana J	Present
2	20IAMOS061	Ankita Biswas	Present
3	20IAMOS062	Arshiya M E	Present
4	20IAMOS063	Asweshvaran R	Present
5	20IAMOS064	Ayesha G	Present
6	20IAMOS065	Bawanshisha Syiemlieh	Present
7	20IAMOS066	Bhanushree C	Present
8	20IAMOS067	Chaithanya M	Present
9	20IAMOS068	Deeksha P	Present
10	20IAMOS069	Devika P R	Present
11	20IAMOS070	Ekanayake Wasala Mudiyansele Amanda Kakusanda Ekanayake	Present
12	20IAMOS071	Harshitha C K	Present
13	20IAMOS072	Hemanathan D	Present
14	20IAMOS073	Javeeth J	Present
15	20IAMOS074	Katherin Sylvia R	Present
16	20IAMOS075	Koteshwari M	Present
17	20IAMOS076	Meghana M Pastey	Present
18	20IAMOS077	Monisha Iyappan	Present
19	20IAMOS078	N B Karthik	Present
20	20IAMOS079	Neha Gupta	Present
21	20IAMOS080	Prakash B	Present
22	20IAMOS081	Priyanshi	Present
23	20IAMOS082	Qurath Ul Ain	Present
24	20IAMOS083	Rabina Sait	Present
25	20IAMOS084	Sindhu R	Present
26	20IAMOS086	T Mercy Scorlet	Present
27	20IAMOS087	T Mouli	Present

INDIAN ACADEMY

Degree College - Autonomous

Department of Microbiology

Report on Industrial/Institutional Visit

Date: 17.12.2021

Industry: Mapro Food Industry, Mahabaleswar

Class: III sem M.Sc., Microbiology students

Objectives:

- To provide an insight to students into the internal working of companies.
- To provide students with a chance to meet industry professionals, who share their wisdom, learning, and experiences.
- To pursue knowledge about the production and processing of different food products.

About the Industry:

Mapro is a food processing company founded in 1959, in the hill-town of Panchgani, near Mahabaleswar - a popular tourist destination near Mumbai and Pune. Mapro is a market leader in Western India with an annual processing capacity of around 30 thousand MT, founded in 1959. The company has grown organically over the last five decades with sustained profitability. Started the first self-owned factory in 1989 and then set up state-of-the-art cold storage at Wai, in 2005, which is capable of precooling 20 MT of fresh fruits and produce chocolate. The company has grown organically over the last five decades with sustained profitability. Known for its quality and innovation, Mapro has been built on its founder's philosophy of developing products that are wholesome, nutritious, value-for-money, and imaginative.

Mapro's portfolio of products provides a high quotient of natural fruit in the form of Jams, Fruit bars and chews, Syrups, Crushes, Squashes, and Dessert Toppings. Its range of premium products such as Thandai crush and Kesar syrup are made from the finest selection of exotic ingredients. Mapro's products are known for their wholesome taste and quality, as

also their natural goodness and nutritive value. Mapro was the pioneer of fruit-based confectionery in India, with its first jelly sweets being made from fruit juices and liquid glucose. The 'Falero' pulpy fruit chews, which are better known as 'pates de Fruit' in the rest of the world – are excellent exemplars of Mapro's very own Innovation Labs. Faleros come in unique indigenous flavours that are suited to the Indian palate, like Kacchi Kairi (Raw Mango), Alphonso Mango and Strawberry.

About the Visit:

The visit started with the animation movie for showing glimpse of Mapro industry from its beginning at Panchgani. It also gave introduction of company profile and its present functioning in food industry for different products. The technical team has explained automation of different food products like chocolates, syrups and jams through presentation containing many functional block diagrams and existing machineries.

Outcome:

The Industrial Visit complemented theoretical knowledge with practical experience. Students also gained information about the development of processed foods ranging from jellies to fruit syrups and from crushes to dessert toppings.

Dr. P. Malaiyarasa Pandiyan



Dr. K. Sahithya



Faculties In-Charge

Prof. P. Rajarajan



HoD



M.Sc., Microbiology Students in Mapro Industry

INDIAN ACADEMY

Degree College - Autonomous

Department of Microbiology

List of students

Class: III Sem M.Sc., Microbiology

Date: 17.12.2021

Industry/Institute Name: Mapro Food Industry, Mahabaleswar

Staff In-charge: Dr. P. Malaiyarasa Pandiyan & Dr. Sahithya K

Sl. No.	Reg. No.	Student Name	Attendance
1	20IAMOS060	Anjana J	Present
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10	20IAMOS069	Devika P R	Present
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12	20IAMOS071	Harshitha C K	Present
13	20IAMOS072	Hemanathan D	Present
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16	20IAMOS075	Koteshwari M	Present
17	20IAMOS076	Meghana M Pastey	Present
18	20IAMOS077	Monisha Iyappan	Present
19	20IAMOS078	N B Karthik	Present
20	20IAMOS079	Neha Gupta	Present
21	20IAMOS080	Prakash B	Present
22	20IAMOS081	Priyanshi	Present
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24	20IAMOS083	Rabina Sait	Present
25	20IAMOS084	Sindhu R	Present
26	20IAMOS086	T Mercy Scorlet	Present
27	20IAMOS087	T Mouli	Present

INDIAN ACADEMY

Degree College - Autonomous

Department of Genetics

Report on Seminar titled "Cancer Genes: Biology of Therapy".

Speaker:

Dr. Prathibha Ranganathan
Research Scientist
Center for Human Genetics
Bengaluru.

Date: 28.05.2022

Time: 11.15 AM

Faculty in-charge: Dr. Shubha Bhadran

Objectives:

- To enable the students to understand the biological nature of P53, BRCA1/BRCA2 Genes.
- To acquire in-depth understanding of carcinogenic agents.
- To instill the knowledge about contemporary biological therapy to treat manage various types of cancer.

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a seminar on "Cancer Genes: Biology of Therapy" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 11.15 AM with the introduction of the speaker. Dr. Prathibha Ranganathan commenced the session with introduction to Cancer genes. She defined Cancer as a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. Genes control how your cells work by making proteins. The proteins have specific functions and act as messengers for the cell. Each gene must have the correct instructions for making its protein. This allows the protein to perform the correct function for the cell. All cancers begin when one or more genes in a cell mutate.

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A mutation is a change. It creates an abnormal protein. Or it may prevent a protein's formation. An abnormal protein provides different information than a normal protein. This can cause cells to multiply uncontrollably and become cancerous. mutations happen often. A mutation may be beneficial, harmful, or neutral. This depends where in the gene the change occurs. Typically, the body corrects most mutations. A single mutation will likely not cause cancer. Usually, cancer occurs from multiple mutations over a lifetime. That is why cancer occurs more often in older people. They have had more opportunities for mutations to build up.

Dr. Prathibha described about types of genetic mutations, Acquired mutations and Germline mutations. These are the most common cause of cancer. Acquired mutations occur from damage to genes in a particular cell during a person's life. For example, this could be a breast cell or a colon cell, which then goes on to divide many times and form a tumor. A tumor is an abnormal mass. Cancer that occurs because of acquired mutations is called sporadic cancer. Acquired mutations are not found in every cell in the body and they are not passed from parent to child. Factors that cause these mutations include: Tobacco, Ultraviolet (UV) radiation, Viruses, Age.

A germline mutation occurs in a sperm cell or egg cell. It passes directly from a parent to a child at the time of conception. As the embryo grows into a baby, the mutation from the initial sperm or egg cell is copied into every cell within the body. Because the mutation affects reproductive cells, it can pass from generation to generation. Cancer caused by germline mutations is called inherited cancer. It accounts for about 5% to 20% of all cancers.

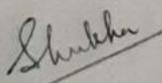
The speaker explained types of genes linked to cancer and many of the genes that contribute to cancer development fall into broad categories such as tumor suppressor genes. These are protective genes. Normally, they limit cell growth by monitoring how quickly cells divide into new cells, repairing mismatched DNA or controlling when a cell dies. When a tumor suppressor gene mutates, cells grow uncontrollably. And they may eventually form a tumor. Examples of tumor suppressor genes include BRCA1, BRCA2, and p53 or TP53. The most commonly mutated gene in people with cancer is p53 or TP53. More than 50% of cancers involve a missing or damaged p53 gene. Most p53 gene mutations are acquired. Germline p53 mutations are rare, but patients who carry them are at a higher risk of developing many different types of cancer.

She explained about DNA repair genes. That DNA repair genes fix the mistakes made when DNA is copied. Many of them function as tumor suppressor genes. BRCA1, BRCA2, and p53 are all DNA repair genes. If a person has an error in a DNA repair gene, mistakes remain uncorrected. Then, the mistakes become mutations. These mutations may eventually lead to cancer, particularly mutations in tumor suppressor genes or oncogenes. Mutations in DNA repair genes may be inherited or acquired. Lynch syndrome is an example of the inherited kind.

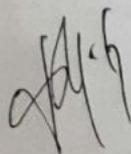
By end of the session students were familiarised with the various type of gene therapy. Somatic cell gene therapy (SCGT), the therapeutic genes are transferred into any cell other than a gamete, germ cell, gametocyte, or undifferentiated stem cell. Any such modifications affect the individual patient only, and are not inherited by offspring. Somatic gene therapy represents mainstream basic and clinical research, in which therapeutic DNA is used to treat disease. Germline gene therapy (GGT), germ cells (sperm or egg cells) are modified by the introduction of functional genes into their genomes. Modifying a germ cell causes all the organism's cells to contain the modified gene. The change is therefore heritable and passed on to later generations. The session concluded at 12:30 PM and the students' feedback was collected.

Learning Outcomes:

- Students understand the biological characteristics of p53, BRCA1/BRCA2 genes rigorously.
- Students Acquired extensive knowledge about the nature of carcinogens and ability to damage Human genome.
- Enable understanding of biology to cancer in the form of immune system to attack cancer cells and to prevent the spread of cancer with few side effects.

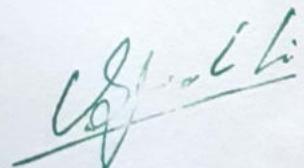


Faculty in-charge



HOD

Department of Genetics
Indian Academy Degree College



Principal

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INDIAN ACADEMY

Degree College - Autonomous

Department of Genetics

Report on Seminar titled "GENETICS AS A WALK OF LIFE".

Speaker:

Mr. Sayan Paul

Senior Project associate

Institute for Stem Cell Science and Regeneration

(DBT-inStem), Bengaluru.

Date: 9.07.2021

Time: 9:30 AM

Faculty in-charge: Dr. Shubha Bhadran

Objectives:

- To instill interest in students minds to pursue a career in Genetics.
- To give students an insight into the possible vocational opportunities available in their fields.
- To acquire knowledge, conceptual understanding and skills to solve problems and make informed decisions.

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a seminar on "GENETICS AS A WALK OF LIFE" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 9:30 AM with the introduction of the speaker. Mr. Sayan Paul gave emphasis on career is an individuals journey through learning, work and other aspects of life. He started explaining the importance of studying genetics. Genetics is a field of science that includes the study of inheritance and genetic variations by investigating the DNA, genes, genome, chromosome and other components of it. The phenomenon of inheritance was first explained by Gregor Johann Mendel during the late 18's.

He explained some applications of genetic studies such as Characterization and diagnosis of genetic disease, Identification of pathogenic mutations, Preserving biodiversity, Identification

PRINCIPAL

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and characterization of microbes, Studying inheritance pattern, Creating advanced plant species, Creating genetically modified organisms and DNA fingerprinting etc.,

Mr. Sayan explained Career is a very important thing in one's life. Whatever career path students choose to follow, it will impact their life greatly. You must consider a number of factors before deciding on your career. Each factor plays a significant role in your choice. Firstly, always assess yourself thoroughly. You must understand your area of interest to choose a career. For instance, someone who dances well can surely become a doctor, but his interest will always be in dance. Thus, ensure that you have the caliber to perform well in the field you choose. This will come from your area of interest itself. After that, you look for the opportunities available as per your area of interest.

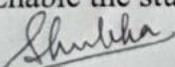
Speaker went on explain that Genetics occupies a central position in modern biology, so its understanding is essential for all scholars of the life sciences. The causes of important human diseases are being discovered, and therapies developed, based on fundamental genetic investigations. Increasingly, the management of human health also depends on genetic and genomic information. These impacts are certain to grow over the coming decades, so genetics is a growth field.

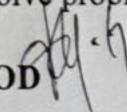
He unfolded the opportunities in the field of Genetics which provides the opportunities to investigate and understand Patterns of inheritance, Generate phylogenetic trees, Population Genetics, Genetically transmitted diseases, Evolutionary History.

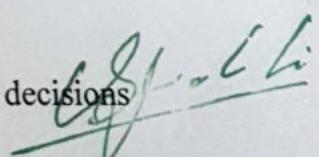
Students were familiarised with the top career options after a degree in Genetics are Genetic Counsellor, Graduate Research Assistant, Postdoctoral Researcher, Forensic Science Research Associate, Scientific Writer, Medical Geneticist, Agricultural Geneticist, Forensic Scientist. A good geneticists should have a passion and curiosity related to the genetic basis of health and disease. The session concluded at 10:30 AM and the students' feedback was collected.

Learning Outcomes:

- To develop interest in the field of genetics
- Enable the students to develop skills to solve problems and take their decisions


Faculty in-charge


HOD


Principal

HEAD
Department of Genetics

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MUMBAI



INDIAN ACADEMY

Degree College - Autonomous

Department of Genetics

Report on Seminar titled "Genome Editing and its applications"

Speaker:

Dr. Mathivanan Jyothi

Associate Professor

Department of Human Genetics

**National Institute of Mental Health and Neurosciences
Bengaluru.**

Date: 03.11.2021

Time: 10:45 AM

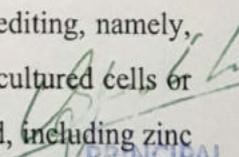
Faculty in-charge: Dr. Shubha Bhadran

Objectives:

- To enable the students to understand the structure and function of genetic/epigenetic sequences.
- To acquire in-depth understanding of stopping inherited diseases in its tracks.
- To acquire knowledge and prevention of genetic disorders.

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a seminar on "Genome Editing and its Applications" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 10:45 AM with the introduction of the speaker. Dr. Mathivanan Jyothi commenced the session with introduction to genome editing and its tools. He defined genome editing as a type of genetic engineering in which DNA is inserted, deleted, modified or replaced in the genome of a living organism. Genome editing, namely, refers to editing the nucleotides of the genome with engineered nucleases in cultured cells or living organisms. Several types of engineered nucleases have been developed, including zinc


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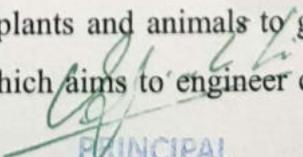


finger nucleases (ZFNs), transcription activator-like effector nucleases (TALENs), and the recent clustered regularly-interspaced short palindromic repeat (CRISPR) systems. These nucleases, in particular CRISPR systems, immensely facilitate the wide application of genome editing in various biological research fields.

The speaker explained the basic mechanism involved in genetic manipulations through programmable nucleases in the recognition of target genomic loci and binding of effector DNA-binding domain, double-strand breaks in target DNA by the restriction endonucleases, and the repair of DSBs through homology-directed recombination or non-homologous end joining. Moreover, the expression level of a target gene can be artificially regulated by a combination of genome editing tools such as catalytically inactivated Cas protein with transcription activator or repressor. This approach could be useful for metabolic engineering, although expression cassettes for inactivated Cas fused to a transcriptional activator or repressor should be stably transformed into the genome. Thus, the rapid development of genome editing technology has been expanding the scope of molecular breeding including metabolic engineering.

Dr. Mathivanan explained how the target metabolite can be fortified by the knockout and modification of target genes encoding enzymes involved in catabolic and biosynthesis pathways, respectively, via genome editing technology. Genome editing is also applied to genes encoding proteins other than enzymes, such as chaperones and transporters. Genome editing is used not only for site-directed mutagenesis such as the substitution of a single base in a target gene but also for random mutagenesis at a targeted region. The latter enables the creation of novel genetic alleles in a target gene.

Students were familiarised with the various applications of Genome editing which holds great promise in potential clinical applications such as gene therapy. Genome editing had been developed for a wide range of experimental systems ranging from plants to animals, often beyond clinical interest, and was becoming a standard experimental strategy in research labs. The recent generation of rat, zebrafish, maize and tobacco ZFN-mediated mutants and the improvements in TALEN-based approaches testify to the significance of the methods, and the list is expanding rapidly. Genome editing with engineered nucleases will likely contribute to many fields of life sciences from studying gene functions in plants and animals to gene therapy in humans. For instance, the field of synthetic biology which aims to engineer cells

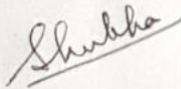

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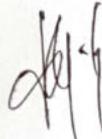
and organisms to perform novel functions. The session concluded at 12:00 PM and the students' feedback was collected.

Learning Outcomes:

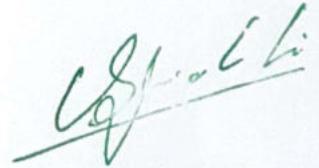
- Students were able to understand principles and mechanisms of RNAi and CRISPR Cas9 technologies and their potential applications in biomedical research, agriculture and healthcare industries.
- Enabled understanding of tools to design RNAi (siRNAs) and CRISPR (sgRNA) constructs to knockdown and edit genes of interests.
- Students will be able to design experiments to silence gene expression in various organisms and learn the ethical implications of genetic manipulation.



Faculty in-charge



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Degree College - Autonomous

Department of Genetics

Report: Workshop on "Karyotyping and its clinical applications-Stroma Technologies".

Resource Persons:

Dr. Veeresh

Stroma biotechnologies pvt ltd

Date: 14.05.2022

Time: 9:30 am to 5:00pm

Venue: Genetics Laboratory, Indian academy degree college autonomous.

Faculty in-charge: Ms. Cynthia, Irene Kasi,

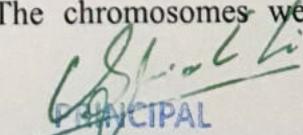
Objectives:

1. To test and examine chromosomes in a sample of cells.
2. To take a close look at the chromosome inside your cells to see if anything about them is unusual
3. To screen for and confirm chromosomal abnormalities

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a Workshop on "Karyotyping and its clinical applications-Stroma Technologies" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 9:30 AM with the introduction of the speaker Students received a brief lecture on karyotyping and its clinical applications.

The workshop included the culturing the cells and harvesting of cells. Slide preparation and staining were done and were later observed by microscopy. The chromosomes were identified and preparation of karyotyping was done.


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At the end Students were briefed on applications of karyotyping techniques:

- Hematological malignancies,
- Fanconi Anemia,
- Couple karyotyping
- Prenatal and postnatal karyotyping

The techniques were demonstrated by expert and hands on practical were done by students.

Learning Outcomes:

1. Able to analysis and visualization of an individuals chromosomes for the purpose of determining chromosome size and number.
2. Understood how to diagnose chromosomal disorders.
3. Acquired knowledge about karyotype and their interpretation for clinical applications.

Cynthia
Faculty in-charge

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Department of Genetics

Report on Seminar titled "Know your Psychometric".

Speaker:

Prof. Umashankari

Assistant professor

Department of Psychology

Indian academy degree college-Autonomous,

Bengaluru.

Date: 28.09.2021

Time: 2:00 PM

Faculty in-charge: Dr. Vanitha G

Objectives:

- To instill interest in students minds about Psychometric test.
- To acquire knowledge, conceptual understanding and skills to perform Psychometric test during interviews.

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a seminar on "Know your Psychometric" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 2:00 PM with the introduction of the speaker. Prof. Umashankari started the session with introduction to a psychometric test is an assessment designed to measure cognitive ability, personality or work behaviour, to indicate the potential of a job candidate to excel in a specific position or career. Psychometric testing takes various forms (eg numerical, mechanical, logical or verbal reasoning).

Psychometric tests may also be administered in person at an assessment centre. The tests are intended to streamline the recruitment process and reveal top applicants efficiently. They are now a common hurdle, particularly in graduate scheme applications. The tests are often used in tandem with each other, the chosen test selection dictated by the career sector to which the applicant is applying.

The speaker went on explaining about Psychometric test scores do not stand alone but are often considered in combination with candidate CVs, cover letters and other assessment rounds such as more tailored, sector-specific tasks, role play scenarios and group interviews. The value of performing well in psychometric testing should not, however, be overlooked. To successfully progress to the next stage of the recruitment process, a high psychometric test score is often needed. While psychometric tests can seem initially daunting, preparing well will ensure you are confident. A high psychometric test score will dramatically increase your chances of securing a final stage interview.

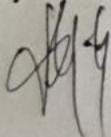
Prof. Umashankari stated Psychometric tests come in a variety of forms but the basic preparation steps are the same. There are a number of commonly used psychometric reasoning tests, including numerical, verbal, diagrammatic, logical, mechanical, abstract, spatial and situational assessments.

At the end of the session students were familiarised with the main purpose of Psychometric tests. The most comprehensive way to prepare for a psychometric test is to take multiple tests to become accustomed to the process, timing and questions. Although taking timed practise tests may not be the most appealing form of preparation, sitting full tests is much better training than simply reading. To increase chances of a top score in the real test, one should seek to be achieving a score in the top range repeatedly. The session concluded at 4:00 PM and the students' feedback was collected.

Learning Outcomes:

- Students were able to understand basis of Psychometric test.
- Students Acquired extensive knowledge about the commonly used psychometric reasoning tests.
- Enable the students to develop skills to clear Psychometric test.

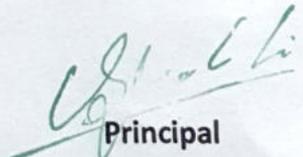
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Department of Genetics

Report on Webinar titled "Research, IP & Innovation".

Speaker:

Dr. Lipika Sahoo

Founder and CEO

Life intellect Consultancy

Pvt.Ltd, Bengaluru.

Date: 29.12.2021

Time: 3:00 PM

Medium: Zoom

Faculty in-charge: Dr. Shubha Bhadran

Objectives:

- To familiarize the students with basic of Research, IP & Innovation
- To instill the knowledge about Intellectual property and Innovation
- To acquire in-depth understanding of rights of Intellectual property.

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a Webinar on "Research, IP & Innovation" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 3:00 PM with the introduction of the speaker. Dr. Lipika Sahoo started the session with introduction to basic research, also called pure research or fundamental research, is a type of scientific research with the aim of improving scientific theories for better understanding and prediction of natural or other phenomena. In contrast, applied research uses scientific theories to develop technology or techniques which can be used to intervene and alter natural or other phenomena.

Research is the careful consideration of study regarding a particular concern or problem using scientific methods. According to the American sociologist Earl Robert Babbie, "research is a systematic inquiry to describe, explain, predict, and control the observed phenomenon. It

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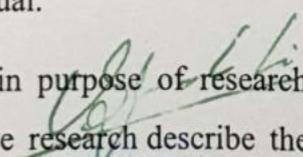
involves inductive and deductive methods.” Inductive methods analyze an observed event, while deductive methods verify the observed event. Inductive approaches are associated with qualitative research, and deductive methods are more commonly associated with quantitative analysis. Research is conducted with a purpose to Identify potential and new customers, understand existing customers, set pragmatic goals, develop productive market strategies, address business challenges, put together a business expansion plan, Identify new business opportunities thus good research follows a systematic approach to capture accurate data. Researchers need to practice ethics and a code of conduct while making observations or drawing conclusions. The analysis is based on logical reasoning and involves both inductive and deductive methods. It creates a path for generating new questions. Existing data helps create more research opportunities.

The speaker went on explaining about Intellectual property and its rights. Intellectual Property rights mean providing property rights through patents, copyrights and trademarks. Holders of intellectual property rights have a monopoly on the usage of property or items for a specified time period.

Speaker listed 4 main types of intellectual property, such as Patents, Copyrights, Trademarks, and Trade Secrets. Patent is used for protecting new inventions, ideas, or processes. Patent holders need to pay periodic government renewal fees. An approved patent is for a limited time period. Know more about Patents Act in India. Copyrights protects the ideas, examples would be written works, music, art, etc. Trademarks is something that protects the symbols, colors, phrases, sounds, design etc. Trade Secrets may be strategies, systems, formulas, or other confidential information of an organization that provides them a competitive advantage in the market.

Dr. Lipika defined innovation can be defined as a process that involves multiple activities to uncover new ways to do things. This definition of innovation puts the emphasis on new ways to get the same or better results. Usually, this is taken as innovation meaning improvement. The innovative ways in which the same result can be produced, are most often faster or cheaper than the old process. In order to realize innovation, leaders should be open-minded and collaborative. Innovative leaders are curious and optimistic since they dare to take risks. No one knows where innovation will bring the organization or individual.

At the end of the session students were familiarised with the main purpose of research accuracy is one of the most critical aspects of research. Descriptive research describe the


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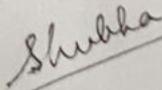
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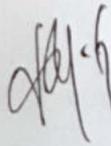
behavior of a sample population. Only one variable is required to conduct the study. Thus researchers conduct exploratory studies to explore a group of questions. The answers and analytics may not offer a conclusion to the perceived problem. Students were able to understand an Intellectual Property Licensing Agreement is a legal document under which the intellectual property ("IP") rights owner, known as "Licensor" authorizes another person or entity to use such rights, known as "Licensee", in exchange for an agreed payment, known as a "Royalty". The session concluded at 4:00 PM and the students' feedback was collected.

Learning Outcomes:

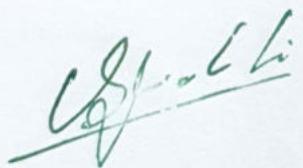
- Students were able to understand basis of research, IP and innovation.
- Students Acquired extensive knowledge about the Innovation and Intellectual property.
- Students will be able to explain about the Licensing Agreement of intellectual property and its right.



Faculty in-charge



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ONE DAY WORKSHOP ON EMBEDDED SYSTEM

Date: 17/06/2022

Time: 9:15 AM-4:00 PM

Event: One day workshop on Embedded system.

Venue: Seminar Hall II, IADCA, Bengaluru

Name of the Resource person: Mr. Prateek K P, B.E.,
Senior Embedded Engineer
CADD center - Livewire
Kalyan Nagar
Bangalore – 560 043

The workshop was organized for BSc Electronics students on 17/06/2022.

Broad Aim: To make students skillful and efficient for all the hardware and software related concepts for 8051 microcontrollers.

OBJECTIVES

- To know the career opportunities in the field of Embedded systems.
- To understand the market of the Embedded systems.

OUTCOMES

- Able to identify the Scope of Embedded systems.
- Gain knowledge on programming.
- Able to understand the coding in the commercial equipment.

One Day Workshop on Embedded System

FRIDAY, 17TH JUNE 2022

09:15AM - 04:00PM



ELECTRONICS LAB

OVERVIEW OF WORKSHOP

Embedded systems are the core of every intelligent device. Everything around you from a simple watch to the space ship is using embedded systems. Your mobile phones, PDAs, Washing Machines, Microwaves Ovens, Automobiles & all the automated electronics gadgets are having one or another form of embedded systems responsible for their intelligent functioning. Electronic devices are rapidly finding applications in many of the areas, from simple coffee vending machines to space science to environmentally friendly products such as big belly etc. Indian embedded market worth \$5.9 billion dollars, & expects 30% growth by 2015. This will certainly increase the demand of professionals in the field of embedded systems. Main aim of this training module is to make the students skill full & efficient for all the hardware & software related concepts for 8051 Microcontrollers.

TOPICS TO BE COVERED IN WORKSHOP

1. Introduction to Embedded C
2. Difference between C & Embedded C
3. Embedded C Constructs & Data Formats
4. Mapping 8051 Architecture to Embedded C
5. Introduction to KEIL Cross-Compiler & its features
6. General Discussion & Overview of Embedded Systems



SPEAKER

Mr. Prateek K P, B.E.,Senior Embedded Engineer, Cadd Center-Livewire,
Kalyan Nagar, Bengaluru - 560 043

PROGRAM - I

Inauguration

Time: 9:15AM - 9:45AM

PROGRAM - II

Session-I: Introduction to Embedded Design program

Time: 10:00AM - 11:00AM

Tea Break: 11:00AM - 11:30AM

PROGRAM - III

Validator

Session-II: Hands on experience on Embedded System

Time: 11:30AM - 01:00PM

Lunch Break: 1:00PM - 2:00PM

Session-III: Embedded hardware program

Time: 2:00PM - 3:30PM

ORGANIZING MEMBERS

Dr. Srinidhi K Parthasarathi

Principal, IADC - A

Dr. E Parasuraman

HOD - Electronics, IADC - A

Mrs. Sherin Nitisha

Faculty - Electronics, IADC - A

Brief details about the event:

The Electronics department has arranged the special talk on “**One day workshop on Embedded system**” for Indian Academy Degree College- Autonomous (IADC-A) BSc Electronics students. The resource person **Mr. Prateek K P, B.E., from CADD center - Livewire** has taken responsibility for giving a talk on Scope of Embedded systems. The program was organized in three sessions.

Session - I

Introduction to Embedded design program

He gave an introduction to Embedded design programming . He has explained the programming concept of C & Embedded language. The Programming was done by the students. Students' response was very good with the resource person as it was based on real time experiences.

Session - II

Hands on experience on Embedded System

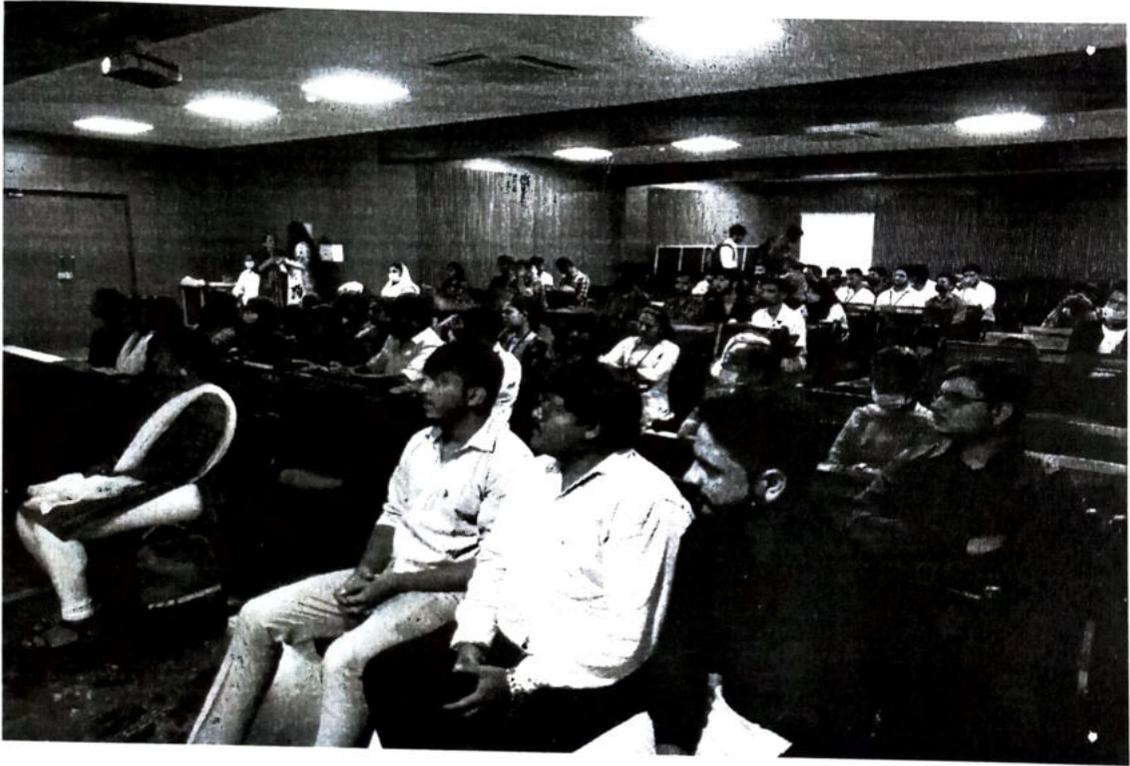
Embedded systems are the core of every intelligent device. Everything around you from a simple watch to the spaceship is using Embedded systems. Mobile phones, washing machines, microwave ovens , etc., are having one or the another form of Embedded systems responsible for their intelligent functioning.

Session - III

Embedded hardware program

Embedded programming is not only with the programming C, also with the hardware. The mapping of 8051 architecture to embedded C is in very much boon. The opportunities toward this are increasing day to day as our world is becoming more technology oriented. Now everything in fingertips as an Embedded system is dashing to the sky.





Faculty Incharge: Sherlin Nitasha

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Degree College - Autonomous

Department of Genetics

Report on Seminar titled "Targeting tissue specific transcription factors -a promising cancer treatment"

Speaker:

Dr. Mathivanan Jyothi

Associate Professor

Department of Human Genetics

National Institute of Mental Health and Neurosciences
Bengaluru.

Faculty in-charge: Dr. Vanitha G

Date: 25.02.2022

Time: 11:15 AM

Objectives:

- To familiarize the students with basic of transcription factors
- To acquire in-depth understanding of tissue specific transcription factors and its role in cancer treatment.
- To acquire knowledge and prevention of cancers.

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a seminar on "Targeting tissue specific transcription factors -a promising cancer treatment" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 11:15 AM with the introduction of the speaker. Dr. Mathivanan Jyothi commenced the session with introduction to tissue specific transcription factors. He defined Transcription factors are involved in a large number of human diseases such as cancers for which account for about 20% of all



oncogenes identified so far. For long time, with the exception of ligand-inducible nuclear receptors, transcription factors were considered as “undruggable” targets.

The speaker explained the basics in terms of structure, function and the dynamics of their mode of binding to DNA has changed this postulate and paved the way for new therapies targeted against transcription factors. Here, we discuss various ways to target transcription factors in cancer models: by modulating their expression or degradation, by blocking protein/protein interactions, by targeting the transcription factor itself to prevent its DNA binding either through a binding pocket or at the DNA-interacting site, some of these inhibitors being currently used or evaluated for cancer treatment.

Such different targeting of transcription factors by small molecules is facilitated by modern chemistry developing a wide variety of original molecules designed to specifically abort transcription factor and by an increased knowledge of their pathological implication through the use of new technologies in order to make it possible to improve therapeutic control of transcription factor oncogenic functions.

Dr. Mathivanan explained how the target metabolite can be fortified by DNA-binding TFs regulate gene expression by influencing RNA polymerase activity in a gene-specific manner. To carry out this function, TFs minimally employ two distinct interaction surfaces: a sequence-specific DNA-binding domain (e.g., zinc finger, homeodomain, basic helix-loop-helix) and an activation/repression domain that interacts with various cofactors. In eukaryotes, TF cofactors include large, multisubunit protein complexes that either directly activate RNA polymerase II or modify local chromatin structure to allow an increased rate of transcription the knockout and modification of target genes encoding enzymes involved in catabolic and biosynthesis pathways, respectively, via genome editing technology.

At the end of the session students had understanding of the clinical efficacy and current limitations of NHR modulation in cancer can greatly aid our assessment of other TF classes as candidates for drug development. One important lesson learned from the agents that target AR and ER is that a therapeutic window need not rely on the targeting of a genetically altered TF functionality. The session concluded at 12:00 PM and the students' feedback was collected.

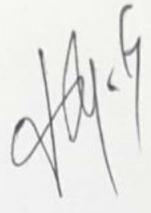
Learning Outcomes:

- Students were able to understand transcription factors and its role.
- Enabled understanding of clinical efficacy of TFs.

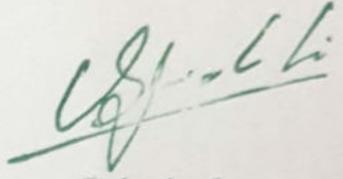
- Students Acquired extensive knowledge about the tissue specific transcription factors and its role in cancer treatment.



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Date: 30.12.2021

CIRCULAR

Department of Psychology is organizing a workshop for all the B.A Psychology students on **05th January, 2022** from **11:30** am in **B Block S8**. All the students and faculty are invited for the workshop. Attendance is Mandatory.

Resource person	Title
Mr Shivananda Nayak Chief Mentor Handwriting House Bangalore	Hand writing Analysis


HEAD OF THE DEPARTMENT
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Department of Humanities
INDIAN ACADEMY DEGREE COLLEGE
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Hebbur Main Road, Bangalore - 560077

Department of Psychology

Workshop

Title of the Event: Hand writing Analysis

Place: Room No : S8

Date: 05/16/2021

Time: 11:30 AM

Name of the Resource Person: **Mr Shivananda Nayak**
Chief Mentor Handwriting House
Bangalore

Broad Aim of the Event: Orientation on the implementation of NEP2020 and the need for services of trained and skilled Psychologists who can take full advantage to be employable or establish themselves as Professionals, in this area of specialization.

Objectives:

- To understand the basic knowledge of Graphology.
- To gain knowledge on the approaches and identify children with various issues like SLD, ADHD and Autism.
- To spread awareness about the challenges and other issues which impact the academic performance.

Outcomes:

- Students will be able to interact with schools, students and parents.
- Students will be able to practice their communication and counselling skills.
- Students will be able to provide support to the child and parents, educate parents on the measures to be taken for such children.

Brief details about the event:

National Handwriting Day: A Special Project by Students of Psychology was conducted by Department of Psychology in association with Handwriting House with who are very keen on working with Academic Issues in Children for about a decade now. A team of Psychologists, who are also trained in Graphology, lead ably by the Chief Mentor, Mr. Shivananda Nayak, have successfully used Handwriting as a tool to reach out to the needy students and parents, without the stigma. Through this approach they have identified children with various issues like SLD, ADHD, Autism etc., counselled children as well as parents, recommended got assessments done.

The new implementation of NEP2020 increased the need for services of trained and skilled psychologists. Psychologists, with the right skill sets. The non-invasive approach has helped to reach out large in number and this special project as a part of National Handwriting Day, which is observed on 23rd of January every year. With the reopening of schools there have been a plethora of complaints with regards to the handwriting of school children.

This project envisages looking into this, as well as few other aspects revealed by Handwriting which involve 8 to 10 colleges from across the city of Bangalore and reach out to about 4 to 5 thousand students. The Project-work of the students was considered as a part of the academic activity. Students were able to interact with schools, students and parents which give them an opportunity to practice their communication & counselling skills. The support provided by handwriting house was helpful for our students like training, verification of data etc. The students participated in the projects were given the Certificate by Handwriting House. The proposed assignment for Graduate students:

“Emotional Disturbances & it’s indicators as Irregularities in Handwriting”

Program Schedule:

Training 3-4 hours, to be completed by 10th December, 2021

Sample Collection 1 – 2 hours, in the school, by 20th Dec.2021

Analysis of writing and Tabulation of the same was done outside college hours, the duration required was based on number of samples) and the task was asked to complete by 10th Jan.2022. The greater purpose of these activities is spreading awareness about the challenges like SLD and other issues which impact the academic performance, provide support to the child and parents, educate parents on the measures to be taken for such children.

The Graphology analysis helped our students to study the personality traits of a person by using their handwriting. Students understood that everybody embraces unique handwriting. And it comprises numerous distinctive information about them. For instance, anger, sadness, dominance, and life incident causing behavioural traits, etc. With the help of personality evaluation through Graphology, they discovered numerous factors accountable for their habits and personality.

This helped students to learn the writer’s psychological condition and characteristics. After all, a person’s handwriting contains major secrets. For example, their success and representation in the public sector, thoughts, and way of speaking. We analysed the behaviour of a children and discover their hidden problems that they still don’t know about. This could also reveal the enigmatic facts of their lives.

It is often missed that the fact that everything we do is a sheer depiction of what we are. It’s really shocking to know that the handwriting of a person depicts their inner self. It represents who they are on their core. It is an aggregation of all their qualities and flaws. The way they form letters and space between them reveal substantive information about them. The knowledge on how handwriting keeps changing slightly with time as things, incidents happen, and memories build our behaviour and draws changes in our handwriting too. These changes are not very noticeable. Therefore, people commonly fail to see the alterations. Owing to these Events, thinking patterns change and handwriting transforms.

Furthermore, handwriting analysis allowed to look deep under the generation of behavioural traits. It disclosed the significant details about children. The group was divided into 4 to 5 members in each team. Each team visited different schools and collected handwriting samples. Some of the schools that were visited by the groups are:

1. Lakshmi memorial High school
2. Jyothi school
3. Jaigopal Garodia Rashotrotthana Vidya Kendra
4. Banyan school
5. Maruthi Vidyalays
6. Narayana vidya kendra etc

Each team collected around of 350 to 400 samples.

Some of the experiences shared by students are as follows:

It was new and exciting experience to all of us because we have never gone to different places to work on our projects and was interested to explore new things and moreover analysing a person through their handwriting was something new to all of us.

Visiting schools that we had no idea about who the principal was, what would be their approach was something unique to experience, we did get rejected by some school due to exams or covid norms but still, getting to know this generation kids ,where each and everyone has their own way of lifestyle and has grown up in a different environment, we understood a lot about the child as they had conversation with us, giving complements, building rapport etc. moreover all where excited seeing new people in their classes, also felt that this generation kids are unique, especially after the covid break, we realized that students had forgotten how to spell the basic words and few students had no idea that their parents had names beyond “mom and dad”.

When it comes to analysing the data .it was different and difficult to understand the handwriting an analysis what is the child’s handwriting indicates, but with the right guidance and support from the mentors we were able to analyse the handwritings effectively. Overall, it was a wonderful exposure and the gratitude for the Handwriting House and the Department of Humanities for this experiential learning in our academics.

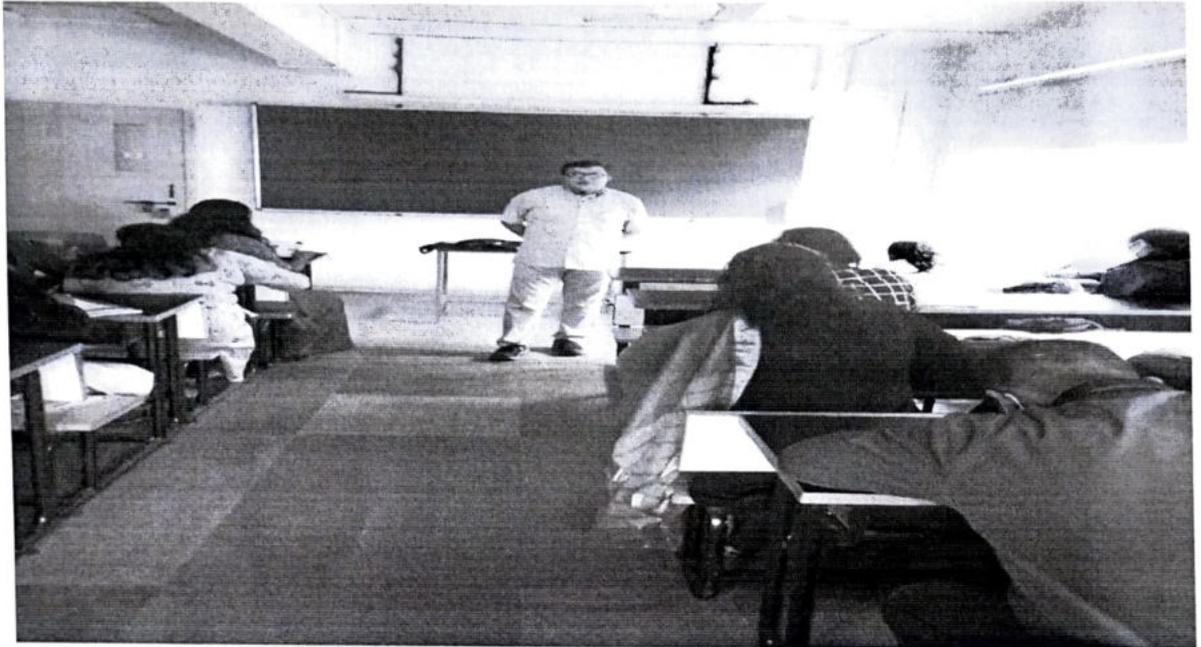
Feedback details:

1. It was really a new exposure after covid 19 pandemic.
2. Hand writing house mentors were really helpful and supportive whenever we approached
3. Interacting with school kids and the authorities was very exciting
4. It was an experiential learning.
5. It was great and felt happy spending time with children was really nice feel
6. Good feel to be a part of handwriting house and the project for world handwriting day

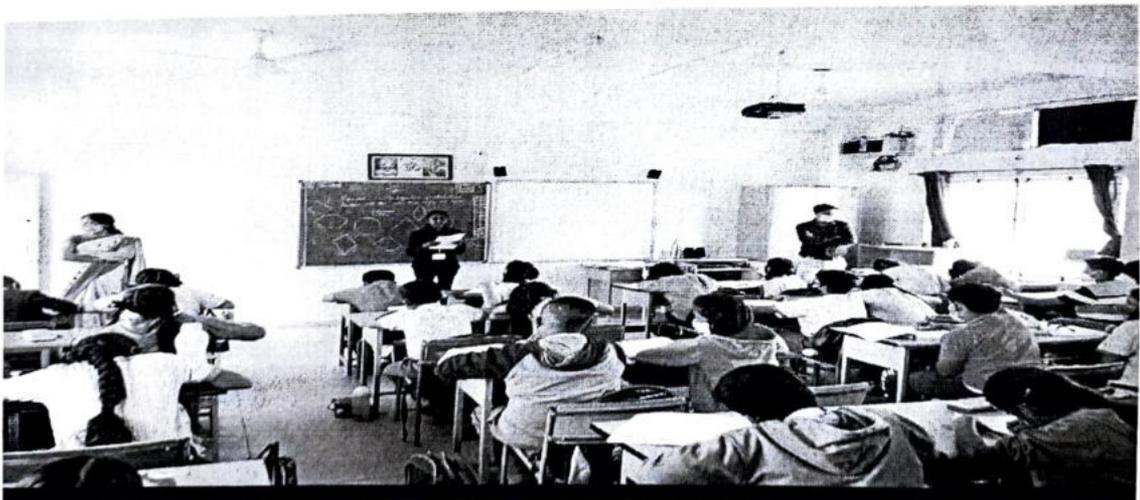
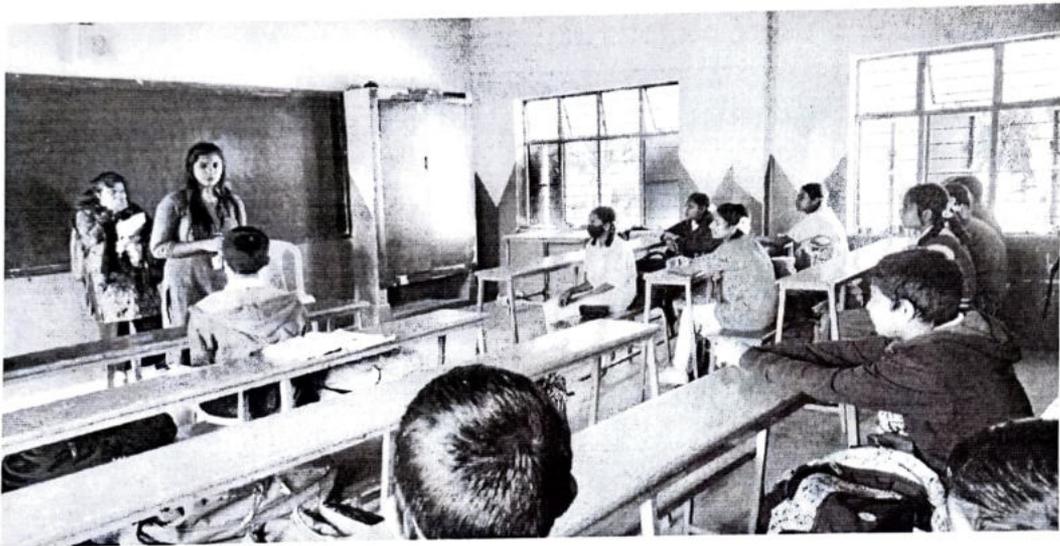
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Degree College - Autonomous

Department of Psychology
Workshop
Hand writing Analysis 5-1-22



Online meeting & field visit by students



PROFILE

Shivananda Nayak MS(C&P), Founder and Managing Trustee of AWAKE Foundation and Chief Mentor of Handwriting House, is a Post Graduate in Psychology and expert Graphologist. He spent initial two decades of his career incorporate health care Industry, working with a multinational company. But his calling to the field of psychology made him to resign his job and to pursue his passion. He began as a corporate trainer for soft skills, simultaneously working on his counselling and Graphology skills. He one of the very few experts in Handwriting, through which, he provides Counselling and Guidance to his clients. Some major areas of his work are personal issues, couple compatibility, career guidance, aptitude assessment, to name a few. He provides solutions through handwriting to some of the issues. He puts his rich experience in the corporate world as a Trainer. He has trained a wide range of employees and across several industries. One of his unique features of training is, using Graphology to give insight to his trainees about themselves. Several of his participants have taken advantage of his expertise to solve some of their personal as well as professional issues. His area of passion is working with Children. Children's handwriting can reveal a range of information about the child. Beginning with improvement of handwriting of children, he identifies presence academic, emotional and physical problems. Not only he deals with the students, his team assists parents in effectively provide solutions to the problems of the child either working through them or around them. His programs for teachers on the above-mentioned topics has helped several schools in identifying such children at an early stage and take appropriate measures to help the child. His has been well recognized and covered by Media like the news papers (all major Kannada and English), radio and TV. One can see him and hear him regularly in the news papers and radio programs. His program "Baduku Badalisuva Kaibaraha" was broadcast on AIR (from Nov.2104 to March, 2015).

principal_jed@indianacademy.edu.in project

TRAINING FOR PROJECT SAMPLES

Ms. Deepa Humanities - (ADCA) - indianacademy.edu.in
To: principal_jed

Dear Sir,

The Department of Pre-legal is intending to collaborate with Handwriting Works, who has agreed to offer (2000) work for our Pre-legal Students (7 Sem & 8th students from 2019) in view of the impending closure of schools for training should be conducted in the school as handwriting samples are required to be submitted from schools.

Therefore we request you to grant permission to conduct the training for 3 hours during the pre-legal hours on Tuesday 1 job. One entry at a cost of 2000 job.

NOTE: After the meeting the Details of Collaboration will be shared to the principal school as well as job website membership.

Regards

Ms. Deepa E
Head, Dept. of Pre-legal
98765 43210
Degree College - Autonomous
Newer Area, Bangalore - 560002
Phone: +91 98765 43210
Mobile: +91 98765 43210
WhatsApp Mobile: +91 9876543210

Dr. Srinidhi K Parthasarathi - principal_jed@indianacademy.edu.in
To: Ms. Deepa, 1 job

10/14/2025 10:29 AM

principal_jed@indianacademy.edu.in project

Ms. Deepa E
Head, Dept. of Pre-legal
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Phone: +91 98765 43210
Mobile: +91 98765 43210
WhatsApp Mobile: +91 9876543210

Dr. Srinidhi K Parthasarathi - principal_jed@indianacademy.edu.in
To: Ms. Deepa, 1 job

Dear Deepa

Greetings to you

OK, kindly go ahead

Is there any financial commitment to us?

Warm Regards,
Dr. Srinidhi K Parthasarathi DE, F108, H.O. 202
Principal
98765 43210
Degree College - Autonomous
Newer Area Road, Bangalore - 560002
Phone: +91 98765 43210
Mobile: +91 9876543210

10/14/2025 10:39 AM

INDIAN ACADEMY

Degree College - Autonomous

Department of Psychology Workshop Hand writing Analysis

Date : 5th Jan 2022

Class: II & III years B.A Psychology

SL.NO	NAME OF THE STUDENTS	REGISTER NUMBERS	REMARKS
1.	DEV DIP KUMAR BOSE	19IABOA018	Present
2.	DORA GRACE SAM	19IABOA019	Present
3.	FRANCIS ZORAMMUANA	19IABOA020	Present
4.	GARRYBAYEVA LEYLA	19IABOA021	Present
5.	IMKONGAKUM JAMIR	19IABOA023	Present
6.	KOSHELNGAMJANGVEI LAMKANG	19IABOA024	Present
7.	MAMATHA R.	19IABOA025	Present
8.	MARFUHA TABASSUM	19IABOA026	Present
9.	NGACHANSO R. W.	19IABOA027	Present
10.	REENA RAJ	19IABOA028	Present
11.	ROHITH	19IABOA029	Present
12.	SANJAY SANTHOSH	19IABOA031	Present
13.	SORAM SONY	19IABOA032	Present
14.	SWATHI	19IABOA033	Present
15.	DEVYANI Y.	19IABOA035	Present
16.	BABY ZEBA	20IABOA011	Present
17.	BHAKTHI J.	20IABOA012	Present
18.	S. SREENISHA	20IABOA029	Present
19.	SNEHA M.	20IABOA028	Present
20.	ABIGAIL	20IABOA010	Present


Faculty In-charge


HEAD OF THE DEPARTMENT
Department of Humanities
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Autonomous
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BA/2021-22/001

Date: 31.05.2022

CIRCULAR

Department of History is organizing a guest lecture for all the B.A History students on **02nd June, 2022** from 12 pm to 1 pm. All the students and faculty are invited for the Guest Lecture in Seminar hall-II.

Resource person	Title
Ms. Sanjana Rangan Museologist Independent Scholar, Bangalore	" Museum- a space of Joy and Learning "

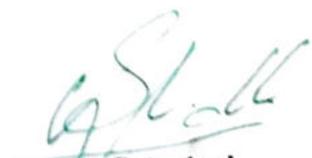
Objectives:

1. To introduce Students to Museums as an institution
2. To introduce the concept of Museology as a discipline
3. To enable students understand the various facets of Museums and how museums contribute to the development of society.

Outcomes:

1. To have awareness about the fundamentals of a museum as a space for learning.
2. Students would have developed a vision towards having a probable career in the field of Museology.
3. To understand the importance of Museums and their contribution to the development of the society.


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DEPARTMENT OF HISTORY

Guest Lecture

1. **Title of the Event:** Guest Lecture

2. **Place:** Seminar Hall II, IADCA

3. **Date:** 02.06.2022.

4. **Time:** 12:00 pm to 1:00 pm.

5. **Name of the Resource Person:** Ms. Sanjana Rangan
Museologist
Independent Scholar, Bangalore

6. **Broad Aim of the Event:**

➤ To introduce the students to the basic principles of Museology as a discipline.

7. **Objectives (at least 3):**

1. To introduce Students to Museums as an institution
2. To introduce the concept of Museology as a discipline
3. To enable students understand the various facets of Museums and how museums contribute to the development of society.

8. **Outcomes (at least 3):**

1. To have awareness about the fundamentals of a museum as a space for learning.
2. Students would have developed a vision towards having a probable career in the field of Museology.
3. To understand the importance of Museums and their contribution to the development of the society.

9. **Brief details about the event:**

The Guest Lecture titled **"MUSEUMS- A SPACE OF JOY AND LEARNING"** was held in Seminar Hall II of IADCA on 2nd June 2022 at 12.30 pm. The event entailed Ms. Sanjana

Rangan, an Independent Scholar and Museologist, interacting with students of BA HEP (II/IV/VI sem) about the basics of the discipline of Museology and helped students to interact with a professional from the field. Ms. Rangan spoke about the types of Museums, what are the various methods through which a museum studies various artefacts that are acquired by them and how is the acquisition of museum objects are done.

The students were made asked to categorise the various day to day materials they use in smaller categories, which was used by Ms. Rangan to explain how Museums categorise objects according to their themes and their educational objectives. She also reflected on how visitors behaviours impact the workings of a Museum an the general hierarchy of the Museum authorities. At the end of the session, Ms Rangan spoke about the various career opportunities that are available for students who wish to take up Cultural and Heritage Studies.

10. Feedback details (if any)

- Got to know abut the new topic.
- Interesting topic to get more informative

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DEPARTMENT OF HISTORY

Guest Lecture

“MUSEUM - A SPACE OF JOY AND LEARNING”

02-06-22



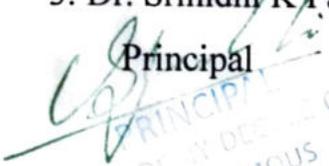


1. Ms Riddhee Joshi
Assistant Professor
Department of History



2. Ms. Deepa. S
HEAD OF THE DEPARTMENT
Department of Humanities
INDIAN ACADEMY DEGREE COLLEGE
Autonomous
Sennur Main Road, Bangalore-560047

3. Dr. Srinidhi K Parthasaradhi
Principal



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SENNUR MAIN ROAD, KALYAN NAGAR
BANGALORE-560043, KARNATAKA



Sanjana Rangan

Museologist

Independent Scholar, Bangalore

Sanjana Rangan is a museum consultant working across Karnataka's museums. She has completed her Masters in Museology from the National Museum Institute in New Delhi. During her tenure at the Robert Bruce Foote Sanganakallu Archaeological Museum (RBFSAM) in Ballari, Karnataka, she developed educational content for student visitors that synthesize the field setting of the archaeological site of Sanganakallu and the collections housed at the museum. Working with museums, students and teachers, her strengths lie in facilitating dialogues at the museum between people, spaces and times. She is presently associated with the S L Bhatia History of Medicine Museum and the Archaeological Museum at Hampi amongst others.

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GUEST LECTURES

- Speaker : MS. SANJANA RANGAN
- Designation : MUSEOLOGIST, INDEPENDENT SCHOLAR, B'LORE
- Topics : " MUSEUM A SPACE OF JOY AND LEARNING "
- Nature of Audience : B. A. Students.
- Date & Time : 2.6.2022 . 12:00pm to 1:30 pm.
- Views of the Speaker : Very enthusiastic students. Looking forward to more interactions with them.

SLU:

Signature of the guest

Views of the beneficiaries

It was very excellent and the session was full of interaction.

Remarks

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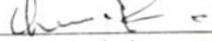
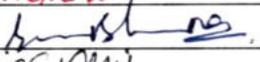
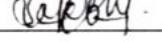
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DEPARTMENT OF HISTORY
ORGANIZE
GUEST LECTURE
ON
"MUSEUMS- A SPACE OF JOY AND LEARNING"

Date: 02 JUNE 2022

Class: BA HEP/ HIECS/HIPS (II, IV, VI SEM)

SL.N O	Register No	Name of the Students	Remarks
1	21IABOA001	FALAK FATHIMA	Falak Fathima
2	21IABOA002	GUHAN.S	Guan.S
3	21IABOA003	K A ARBAZ ALI KHAN	A. Khan
4	21IABOA004	MEHTAB A	Mehtab A
5	21IABOA005	MURLI S	Absent
6	21IABOA006	NIKITHA MICHAEL	Absent
7	21IABOA007	NITHIN RAJ KUMAR	Nithin Raj Kumar
8	21IABOA008	RAKSHITHA S P	Rakshitha S.P
9	21IABOA009	S BIKRAM	S. Bikram
10	21IABOA010	SHARON KEZIAH L	Absent
11	21IABOA011	V SAI KEERTHI	Sai Keerthi
12	21IABOA012	ASHA	Asha
13	21IABOA013	AYUSH TIWARI	Absent
14	21IABOA014	MOHAMMED IZHAN S S	Absent
15	21IABOA015	MONIKA H	Monika
16	21IABOA016	PARVEEN TAJ A	Parveen
17	21IABOA017	RAJA JUNAID JAVID	Raja
18	21IABOA018	RENUKA	Absent
19	21IABOA019	SANJANA P	Sanjana
20	21IABOA020	TENZIN LHAKPA	Tenzin
21	21IABOA021	U NITHISH KUMAR	Nithish Kumar
22	20IABOA001	APARNA SAHU	Aparna
23	20IABOA002	DANISTHA TAHNIN	Danistha
24	20IABOA003	MOHD YAHYA	Mohd Yahya
25	20IABOA004	MUJEERULLA KHAN	Mujeerulla Khan

26	20IABOA005	NAMDI CHUILO	Namdi
27	20IABOA006	P ISAAC THANGZOM ZOU	
28	20IABOA007	SURAJ S	Absent
29	20IABOA008	THANGCHUNGNUNG HAOKIP	Absent
30	20IABOA009	THARUN KUMAR S	
31	19IABOA001	AMULYA NETHAJI	
32	19IABOA002	CHANDAN R	
33	19IABOA003	DAVID LALRINGUM	David Lalringum
34	19IABOA004	FAITH LALIA LAWRENCE	Faith
35	19IABOA005	GOKUL RAJ N	Absent
36	19IABOA006	JAI SHRUTHI S	Absent
37	19IABOA007	KEETHANA T T	Absent
38	19IABOA008	KSHETRIMAYUM HEROJIT SINGH	Herojit
39	19IABOA009	LAITONJAM WANGLEN M	Wanglen
40	19IABOA010	MHD. MUDASSIR NADEEM	Absent
41	19IABOA011	MONISH GOWDA	Absent
42	19IABOA012	MUBARAK J J SALMOUN	Absent
43	19IABOA013	NKIUKAMBOU WIJUNAMAI	Absent
44	19IABOA014	SAMIYA SAHANA	
45	19IABOA015	SUTHARI SAI ABHINAV	



Faculty In-charge



Head of Department
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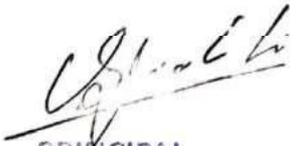
Date: 23.06.2022

Circular

The Department of Commerce (UG) is organising a Guest lecture on the "Time Management" by Dr.Syeda TabassumS.G on 28/06/2022 (Tuesday) for the second semester B.Com Students in the Seminar Hall II at 12.00 pm.

Sign

Principal



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Indian Academy Degree College
Kalyan Nagar, BANGALORE 43

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GUEST LECTURE REPORT ON THE TOPIC "TIME MANAGEMENT" AS ON 28.06.2022

- ❖ **Title of the Event:** Guest Lecture on time management
- ❖ **Place:** Seminar Hall II
- ❖ **Date:** 28.06.2022
- ❖ **Time:** 12.00 pm
- ❖ **Name of the Resource Person:** Dr. Syeda Tabassum
- ❖ **Beneficiaries:**

The guest talk was arranged for the second-semester B. Com students.

- ❖ **Broad Aim of the Event:** To understand how time can be managed and know why time management is important and make them aware of their plan to work actively with some autonomy

- ❖ **Objectives:**

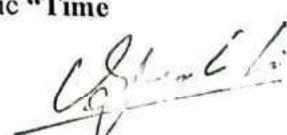
1. To make them aware of the use of time in the most effective way possible.
2. To create control over distractions that waste time.
3. To educate them about giving them more quality to relax and be creative.

- ❖ **Outcomes:**

1. To enable productivity among students.
2. To enable students to get more and better work done in less time.
3. To help students in managing time to overcome stress.

- ❖ **Brief Report**

The Department of UG Commerce, Indian Academy Degree College organized a guest lecture program for the second semester. B. Com students on the topic "**Time Management**" on 28-06-22 by Dr. Syeda Tabassum S.G


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Dr. Syeda Tabassum S.G addressed students and explained what TIME MANAGEMENT is she told them Your stress handling, your attitude, your communication skills, your emotional intelligence and a whole host of other personal attributes are the time management that is crucial for career success. Problem-solving, delegating, motivating, and team building is all much easier if you have good soft skills. She highlighted that nowadays an individual must have time management to survive in the corporate world. She also explained how managing time can influence everything from the way employees communicate with customers to the way they solve problems internally. She also highlights the importance of time management in planning their studies.

She encouraged students to take involve themselves in the activity. Almost all students attended the program with good interest and got inspired by Dr. Syeda Tabassum S.G. During the session, she also conducted activities like a few physical exercises where all the students participated. Overall, the session was very interactive. The feedback was collected at the end of the session from the beneficiaries for catering to further need improvements.



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Indian Academy Degree College
Rajyan Nagar, BANGALORE

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PROFILE OF SPEAKER

Name: Dr. Syeda Tabassum S.G , M.Com, Ph.D.

Designation: H.O.D of Commerce
Abbas Khan College for Women
Bangalore 560 002, Karnataka

Contact Number:Ph: 7204259416

Email: tabu9416@gmail.com

Experience: 15 yrs (UG & PG)

Specialization:Ph.D in Commerce on the topic " A Study on Women Attrition In I.T Sector with reference to Bangalore City".

Other Portfolio held:

- External Examiner for Ph.D thesis Evaluation at Bharathidasan University.
- Paper setter for Indian Academy Degree College Bangalore (Autonomous).
- Worked as BOE member, for VI Semester B.com Bangalore University 2019-2020.
- Appointed as External Examiner for BBA Viva Voce Bangalore University in 2018.
- External Guide for BBA students of Jain University in 2018.
- Evaluator /Reviewer for U.G courses of Bangalore City University.
- Asst. Co ordinator of NAAC & IQAC Abbas Khan College Bangalore.

Publications & Certifications

- Work-Life Balance & Stress management - A Case study on Health Centres. Best paper award at International summit in Jain University Jan 2022 (Publication awaited)
- IAMS School of Business Spectrum- Impact on employability during crises- A case study on the corporate sector. Vol XIV Nov 2 Dec 21
- Managing Emotional stress during Pandemic- A case study on faculty in Higher Education. (publication awaited)


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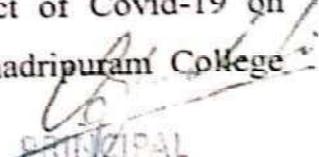
- International Journal of Inter-Disciplinary Studies - 19 on Teaching & Learning on college faculty.
- International Journal of Analytical and Experimental Modal analysis Title - Organizational citizenship of Bank employees.
- International Journal of mgt, technology and engineering - Title "Determinants of service climate a Theoretical study.
- International journal of Multidisciplinary research review-peer reviewed monthly journal on Title - "Women attrition and retention".
- International journal of Management and social science research review Title- "Employee retention and commitment".
- International journal of Business administration research review Impact factor 3996 Title- the "A Study on the impact of factors affecting women attrition in I.T sector with specific reference to strategies and techniques".
- Southern Economists National work-life "Work life balance & attrition".
- Southern Economists National journal Title "Impact of the attrition on the performance of I.T companies".
- Southern economists Title "Women attrition in IT sector".
- Conference publication - Global workplace by 2020, on the title "Use of technology in HR and its implications.

Book Publication

Human Resource Management reference book by Dr. Nirmala, Syeda Tabassum S.G - Himalaya Publishing House.

Papers Presented

- Work-Life balance & Stress management - A Case study on Health Centers. Best paper award at International summit in Jain University Jan 2022.
- Managing Emotional stress during Pandemic- A case study on faculty in Higher Education.
- Presented a paper in 3 days International Webinar on "Impact of Covid-19 on Teaching & Learning by College Faculty" 2nd Sep 2020 Sheshadripuram College Bangalore.


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- Presented a paper in 3 days International Webinar on “Digital Pedagogy in 21st Century – Opportunities & Challenges. Rajiv Gandhi University.
- Presented a paper in the 3rd National Seminar on “Global work place by 2020”, (Sindhi College of Commerce Bangalore).
- Presented paper in UGC Sponsored 1 day National Conference on “Impact of metro rail on Environment” Abbas Khan College Bangalore).
- UGC Sponsored 1 day State level seminar on “Effect on entry of foreign players in Indian retail industry and strategies for survival and growth” (AKCW).



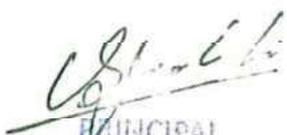
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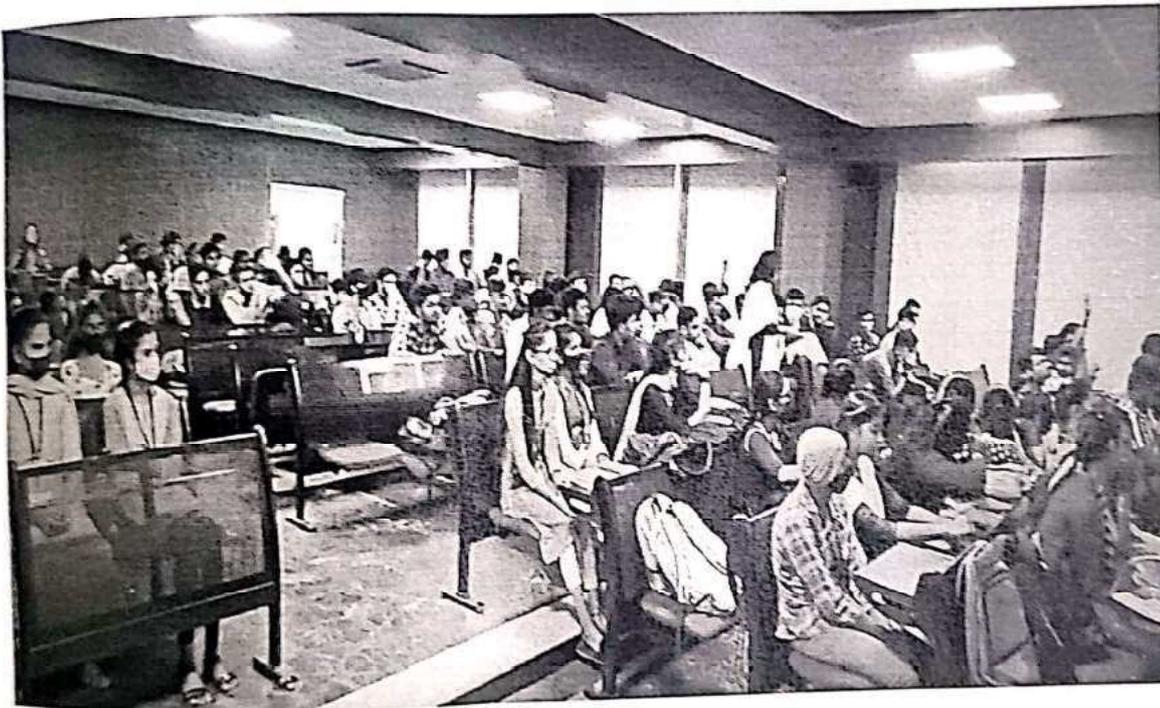
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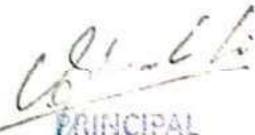
Degree College - Autonomous

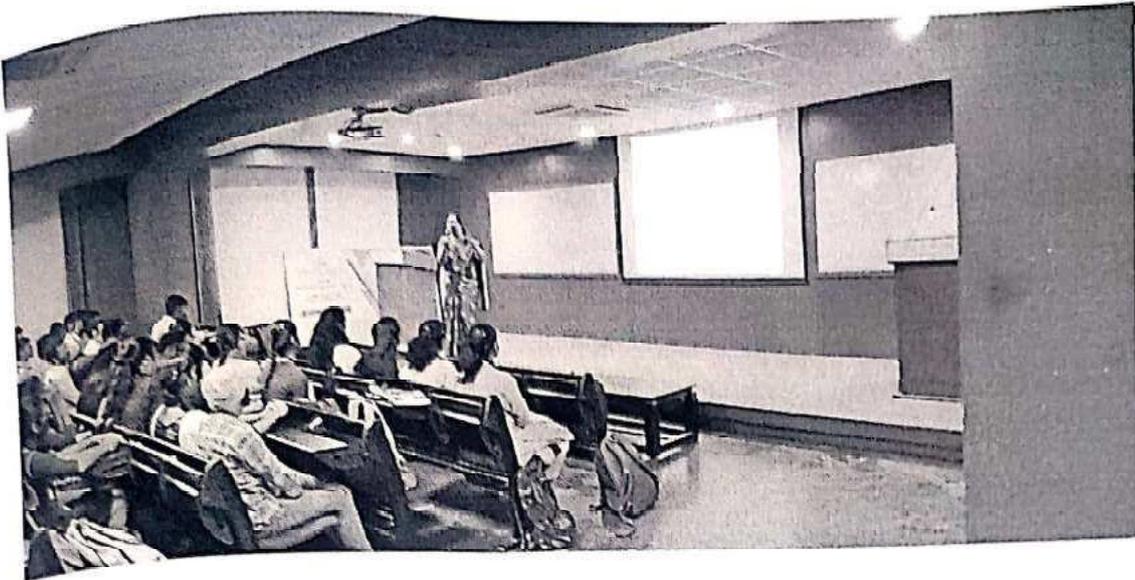
GUEST LECTURE PICTURES ON THE TOPIC "TIMEMANAGEMENT" AS ON
28.06.2022




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AUTONOMOUS
HENNUR MAIN ROAD
BANGALORE - 56



[Handwritten Signature]
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AUTONOMOUS
HENNUR MAIN ROAD
BANGALORE - 43

INDIAN ACADEMY

Degree College - Autonomous

GUEST LECTURES

Speaker : Dr. Syeda Tabassum S.G
Designation : HOD of Commerce Abbas Khan College for Women
Topics : Time Management
Nature of Audience : II Semester B.COM
Date & Time : 28th June 2022 - 12:15pm to 1:10pm
Views of the Speaker : The experience was wonderful, audience was very enthusiastic & energetic. All the best.
Signature of the guest

Views of the beneficiaries

- Kunhika P 21IABCM138 1. The session was very good and it was very useful for us.
Amal Kumar 21IABCM168 2. The session was informative & useful for us.
Remarks Prati 21IABCM177 3. Very enlightening words and words of wisdom to hear from an experienced person



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DEPARTMENT OF COMMERCE

PARTICIPANT LIST FOR GUEST LECTURE

TOPIC TIME MANAGEMENT

DATE 28th June 2022

NAME OF SPEAKER Dr. Syeda Tabassum S.G

CLASS 11 Sem B.Com 'A' SEC

Sl No	REGISTER NO	NAME OF THE STUDENTS	SIGNATURE
1	21IABCM001	ABDUL AHAD	<i>[Signature]</i>
3	21IABCM003	ABDUL REHMAN	<i>[Signature]</i>
4	21IABCM004	ABDUL REHMAN VIRANI	<i>[Signature]</i>
5	21IABCM005	ABU HARIS KHAN	<i>[Signature]</i>
6	21IABCM006	ADITHYA KUMAR NISHAD R	<i>[Signature]</i>
7	21IABCM007	ADITHYA M	<i>[Signature]</i>
8	21IABCM008	AFNAN KHAN	<i>[Signature]</i>
9	21IABCM009	AHBAS AHMED P	Absent
10	21IABCM010	AJAY R (Raja R)	Ajay
11	21IABCM011	AJAY R (Ravi B)	Ajay
12	21IABCM012	AKASH S	Akash S.
13	21IABCM013	AKSHAY G S	<i>[Signature]</i>
14	21IABCM014	AMBRISH KUMAR P	Absent
15	21IABCM015	AMITH K S	<i>[Signature]</i>
16	21IABCM016	ANIKET MAHATO	Absent
18	21IABCM018	ARATHI P	<i>[Signature]</i>
19	21IABCM019	ARAVIND SWAMY B	Absent
20	21IABCM020	ARBAZ PASHA	Arbaz Pasha
21	21IABCM021	ARCHANA S	Archana S
22	21IABCM022	ARJUN S	Arjun S
23	21IABCM023	ARUL NADAN	Arulnadan B
24	21IABCM024	ARUN RAJ A	Absent
25	21IABCM025	ASHISH R	Absent
26	21IABCM026	ASHWANI KUMARI	Absent
27	21IABCM027	AUSTIN D CRUZE J	Absent
28	21IABCM028	AVEZ PASHA F	Absent
29	21IABCM029	AYESHA KHANUM	Ayesha Khanum
30	21IABCM030	AYESHA SAYADI	Ayesha Sayadi
31	21IABCM031	B LAKSHMI POOJITHA	Lakshmi
32	21IABCM032	B MOHAMMED MISBAH AHMED	Absent
33	21IABCM033	BABITHA S	Babitha S
34	21IABCM034	BALAJI MANJUNATH S	Balaji Manjunath S
35	21IABCM035	BHAGYASHREE KUMARI C	Absent
36	21IABCM036	BHARATH KUMAR N	Bharath K
37	21IABCM037	BHARATH S	Absent
38	21IABCM038	BHARATH V	Bharath V
39	21IABCM039	BHARGAVI B K	Bhargavi B K
40	21IABCM040	BHAVANA M	Bhavana M
41	21IABCM041	BHOLA YADAV	Absent
42	21IABCM042	BHOOMIKA S V	Bhoomika S V
43	21IABCM043	BILAL M	Bilal M
44	21IABCM044	BINDU G	Absent

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42	21IABCM139	KRUTHIKA S	Kruthikas
43	21IABCM140	LAKSHMI KUMARI	Lakshmi Kumari
44	21IABCM141	LAKSHMI NARAYANA S	Lakshmi Narayana S
45	21IABCM142	LATHA P	Latha P
46	21IABCM143	LAVANYA S	Lavanya S
47	21IABCM145	LIKITH GOWDA G M	Likith Gowda G M
48	21IABCM146	LIMBANI RIDHI R	Limbani Ridhi R
49	21IABCM147	LOKITH K	Lokith K
50	21IABCM148	M ABHISHEK	Absent
51	21IABCM149	MADAN G	Madan G
52	21IABCM150	MADHAN KUMAR M	Absent
53	21IABCM151	MADHAVAN M	Absent
54	21IABCM152	MADHUMITHA B	Madhumitha B
55	21IABCM153	MAHESH J S	Mahesh J S
56	21IABCM154	MALINI M	Malini M
57	21IABCM155	MANI V	Mani V
58	21IABCM156	MANJULA M	Manjula M
59	21IABCM157	MANOHAR K	Absent
60	21IABCM158	MANOHAR N	Manohar N
61	21IABCM159	MANOJ KUMAR M	Manoj Kumar M
62	21IABCM160	MANOJ M	Manoj M
63	21IABCM161	MANOJ PREM R	Absent
64	21IABCM162	MANSOOR SHARIEFF	Mansoor Sharieff
65	21IABCM163	MANU-B R	Manu-B R
66	21IABCM164	MARK LEE	Mark Lee
67	21IABCM165	MARTHESHWARAN V	Martheshwaran V
68	21IABCM166	MARY BEULINE	Mary Beuline
69	21IABCM167	MARY PAVITHRA L	Mary Pavithra L
70	21IABCM168	MATTHEW J	Matthew J
71	21IABCM169	MAZAR AHMED	Absent
72	21IABCM170	MD A'THA UR REHMAN	MD A'THA UR REHMAN
73	21IABCM171	MD UZAIR ZULQUARNAIN	Absent
74	21IABCM172	MEERA A	Meera A
75	21IABCM173	MEGRAJ SINGH K	Megraj Singh K
76	21IABCM174	MELVIN JACOB S	Melvin Jacob S
77	21IABCM175	MELVIN KUMAR G	Absent
78	21IABCM176	MERCY ANISHA M	Mercy Anisha M
79	21IABCM177	MOHAMMED AFFAN RUAFI	Mohammed Affan Ruafi
80	21IABCM178	MOHAMMED AFTAB T	Mohammed Aftab T
81	21IABCM179	MOHAMMED FARDEEN KHAN	Fardeen
82	21IABCM180	MOHAMMED HAZIQ P	Absent
83	21IABCM181	MOHAMMED HUSSAIN M	Absent
84	21IABCM182	MOHAMMED KAIF	Absent
85	21IABCM183	MOHAMMED MAAZ	Maz
86	21IABCM184	MOHAMMED MUQITHULLA SHARIFF	Absent
87	21IABCM185	MOHAMMED RAFIUDDIN	Rafiuddin
88	21IABCM186	MOHAMMED RAYYAN QURESHI	Absent
89	21IABCM187	MOHAMMED SAQLAIN	Mohammed Saqlain

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45	21IABCM045	CALEB	Caleb
46	21IABCM046	CHAITHANYA RAM S	Chaithanya
47	21IABCM047	CHANDAN N	Chandan
48	21IABCM048	CHANDANA R	Chandana
49	21IABCM049	CHANDRU M	Chandru
50	21IABCM050	CHANNA KESHAVA M	Channa Keshava M
51	21IABCM051	CHARULATHA	Charulatha
52	21IABCM052	CHEZHAN L	Absent
53	21IABCM053	CHEZHANA B K	Absent
54	21IABCM054	CHINNI PRASAD R V	Chinni Prasad R V
55	21IABCM055	CHIRAG SHEKHAR POOJARI	Chirag
56	21IABCM056	DANIEL E	Daniel
57	21IABCM057	DANUSH M	Danush
58	21IABCM058	DARSHINI M	Darshini
59	21IABCM059	DASARI ADIKESAVA REDDY	Dasari Adikesava Reddy
60	21IABCM060	DEEPAK KUMAR C	Deepak
61	21IABCM061	DEEPAK L	Deepak
62	21IABCM062	DEEPIKA D	Deepika
63	21IABCM063	DEEPTHI M	Deepti
64	21IABCM064	DEERAJ MANIKANTA P	Deeraj
65	21IABCM065	DELSON EMMANUEL S	Delson
66	21IABCM066	DENISH B	Denish
67	21IABCM067	DHANUSH R	Dhanush
68	21IABCM068	DHANUSH S	Dhanush
69	21IABCM069	DHARSHAN M	Dharshan
70	21IABCM070	DILEEP M	Dileep
71	21IABCM071	EDWIN SUSHANTH E	Edwin
72	21IABCM072	EVANGELINE JUDY R	Evangeline
73	21IABCM073	FARDEEN KHAN	Fardeen
74	21IABCM074	FARZANA BEGAM Y	Farzana
75	21IABCM075	FAZAL KHAN	Fazal
76	21IABCM076	FAZIL PASHA	Fazil
77	21IABCM077	GANESH A K	Ganesh
78	21IABCM078	GAUTHAM C	Gautham
79	21IABCM079	GAYATHRI S	Gayathri
80	21IABCM080	GEETHA SINGH R	Geetha
81	21IABCM081	GIDEON D	Gideon
82	21IABCM082	GOPAL KIRAN K	Gopal
83	21IABCM083	GOPI SARAVANAN T	Gopi
84	21IABCM084	GOWARKAL SASIREKHA	Gowarkal
85	21IABCM085	GOWRAMMA G	Gowamma
86	21IABCM086	GOWTHAM R	Gowtham
87	21IABCM087	GUNASHEKAR	Gunashekar
88	21IABCM088	GURUPRASAD K N	Guruprasad
89	21IABCM089	HAMSA A	Hamsa
90	21IABCM090	HARITHAA NANDINI G	Haritha
91	21IABCM091	HARSHAVARDAN R	Harshavardan
92	21IABCM092	HARSHITH M	Harshith
93	21IABCM093	HARSHITHA V	Harshitha
94	21IABCM094	HARSHITHA V	Harshitha

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BA/2021-22/001

Date: 31.05.2022

CIRCULAR

Department of History is organizing a guest lecture for all the B.A History students on **02nd June, 2022** from 12 pm to 1 pm. All the students and faculty are invited for the Guest Lecture in Seminar hall-II.

Resource person	Title
Ms. Sanjana Rangan Museologist Independent Scholar, Bangalore	" Museum- a space of Joy and Learning "

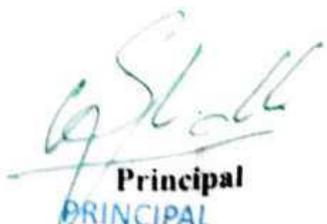
Objectives:

1. To introduce Students to Museums as an institution
2. To introduce the concept of Museology as a discipline
3. To enable students understand the various facets of Museums and how museums contribute to the development of society.

Outcomes:

1. To have awareness about the fundamentals of a museum as a space for learning.
2. Students would have developed a vision towards having a probable career in the field of Museology.
3. To understand the importance of Museums and their contribution to the development of the society.


HOD
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Department of Humanities
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AUTONOMOUS
HENNUR MAIN ROAD
BANGALORE - 43

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Degree College - Autonomous

DEPARTMENT OF HISTORY

Guest Lecture

1. **Title of the Event:** Guest Lecture

2. **Place:** Seminar Hall II, IADCA

3. **Date:** 02.06.2022.

4. **Time:** 12:00 pm to 1:00 pm.

5. **Name of the Resource Person:** Ms. Sanjana Rangan
Museologist
Independent Scholar, Bangalore

6. **Broad Aim of the Event:**

➤ To introduce the students to the basic principles of Museology as a discipline.

7. **Objectives (at least 3):**

1. To introduce Students to Museums as an institution
2. To introduce the concept of Museology as a discipline
3. To enable students understand the various facets of Museums and how museums contribute to the development of society.

8. **Outcomes (at least 3):**

1. To have awareness about the fundamentals of a museum as a space for learning.
2. Students would have developed a vision towards having a probable career in the field of Museology.
3. To understand the importance of Museums and their contribution to the development of the society.

9. **Brief details about the event:**

The Guest Lecture titled “MUSEUMS- A SPACE OF JOY AND LEARNING” was held in Seminar Hall II of IADCA on 2nd June 2022 at 12.30 pm. The event entailed Ms. Sanjana

Rangan, an Independent Scholar and Museologist, interacting with students of BA HEP (II/IV/VI sem) about the basics of the discipline of Museology and helped students to interact with a professional from the field. Ms. Rangan spoke about the types of Museums, what are the various methods through which a museum studies various artefacts that are acquired by them and how is the acquisition of museum objects are done.

The students were made asked to categorise the various day to day materials they use in smaller categories, which was used by Ms. Rangan to explain how Museums categorise objects according to their themes and their educational objectives. She also reflected on how visitors behaviours impact the workings of a Museum an the general hierarchy of the Museum authorities. At the end of the session, Ms Rangan spoke about the various career opportunities that are available for students who wish to take up Cultural and Heritage Studies.

10. Feedback details (if any)

- Got to know about the new topic.
- Interesting topic to get more informative

INDIAN ACADEMY

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DEPARTMENT OF HISTORY

Guest Lecture

“MUSEUM - A SPACE OF JOY AND LEARNING”

02-06-22





1. Ms Riddhee Joshi

Assistant Professor

Department of History



2. Ms. Deepa. S

HEAD OF THE DEPARTMENT
Head Department of Humanities

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Heennur Main Road, Bangalore - 560042

3. Dr. Srinidhi K Parthasaradhi



Principal

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BANGALORE-560042, KARNATAKA

BANGALORE-560042, KARNATAKA



Sanjana Rangan

Museologist

Independent Scholar, Bangalore

Sanjana Rangan is a museum consultant working across Karnataka's museums. She has completed her Masters in Museology from the National Museum Institute in New Delhi. During her tenure at the Robert Bruce Foote Sanganakallu Archaeological Museum (RBFSAAM) in Ballari, Karnataka, she developed educational content for student visitors that synthesize the field setting of the archaeological site of Sanganakallu and the collections housed at the museum. Working with museums, students and teachers, her strengths lie in facilitating dialogues at the museum between people, spaces and times. She is presently associated with the S L Bhatia History of Medicine Museum and the Archaeological Museum at Hampi amongst others.

INDIAN ACADEMY

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GUEST LECTURES

Speaker : MS. SANJANA RANGAN
Designation : MUSEOLOGIST, INDEPENDENT SCHOLAR, B'LORE
Topics : "MUSEUM A SPACE OF JOY AND LEARNING"
Nature of Audience : B.A. Students.
Date & Time : 2.6.2022 . 12:00pm to 1:30 pm.
Views of the Speaker : Very enthusiastic students. Looking forward to more interactions with them.

SM:

Signature of the guest

Views of the beneficiaries

It was very excellent and the session was full of interaction.

Remarks

INDIAN ACADEMY

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DEPARTMENT OF HISTORY

ORGANIZE

GUEST LECTURE

ON

“MUSEUMS- A SPACE OF JOY AND LEARNING”

Date: 02 JUNE 2022

Class: BA HEP/ HIECS/HIPS (II, IV, VI SEM)

SL.N O	Register No	Name of the Students	Remarks
1	21IABOA001	FALAK FATHIMA	Falak Fathima
2	21IABOA002	GUHAN.S	Guhan.S
3	21IABOA003	K A ARBAZ ALI KHAN	K A Arbaz
4	21IABOA004	MEHTAB A	Mehtab A
5	21IABOA005	MURLI S	Absent
6	21IABOA006	NIKITHA MICHAEL	Absent
7	21IABOA007	NITHIN RAJ KUMAR	Nithin Raj Kumar
8	21IABOA008	RAKSHITHA S P	Rakshitha S.P
9	21IABOA009	S BIKRAM	S. Bikram
10	21IABOA010	SHARON KEZIAH L	Absent
11	21IABOA011	V SAI KEERTHI	V Sai Keerthi
12	21IABOA012	ASHA	Asha
13	21IABOA013	AYUSH TIWARI	Absent
14	21IABOA014	MOHAMMED IZHAN S S	Absent
15	21IABOA015	MONIKA H	Monika
16	21IABOA016	PARVEEN TAJ A	Parveen
17	21IABOA017	RAJA JUNAID JAVID	Raja
18	21IABOA018	RENUKA	Absent
19	21IABOA019	SANJANA P	Sanjana
20	21IABOA020	TENZIN LHAKPA	Tenzin
21	21IABOA021	U NITHISH KUMAR	U Nithish Kumar
22	20IABOA001	APARNA SAHU	Aparna
23	20IABOA002	DANISTHA TAHNIN	Danistha
24	20IABOA003	MOHD YAHYA	Mohd Yahya
25	20IABOA004	MUJEERULLA KHAN	Mujeerulla

26	20IABOA005	NAMDI CHUILO	Namdi
27	20IABOA006	P ISAAC THANGZOM ZOU	<i>[Signature]</i>
28	20IABOA007	SURAJ S	Absent
29	20IABOA008	THANGCHUNGNUNG HAOKIP	Absent
30	20IABOA009	THARUN KUMAR S	<i>[Signature]</i>
31	19IABOA001	AMULYA NETHAJI	<i>[Signature]</i>
32	19IABOA002	CHANDAN R	<i>[Signature]</i>
33	19IABOA003	DAVID LALRINGUM	David Lalringum
34	19IABOA004	FAITH LALIA LAWRENCE	Faith
35	19IABOA005	GOKUL RAJ N	Absent
36	19IABOA006	JAI SHRUTHI S	Absent
37	19IABOA007	KEETHANA T T	Absent
38	19IABOA008	KSHETRIMAYUM HEROJIT SINGH	Herojit
39	19IABOA009	LAITONJAM WANGLEN M	Wanglen
40	19IABOA010	MHD. MUDASSIR NADEEM	Absent
41	19IABOA011	MONISH GOWDA	Absent
42	19IABOA012	MUBARAK J J SALMOUN	Absent
43	19IABOA013	NKIUKAMBOU WIJUNAMAI	Absent
44	19IABOA014	SAMIYA SAHANA	<i>[Signature]</i>
45	19IABOA015	SUTHARI SAI ABHINAV	<i>[Signature]</i>

[Signature]
Faculty In-charge

[Signature]
Head of Department
HEAD OF THE DEPARTMENT
Department of Humanities
INDIAN ACADEMY DEGREE COLLEGE
Autonomous
Hennur Main Road, Bangalore-560043

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Degree College - Autonomous

BA/2021-22/001

Date: 31.05.2022

CIRCULAR

Department of History is organizing a guest lecture for all the B.A History students on **02nd June, 2022** from 12 pm to 1 pm. All the students and faculty are invited for the Guest Lecture in Seminar hall-II.

Resource person	Title
Ms. Sanjana Rangan Museologist Independent Scholar, Bangalore	" Museum- a space of Joy and Learning "

Objectives:

1. To introduce Students to Museums as an institution
2. To introduce the concept of Museology as a discipline
3. To enable students understand the various facets of Museums and how museums contribute to the development of society.

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Degree College - Autonomous

DEPARTMENT OF HISTORY

Guest Lecture

1. **Title of the Event:** Guest Lecture

2. **Place:** Seminar Hall II, IADCA

3. **Date:** 02.06.2022.

4. **Time:** 12:00 pm to 1:00 pm.

5. **Name of the Resource Person:** Ms. Sanjana Rangan
Museologist
Independent Scholar, Bangalore

6. **Broad Aim of the Event:**

- To introduce the students to the basic principles of Museology as a discipline.

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10. Feedback details (if any)

- Got to know abut the new topic.
- Interesting topic to get more informative

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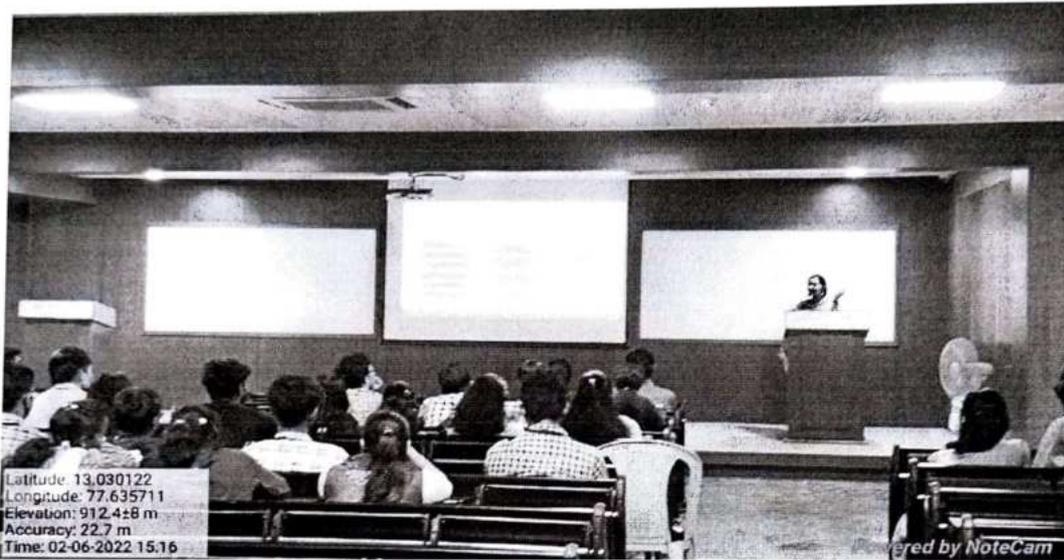
Degree College - Autonomous

DEPARTMENT OF HISTORY

Guest Lecture

“MUSEUM - A SPACE OF JOY AND LEARNING”

02-06-22





1. Ms Riddhee Joshi

Assistant Professor

Department of History



2. Ms. Deepa. S

HEAD OF THE DEPARTMENT
Head Department of Humanities

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54, Hennur Main Road, Bangalore-560043

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Principal

INDIAN ACADEMY DEGREE COLLEGE
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Bangalore-560043, Karnataka



Sanjana Rangan

Museologist

Independent Scholar, Bangalore

Sanjana Rangan is a museum consultant working across Karnataka's museums. She has completed her Masters in Museology from the National Museum Institute in New Delhi. During her tenure at the Robert Bruce Foote Sanganakallu Archaeological Museum (RBFSAM) in Ballari, Karnataka, she developed educational content for student visitors that synthesize the field setting of the archaeological site of Sanganakallu and the collections housed at the museum. Working with museums, students and teachers, her strengths lie in facilitating dialogues at the museum between people, spaces and times. She is presently associated with the S L Bhatia History of Medicine Museum and the Archaeological Museum at Hampi amongst others.

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GUEST LECTURES

Speaker : MS. SANJANA RANGAN
Designation : MUSEOLOGIST, INDEPENDENT SCHOLAR, B'LORE
Topics : " MUSEUM A SPACE OF JOY AND LEARNING "
Nature of Audience : B. A. Students.
Date & Time : 2.6.2022 . 12:00pm to 1:30 pm.
Views of the Speaker : Very enthusiastic students. Looking forward to more interaction with them.

SM:

Signature of the guest

Views of the beneficiaries

It was very excellent and the session was full of interaction.

Remarks

INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HISTORY
ORGANIZE
GUEST LECTURE
ON
"MUSEUMS- A SPACE OF JOY AND LEARNING"

Date: 02 JUNE 2022

Class: BA HEP/ HIECS/HIPS (II, IV, VI SEM)

SL.N O	Register No	Name of the Students	Remarks
1	21IABOA001	FALAK FATHIMA	Falak Fathima
2	21IABOA002	GUHAN.S	Guhan.S
3	21IABOA003	K A ARBAZ ALI KHAN	A.K.A
4	21IABOA004	MEHTAB A	Mehtab A
5	21IABOA005	MURLI S	Absent
6	21IABOA006	NIKITHA MICHAEL	Absent
7	21IABOA007	NITHIN RAJ KUMAR	Nithin Raj Kumar
8	21IABOA008	RAKSHITHA S P	Rakshitha S.P
9	21IABOA009	S BIKRAM	S. Bikram
10	21IABOA010	SHARON KEZIAH L	Absent
11	21IABOA011	V SAI KEERTHI	Keerthi
12	21IABOA012	ASHA	Asha
13	21IABOA013	AYUSH TIWARI	Absent
14	21IABOA014	MOHAMMED IZHAN S S	Absent
15	21IABOA015	MONIKA H	Monika
16	21IABOA016	PARVEEN TAJ A	Parveen
17	21IABOA017	RAJA JUNAID JAVID	Raja
18	21IABOA018	RENUKA	Absent
19	21IABOA019	SANJANA P	Sanjana
20	21IABOA020	TENZIN LHAKPA	Tenzin
21	21IABOA021	U NITHISH KUMAR	U Nithish Kumar
22	20IABOA001	APARNA SAHU	Aparna
23	20IABOA002	DANISTHA TAHNIN	Danistha
24	20IABOA003	MOHD YAHYA	Mohd Yahya
25	20IABOA004	MUJEERULLA KHAN	Mujeerulla

26	20IABOA005	NAMDI CHUILO	Namdi
27	20IABOA006	P ISAAC THANGZOM ZOU	<i>[Signature]</i>
28	20IABOA007	SURAJ S	Absent
29	20IABOA008	THANGCHUNGNUNG HAOKIP	Absent
30	20IABOA009	THARUN KUMAR S	<i>[Signature]</i>
31	19IABOA001	AMULYA NETHAJI	<i>[Signature]</i>
32	19IABOA002	CHANDAN R	<i>[Signature]</i>
33	19IABOA003	DAVID LALRINGUM	David Lalringum
34	19IABOA004	FAITH LALIA LAWRENCE	Faith
35	19IABOA005	GOKUL RAJ N	Absent
36	19IABOA006	JAI SHRUTHI S	Absent
37	19IABOA007	KEETHANA T T	Absent
38	19IABOA008	KSHETRIMAYUM HEROJIT SINGH	Herojit
39	19IABOA009	LAITONJAM WANGLEN M	Wanglen
40	19IABOA010	MHD. MUDASSIR NADEEM	Absent
41	19IABOA011	MONISH GOWDA	Absent
42	19IABOA012	MUBARAK J J SALMOUN	Absent
43	19IABOA013	NKIUKAMBOU WIJUNAMAI	Absent
44	19IABOA014	SAMIYA SAHANA	<i>[Signature]</i>
45	19IABOA015	SUTHARI SAI ABHINAV	<i>[Signature]</i>



Faculty In-charge



Head of Department

HEAD OF THE DEPARTMENT
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Library and Information Centre

www.iadc.ac.in mail - library@indianacademy.edu.in

Date: 20 Feb 2023

To,
Principal
IADC-A
Bangalore-560043

Respected Sir

Sub: Seeking Permission to Conduct Workshop for PG First semester Students.

With reference to the above mentioned subject we are seeking your permission to conduct workshop for PG first semester students on the online resources and services from 24th Feb 2023 to 4th March 2023. In order to conduct the workshop, we required BCA Lab for the Technical Session Kindly permit us to use the Lab at the time of workshop.

The participants will receive an online certificate.

Thanking You

Saeetha. M
Chief Librarian

CHIEF LIBRARIAN
Dept. of Library & Information Centre
INDIAN ACADEMY GROUP OF INSTITUTIONS
Hennur Cross, Hennur Main Road,
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[Signature]
Principal

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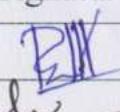
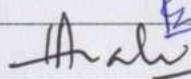
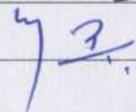
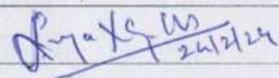
CIR/IADC-A-LIB\2022- 23

Date: 20 Feb 2023

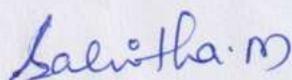
To,
Heads of the Department
IADC-A
Bangalore-560043

Respected Sir/Madam,

The IADC-A Library and Information Center intends to host a workshop for PG first semester students on the online resources and services from 24th Feb 2023 to 4th March 2023. In order to conduct the Workshop, Hereby we are requesting you to complete and provide the information below.

Sl No	Department	Date	Timing	HOD Signature
01	Biotechnology	27-02-2023	10:15-11:10	
02	Biochemistry	28-02-2023	12:15-1:10	
03	Chemistry	04-03-2023	12:15-1:10	
04	Computer Science	02.3.2023	2:15-3:00	
05	PG Commerce	24/02/2023	11:15 to 12:15	
06	Genetics	06/03/2023	12:15 to 1:15	
07	Microbiology	07/03/2023	12:15 to 1:15pm	

Thanking You for Your Kind Cooperation.

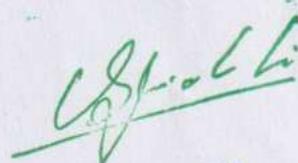


Chief Librarian

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LIBRARY AND INFORMATION CENTRE

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Date: 15.03.2023

Report on the Conducted workshop on Online Resources and Services for PG Students- 2023

This is a report on the workshop conducted by the Department of Library and Information Centre. The workshop was conducted from 24th Feb to March 10th 2023 for PG First year Students.

The library and information centre recently conducted a workshop on online resources and facilities available for library users. The workshop was aimed at informing users about the latest digital technologies and tools available for accessing information and research. It was also intended to teach users how to navigate the library's online resources effectively and improve their research skills. The workshop was attended by a PG first years of students. The workshop was conducted by librarians who have extensive knowledge in digital resources and online facilities. They demonstrated various tools and resources available online and how to use them to access relevant information.

The workshop covered a variety of topics, including research databases, online journals, e-books, and digital archives. This was supplemented with practical examples that demonstrated how these resources can be used to conduct research more effectively. Participants were also given tips on how to evaluate online resources and the importance of avoiding unreliable sources.

The workshop also demonstrated the library's user-friendly online search platform that enables users to search for resources and services from anywhere at any time. Participants were taught how to use this platform to conduct effective research and how to access additional information services provided by the library.

In summary, the workshop was a resounding success, and participants left with a deeper understanding of digital resources and facilities available in the library. They were equipped with new research skills and encouraged to make the most of the new technologies to enhance their research and improve their overall learning experience.

The library and information centre plans to organize more workshops and training programs to ensure users stay up-to-date with the latest resources and facilities available. Each participant received an electronic certificate.

Saeetha M
Chief Librarian

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Dept of. Library and Information Centre

A Workshop on Usage of Online Resources and Services

From 24th Feb - March 10th



BCA LAB

Table of Contents

- 1. DELNET**
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- 4. NDL**
- 5. NPTEL**
- 6. e-PGPATHSHALA**
- 7. SWAYAM**

A WORKSHOP ON USAGE OF ONLINE RESOURCES & SERVICES - DATE - 25-2-2023.

SL. NO.	NAME OF THE STUDENT	CLASS	SIGNATURE
1.	ANJALI CHAND.B [21IAM0001]	3 rd Sem MFA	<u>Shyali</u>
2.	SONIVA R.B [21IAM0007]	3 rd Sem MFA	<u>Soniya</u>
3.	PRATHIBA . D [21IAM0004]	3 rd Sem MFA	<u>Prathiba D</u>
4.	PREETHI SANDEEP ^N [21IAM0005]	3 rd SEM MFA	<u>Preethi N</u>
5.	MESHANA . R [21IAM0003]	3 rd sem MFA	<u>Meshaan R</u>
6.	SINDHU . N.B [21IAM0006]	3 rd sem MFA	<u>Sindhu N.B</u>
7.	KRITHIKA . R [21IAM0002]	3 rd Sem MFA	<u>Krithika R</u>

Saetham

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C. S. Reddy

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Dr. M. DEVENORA
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25/2/2023

No	Name of the Student	class	Signature
1.	Sangeetha	M.COM(FA)	Sangeetha
2.	Angel Reena.s	M.com(FA)	Angel.
3.	Sumaiya kousar.g	M.com (FA)	Sumaiya
4.	Sabiha Fathima	M.com (F.A)	Sabiha
5	Nirosha.s	M.com(F.A)	Nirosha

Saenitha M

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27/2/23

NO	Name of the Student	Class	Signature
1)	Lakshmi C.K	I Msc Bt	
2)	Nithya.K.R	I Msc Bt	
3)	Vijayalakshmi.B.L	I Msc Bt	
4)	Lakshmi Priya.S	I Msc Bt	
5.	Sangeetha.S	I Msc Bt	
6.	Chaitra shree M.N	I Msc Bt	
7.	Pallavi.N	I Msc Bt	
8.	Sweta	I Msc Bt	
9.	Surya.S	I Msc Bt	
10	Rachel.V	I Msc Bt	
11.	Gagan.M.S.Gowda	I Msc Bt	
12	NITHIN KUMAR CV	I Msc Bt	
13.	GAYEETHRI.H.N	I Msc Bt	
14.	Tejawini.Hegde.	I Msc Bt	
15	HemaPradu.C	I Msc Bt	

Saeetham

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L. NO	Name of the Student	Class	Signature.
29	Navya. CM	I MSc BT	<u>Navya</u> CM
30	Gowtham SS	I MSc BT	Gowtham SS.
31	Jonna kutti Bhanu sagar	I MSc BT	J. Bhanu
32	Chethan L	I MSc BT	<u>Chethan</u> L
33	Kiran kumar. B.P	I MSc BT	<u>Kiran</u>
34	SOUVIK BHUNIA	I MSc BT	<u>Souvik</u>
35	CHIRANTH JAIN P	I MSc BT	Chiranth Jain P

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Chiranth Jain P
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No	Name of the Student	Class	Signature
16	MAHENDRA.M	1 st MSc BT	
17	BHAVYA C	1 st MSc BT	
18	LIKHITHA L	1 st MSc BT	
19	KAVYA.M	1 st MSc BT	
20	KUSUMA.A.B	I MSc BT	
21	SOUNDARYA MORE	I MSc-BT	
22	KAVYA SHREE.N	I MSc-BT	
23	GOVARDHINI.K	I MSc - BT	
24	SUPARNA BISWAS	I MSc-BT	
25	Inchana.R	I MSc BT	
26	Keethana.J.M	I MSc BT	
27	Sueha Manna	I M.sc.BT	
28	BHAVAN.KUMAR.A	I msc BT	

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Name

Department

Sign.

① AISHWARYA GOPINARENDRA
PATHAK

MSc. Microbiology

Aparale

② JOSHUA S. R

Msc Microbiology

③ ABHILASA BHATTACHARYA

MSc Microbiology

Abhi

④ MOHAMMAD MANSOOR
ZARIAN

MSc Microbiology

Mansoor

⑤ KEVIN SABU

MSc Microbiology

Kevin

⑥ SUDARSAN SARKAR

M.Sc Microbiology

~~Sudarsan S~~

⑦ NIYATHI.V

MSc. Microbiology

Niyathi

⑧ Pruthvi Raj.R

MSc. Microbiology

R. Pruthvi Raj

⑨ GOWTHAM. G.V.

Msc. Microbiology

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⑩ RESHMA R.N

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Reshma

⑪ MARIA PREETHI

MSc. MICROBIOLOGY

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⑫ Harshitha N.R

M.Sc Microbiology

Harshitha N.R

⑬ DEEVEN KUMAR BN

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⑭ CHANDAN.P

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- 19. Binchana. S Msc. Microbiology
- 20. Sparsha. B.D Msc. Mb
- 21. Nikhil. I-A Msc. Mb
- 22. Liketh Msc. Mb
- 23. Nithin. S Msc. Mb
- 24. Grace peniel A Raju MSC. Mb
- 25. Ami Baldairya Msc. Mb
- 26. Neeraj Krishna Msc Mb
- 27. Faizan Msc. Mb.
- 28. Liya Bhunia Msc. Mb.

Sul. S

Sparsha

Nikhil

Liketh

Nithin

Grace peniel A Raju

Ami

Neeraj Krishna

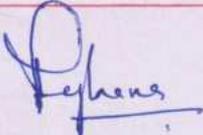
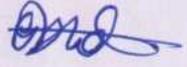
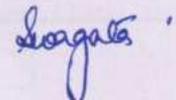
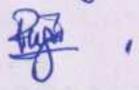
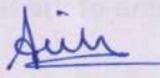
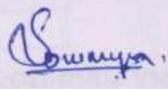
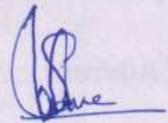
Faizan

Liya Bhunia

Liya Bhunia

A WORKSHOP ON USAGE OF ONLINE RESOURCES & SERVICES

Dept. of Genetics

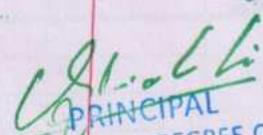
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A WORKSHOP ON USAGE OF ONLINE RESOURCES & SERVICES.

02/03/2023.

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10)	Shwetha. M	MSc (DS)	



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2022-24

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33	22IAMOS100	SANDEEP RED sandeep.22iamos100@iadc.ac.in <i>Sandeep</i>
34	22IAMOS101	SANDHYA HD sandhya.22iamos101@iadc.ac.in <i>Sandhya</i>
35	22IAMOS102	SANIYA TABASUM saniya.22iamos102@iadc.ac.in <i>SaniyaTabasum</i>
36	22IAMOS103	SHAILESHKUMAR HS shaileshkumar.22iamos103@iadc.ac.in <i>Shailesh</i>
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47	22IAMOS114	SUPRITHA S SUPRITHA.22IAMOS114@iadc.ac.in <i>Supritha</i>
48	22IAMOS115	SUPRIYA R Supriya.22IAMOS115@iadc.ac.in <i>Supriya.R</i>
49	22IAMOS116	SUSHMITHA R L sushmitha.22iamos116@iadc.ac.in <i>Sushmitha</i>
50	22IAMOS117	VEDHA CR vedha.22iamos117@iadc.ac.in <i>Vedha CR</i>
51	22IAMOS118	VISHNU BALAJI K vishnu.22iamos118@iadc.ac.in <i>Vishnu</i>

Saaritha.M
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Dept. of Library & Information Science



[Signature]
HOD Chemistry

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I.A.D.C. and Centre For

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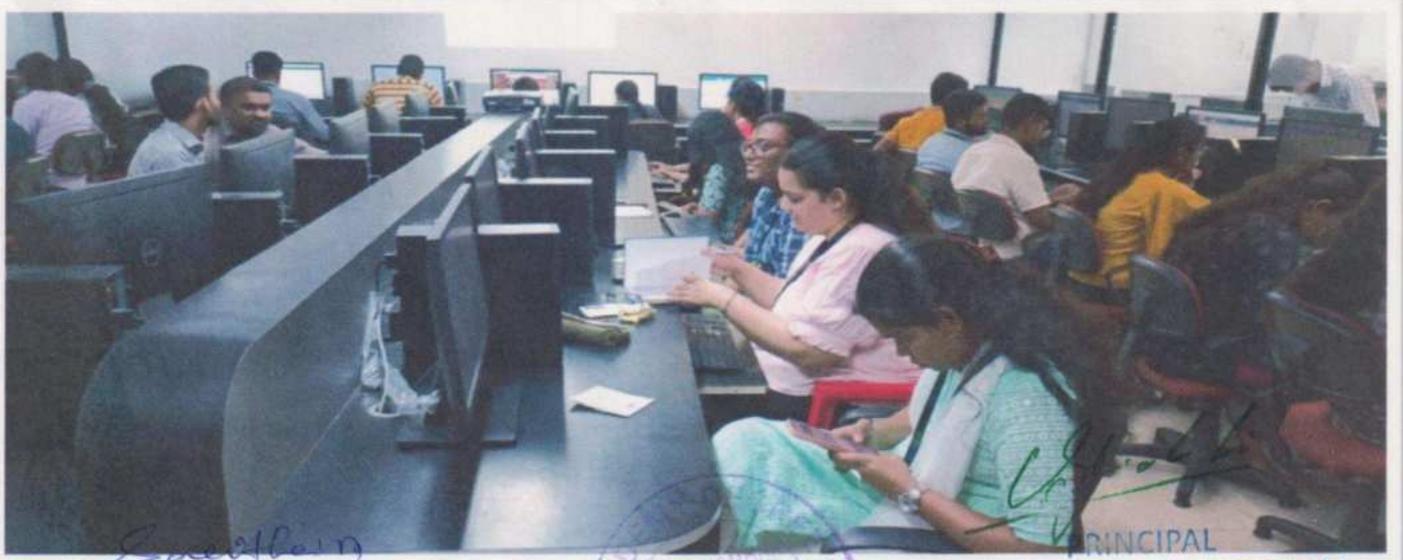
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CERTIFICATE OF APPRECIATION

THE FOLLOWING AWARD IS GIVEN TO

Mr/Ms. Venkatesha C N

Has successfully Participated A Workshop on Library Database & its Services
on 24th Feb - March 10th Organized by Dept.of Library & Information Centre Bangalore-560043

Saritha M

Saritha M
Chief Librarian



Srinidhi K Parthasarathi

Srinidhi K Parthasarathi
Principal

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Department of Microbiology

Institutional Visit to Agharkar Research Institute

Date: 16.12.2021

Class: III sem M.Sc., Microbiology students

Objective:

The objective of the institutional visit is to grasp knowledge in the area of bioenergy generation using anaerobic microorganisms and techniques involved.

About the Institute:

The Agharkar Research Institute, founded in 1946 as the Maharashtra Association for the Cultivation of Science Research Institute, was renamed in 1992 as the Agharkar Research Institute (ARI) in honour and memory of the Founder Director, the late Professor Dr. Shankar Purushottam Agharkar. The ARI is an autonomous research institution fully funded by the Department of science and Technology (DST) government of India, since 1966. It operates under the overall umbrella of the Maharashtra Association for the Cultivation of Science (MACS). The current research and development activities of ARI span across all areas of life sciences spread over six different themes, namely Biodiversity & Paleobiology, Bioenergy, Bioprospecting, Developmental Biology, Genetics & Plant Breeding, and Nano bioscience. The institute has a distinguished faculty, modern infrastructural facilities, well-equipped laboratories.

Anaerobic cellulolytic and methanogenic organisms from gobar gas plants were reported for the first time in India by the microbiology group of the Agharkar Research Institute. A specialized culture collection of anaerobic organisms was also established. The current research activities of the Bioenergy group are focused on "exploring and exploiting microorganisms for sustainable energy

About the Visit:

The visit started with a brief introduction to the concept of anaerobic microbes, their isolation from different environments, and their significance in bioenergy production. Introduction also included the information about facility operations, pre-processing technologies, feedstock types and sources, biogas cleaning systems, biogas production/uses, and solid/liquid digestate uses. Dr. Vikram demonstrated the techniques involved in the preparation of anaerobic media and inoculation of anaerobic microbes in to sterilized media. In addition, Dr. Vikram also demonstrated the analysis of products produced by anaerobic metabolism using advanced instruments such as high-performance liquid chromatography, gas chromatography and mass spectroscopy and liquid chromatography.

Outcome:

Students gained practical knowledge on the anaerobic preparation of media and the techniques involved in the cultivation of anaerobic microorganisms. Students also experienced the operation of Gas chromatography and High-Performance Liquid Chromatography.

Dr. P. Malaiyarasa Pandiyan

Dr. K. Sahithya

Faculties In-Charge




Prof. P. Rajarajan

HoD





M.Sc., Microbiology students in Agharkar Research Institute, Pune

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Department of Microbiology

List of students

Class: III Sem M.Sc., Microbiology

Date: 16.12.2021 AN

Industry/Institute Name: Agharkar Research Institute, Pune

Staff In-charge: Dr. P. Malaiyarasa Pandiyan & Dr. Sahithya K

Sl. No.	Reg. No.	Student Name	Attendance
1	20IAMOS060	Anjana J	Present
2	20IAMOS061	Ankita Biswas	Present
3	20IAMOS062	Arshiya M E	Present
4	20IAMOS063	Asweshvaran R	Present
5	20IAMOS064	Ayesha G	Present
6	20IAMOS065	Bawanshisha Syiemlieh	Present
7	20IAMOS066	Bhanushree C	Present
8	20IAMOS067	Chaithanya M	Present
9	20IAMOS068	Deeksha P	Present
10	20IAMOS069	Devika P R	Present
11	20IAMOS070	Ekanayake Wasala Mudiyansele Amanda Kakusanda Ekanayake	Present
12	20IAMOS071	Harshitha C K	Present
13	20IAMOS072	Hemanathan D	Present
14	20IAMOS073	Javeeth J	Present
15	20IAMOS074	Katherin Sylvia R	Present
16	20IAMOS075	Koteshwari M	Present
17	20IAMOS076	Meghana M Pastey	Present
18	20IAMOS077	Monisha Iyappan	Present
19	20IAMOS078	N B Karthik	Present
20	20IAMOS079	Neha Gupta	Present
21	20IAMOS080	Prakash B	Present
22	20IAMOS081	Priyanshi	Present
23	20IAMOS082	Qurath Ul Ain	Present
24	20IAMOS083	Rabina Sait	Present
25	20IAMOS084	Sindhu R	Present
26	20IAMOS086	T Mercy Scorlet	Present
27	20IAMOS087	T Mouli	Present

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DEPARTMENT OF MICROBIOLOGY

Industrial Visit

Place: Criyagen Agri & Biotech Pvt. Ltd. Bengaluru

Date: 29.11.2022

Time: 9.15 – 2.00

Name of the Resource Person: Dr. Bathina Poornesha, Senior scientist.

Aim of the Event: To gain knowledge in biofertilizer & biopesticides production and its application.

Objectives of Industrial visit:

- To acquire the skill knowledge about the mass production of biofertilizer.
- To acquire the knowledge of biopesticides and physico chemical.
- To gain knowledge in the biological analysis of soil, water and plant extracts.

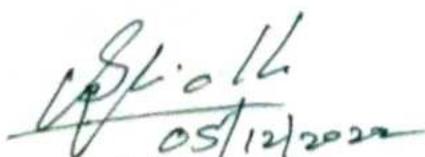
Outcomes of Industrial visit:

The students

- Understand the complete physico chemical analysis of soil, water and plant extracts.
- Understand the complete biological analysis of soil, water and plant extracts.
- Gain knowledge in the mass production of biochemical fertilizer, biofertilizer, Phosphate rich organic manure (PROM) and biocontrol agents.

About the event:

Criyagen Agri & Biotech Pvt.Ltd. is located at Doddaballapur – Nelamangala State Highway, Bengaluru is pioneer in developing innovative products for comprehensive crop production. It is one of the largest producer of Bio-chemical fertilizer, Biofertilizer, PROM and Bio control agents. Their products are suitable for all cropping conditions around the world to improve crop productivity and soil health. Their products tailored/designed to produce more crop yield per unit area while improving the eco system and bringing sustainability to agriculture. The patent and flagship bio-chemical product is sought after by farmers for enhanced crop productivity and soil-plant health. They are working towards enterprising new ideas and taking them to domestic and global markets.


05/12/2022
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Faculty Coordinator
Dr. S. Anu Kiruthika


HOD
Prof. P. Rajarajan
Department of Microbiology
Indian Academy Degree College
Hennur Cross, Hennur Main Road
Bangalore-560043

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Attendance of Industrial visit

Criyagen Agri & Biotech Pvt. Ltd. Bengaluru.

Date: 29.11.2022

Time: 9.15 - 2.00

S.No	Reg No	Students Name	Remarks
1	20IABSC025	ADITHI PRASAD	Absent
2	20IABSC026	ALAINA ARA	Present
3	20IABSC027	CHANDANA P V	Present
4	20IABSC028	DEEPTHI B	Present
5	20IABSC030	MANISHA SRI K	Present
6	20IABSC031	N S SHIVANI	Present
7	20IABSC032	NANCY	Present
8	20IABSC033	RANJITH KUMAR	Present
9	20IABSC034	SODH TECHI	Present
10	20IABSC037	HARI KEERTHANA	Present
11	20IABSC038	JEEVITHA G	Present
12	20IABSC039	K VANITHA	Present
13	20IABSC040	KALOMBO KAZADI MARDOCHEE	Present
14	20IABSC041	NIDA KHAN	Present
15	20IABSC042	NIKITHA V YADAV	Present
16	20IABSC043	RACHITHA K	Present
17	20IABSC044	RAHUL C	Present
18	20IABSC045	RUDRAKSHINI S	Present
19	20IABSC046	SHALINI V H	Present
20	20IABSC047	SHRAVANI	Present
21	20IABSC048	SYEDA ASMA TAJ	Present
22	20IABSC049	THANUSHA R	Present
23	20IABSC050	VANDANA S	Present

Faculty Coordinator
Dr. S. Anu Kiruthika



HOD
Prof. P. Rajarajan

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S. Anu
 Faculty Coordinator
 Dr. S. Anu Kiruthika



P. Rajarajan
 HOD

Prof. P. Rajarajan
 Department of Microbiology
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MB/2022-23/04

Date: 14.12.2022

DEPARTMENT OF MICROBIOLOGY

Circular

This is to inform all the III & V Semester B.Sc., Microbiology students that the Department is organising Industrial visit to KOMUL, Kolar on 19th December, 2022.

Objectives of the Visit:

1. To enhance the students' knowledge on essential steps in dairy industry
2. To provide students with a chance to meet industry professionals and entrepreneurs, who share their wisdom, learning, and experiences
3. To pursue knowledge about the organized collection of milk and production of pasteurized milk and milk products, toned milk, full cream milk and ice - creams with different flavours

Outcomes of the Visit:

- The visit will be a true learning experience for students and to understand the expectations of the dairy industry and interact with highly trained and experienced personnel.
- The visit will provide overall exposure to the microbiological aspects in the dairy industry
- The visit will also help the students to experience milk collection, processing, packaging, and storage units in dairy industry.

Location: Kolar-Chikkaballapura Cooperative Milk Producers Societies Union Limited (KOMUL), Kolar Dairy Premises, NH 75, Huthur, Post, Kolar, Karnataka 563102

Time of the departure: 9.00 AM

Time of arrival: 4.30 PM


HoD
Head

Department of Microbiology
Indian Academy Degree College
Hennur Cross, Hennur Main Road
Bangalore-560043


Principal
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DEPARTMENT OF MICROBIOLOGY

INDUSTRIAL VISIT TO KOMUL DAIRY INDUSTRY

DATE OF VISIT: 19th December 2022.

OBJECTIVE

The objective of the visit is to acquire knowledge in the dairy processing unit and production of dairy products

KOMUL DAIRY INDUSTRY

Kolar-Chikkaballapura District Co-operative Milk Producers Union Ltd., (KOMUL) is Karnataka's second highest Milk Producing District organisation. It is a District level apex body of milk cooperatives in Karnataka, which aims to provide remunerative returns to the farmers by eliminating the middlemen and also serve the interest of consumers by providing quality Milk & milk products, which are good value for money.

The area of operation is restricted to Kolar and Chikkaballapura Districts having 2919 villages of 11 revenue Taluks

Once the Dist. was named as Land of Gold & Silk, is making inroads in Quality Milk Production. It is KOMUL first installed " Bulk Milk Coolers & Community Milking Machines " at Society level in the state of Karnataka to get the quality milk required for UHT milk packed at Kolar Dairy under the brand name of nandini 'Good-Life '. Presently Union has full pledged dairy at Kolar with an installed capacity of 2.0 LLPD, and three chilling centers at Chinthamani, Sadli, & Gowribidnur with 1.0 LLPD capacity each respectively. KOMUL started marketing of liquid milk in polythene sachets in entire Kolar District and parts of Bangalore City since 1994. The Mnemonic Symbol of NDDB was adopted by the Union from April' 2002 to market the liquid milk.

STATUS

Kolar-Chikkaballapura District Co-operative Milk Producers Union is registered under Co-operative Societies act after bifurcation from Bangalore District Co-operative Milk

Producers Union on 23/03/1987. The area of operation is restricted to Kolar and Chikkaballapur Districts having 2919 villages of 11 revenue Taluks.

Dairy plants are found all over the world, but because their sizes and the types of manufactured products vary tremendously, it is hard to give general characteristics. The dairy industry can be divided into several production sectors. Each division produces wastewater of a characteristic composition, depending on the kind of product that is produced (milk, cheese, butter, milk powder, condensate). Dairy plants process the raw milk they receive from farmers so as to extend its marketable life. Two main types of processes are employed: heat treatment to ensure the safety of milk for human consumption and to lengthen its shelf-life, and dehydrating dairy products such as butter, hard cheese and milk powders so that they can be stored. The dairy industry involves processing raw milk into products such as consumer milk, butter, cheese, yogurt, condensed milk and ice cream using processes such as chilling, pasteurization and homogenization.

Dairy processing plants is divided into two categories:

Fluid milk processing involving the pasteurization and processing of raw milk into liquid milk for direct consumption as well as cream, flavoured milk and fermented products such as buttermilk and yogurt.

Industrial milk processing involving the pasteurization and processing of raw milk into value added dairy products such as cheese and butter and other milk fats, milk powder and condensed milk, whey powder and other dairy ingredients and ice cream and other frozen dairy products.

DAIRY PROCESSING ACTIVITIES:

Raw milk collection and storage: The raw milk is collected from various areas and nearby villages daily. The first steps in preserving the quality of milk should be taken at the farm. To achieve the best quality milk at intake, milking conditions must be as hygienic as possible. The milk must be chilled to below +4°C immediately after milking and be kept at this temperature during transport to the dairy. Raw milk is collected and transported to the processing plant in stainless steel.

Standardization: Separation and Centrifugal separation and clarification is common in dairy processing to ensure further processing of standard products avoiding quality variations. Standardization of the dry matter for fat, protein and lactose content of the milk usually takes place in the production phase of most dairy products.

MILK PRODUCTION: Typical starter bacteria include *Lactococcus lactis subsp. lactis* or *cremoris*, *Streptococcus salivarius subsp. thermophilus*, *Lactobacillus delbruckii subsp. bulgaricus*, and *Lactobacillus helveticus*.

The initial process needs milk collection from the dairy livestock and after collection of milk it is transported to dairy plants, separations, clarification, homogenization, pasteurization and at the lastly pack the products for sell.

Milk Tanks: The milk tanks are the prime components in any milk processing plants that used to store raw milk, skimmed milk or cream. The pre-stack tanks, milk tanks, interim tank and mixing tanks are mainly used in processing plants to provide good quantity milk.

Pasteurizers: Pasteurization is the process of heat treatment of a product to reduce enzymatic activity and kill pathogenic bacteria. This process can be done by using pasteurizers The main purpose of pasteurization in dairy plants is to make the product safe for use and to extend product shelf life.

Separators: After pasteurizers, the separators come as third main equipment in milk plants that ensure the excellent products quality and high performance in milk skimming by preventing intake of destructive air.

Homogenizers: At last, the homogenizer helps to achieve the different variety of products, improves the texture, taste and viscosity of cream or juice-based drink and prevents a cream line and sedimentation in the milk products. It is essential to use homogenizers for set up effective and successful milk processing plants. The next milk plants procedure is that need to check all collected milk for transparency and quality. It is important to use separators that separate microbes and germs for milk consumption. It is also known as clarification process. After these steps, it is easy to collect whole milk in milk tanks for the packing and lastly packed in the packets and bottles. The final milk production process is the product packaging in the bottle, cartons and plastic bags. These packaging are useful for long life of products from the dairy to other different places.

LEARNING FROM THE VISIT:

The visit was very informative, and the entire working process of the industry was observed. The production of milk and other milk products were studied. The collection of milk, its processing, pasteurization, packaging and storage was observed and studied. The different storage environment with varying temperatures were seen and the cooling systems were observed. Other than the milk and milk products processing units the waste treatment plant of the industry was also observed. Anaerobic digester, aeration tank and oxidation ponds were observed in which the effluents of the industry were treated, and the water tanks and pipes were present to restore the less toxic effluents which can then be discharged. All this

techniques and learning helps us to better understand the milk and milk products processing and the effluent treatments which is helpful for various applications.



OUTCOME OF THE VISIT

II & III B.Sc., Microbiology students learned about the commercial production of milk and milk products and its quality control. In addition they learned the technical details of Milk Processing Unit.

Faculty In - Charge

DR.P.MALAIYARASA PANDIAN

DR.SAHITHYA K.

HOD

PROF. P.RAJARAJAN

For

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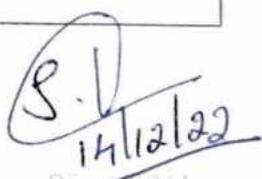
LIST OF STUDENTS FOR KOMUL VISIT

Class: III & V Sem B.Sc., Microbiology

Sl. No.	Reg. No.	Student Name	Sl. No.	Reg. No.	Student Name
1	20IABSC026	ALAINA ARA	24	21IABSC037	BELICIA E
2	20IABSC027	CHANDANA	25	21IABSC038	HARMINE TASNEEM
3	20IABSC028	DEEPTHI B	26	21IABSC040	LEKHA S
4	20IABSC030	MANISHA SRI	27	21IABSC039	KUMAR CHANDU
5	20IABSC032	NANCY	28	21IABSC040	LEKHA S
6	20IABSC033	RANJITH KUMAR	29	21IABSC041	LOKESHWARI M
7	20IABSC031	SHIVANI	30	21IABSC042	MANOJ SN
8	20IABSC037	HARI KEERTHANA	31	21IABSC043	NANDINI DEB SINGHA
9	20IABSC038	JEEVITHA	32	21IABSC044	NANDINI T
10	20IABSC039	VANITHA	33	21IABSC045	SONY T
11	20IABSC040	KALOMBO KAZADI	34	21IABSC046	SREEJONI ADHIKARI
12	20IABSC041	NIDA KHAN	35	21IABSC047	SUPRIYA P
13	20IABSC042	NIKITHA	36	21IABSC048	SWAGATA BANERJEE
14	20IABSC043	RACHITHA	37	21IABSC049	THAMMINENI RAGHU
15	20IABSC044	RAHUL	38	21IABSC062	ANKITA DIGAL
16	20IABSC045	RUDRAKSHINI	39	21IABSC063	DEEPIKA E S
17	20IABSC046	SHALINI	40	21IABSC064	DEEPIKA N
18	20IABSC047	SHRAVANI	41	21IABSC065	FARHATH BANU
19	20IABSC048	SYDA ASMA	42	21IABSC066	N HARISH KIRAN
20	20IABSC049	THANUSHA	43	21IABSC068	SHABANA BEGUM S
21	20IABSC050	VANDANA	44	21IABSC069	SINDHU J
22	21IABSC035	AKSHATHA R	45	21IABSC072	ZAKIYA KHANUM
23	21IABSC036	ARPITHA H L			


Dr P. Malaiyarasa Pandiyan & Dr. Sahithya K

Faculties In-Charge


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MB/2021-22/015

Date: 23.04.2022

CIRCULAR

Department of Microbiology is organizing a guest lecture for all the B.Sc., and M.Sc., life science students on **26th April, 2022** from 11 am to 1 pm. All the students and faculty are invited for the guest lecture in Seminar hall-II.

Resource person	Title
Mr. C. Senthil Kumar, Research Associate, Directorate of National Centre for Vector Borne Disease Control, Regional Office for Healthy and Family Welfare, Koramangala, Bangaluru-34	Overview about Biology of Parasitism: Malaria – Causes, symptoms, diagnosis, morphology & lifecycle

Objective:

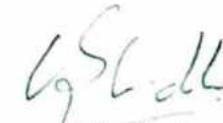
To increase comprehensive awareness on Malaria.

Outcome:

Students will develop awareness on disease detection, early treatment-seeking, prevention and elimination of malaria disease.


HOD

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Department of Microbiology

Date & time: 26.04.2022, 11 am to 1 pm

Topic: Overview about Biology of Parasitism: Malaria – Causes, symptoms, diagnosis, morphology & lifecycle

Resource person: Mr. C. Senthil Kumar, Research Associate, Directorate of National Centre for Vector Borne Disease Control, Regional Office for Healthy and Family Welfare, Koramangala, Bangaluru-34

ATTENDANCE SHEET

Sl. No.	Register no.	Name of the student	Attendance
1.	201ABSC037	Hari Keerthana	<i>[Signature]</i>
2.	201ABSC042	Nikitha v yadav	<i>[Signature]</i>
3.	201ABSC011	Lokith. V	<i>[Signature]</i>
4.	201ABSC006	Yashwanth	<i>[Signature]</i>
5.	201ABSC021	Trisha Bhattacharya	Trish
6.	201ABSC045	Rudrakshini. S	R.S.
7.	201ABSC009	Lakshmi priya. M.P	Lakshini
8.	21IABSC019	NOOR RABIYA [BSc 2 nd sem BcBt]	Noor Rabiya
9.	201AMDS026	Bhavani. M.P	Bhavi M.P
10.	201AMDS036	Sharina. N. K	<i>[Signature]</i>
11.	201AMDS067	Chaitanya. M (MSc. MB)	Chaitanya
12.	201AMDS070	Amanda Ekanayake (MSc. MB)	Amyale.
13.	201AMDS079	Nehe Gupta (MSc MB Iyc)	Nehe .
14.	201AMDS065	Bawanshuha Syamlich	Bawanshuha
15.	21PG371	chaitraa reddy. S (MSc, PC)	Chaitra
16.	21PG205	Swathi. M (MSc BC) 2 nd yr	Swathi

17.	21PG368	APOORVA. BREDDY (M.Sc I st sem BC)	Apoorva
18.	21IABSC020	Priyoshi Ghosh (Bsc 2 nd sem BCBT)	Priyoshi
19.	21IABSC055	K.N Madhavi (Bsc II sem BCG)	K.N. Madhavi
20.	21IABSC062	Ankita Djal (Bsc II sem CMB)	Ankita
21.	21IABSC048	Swagata Banerjee (Bsc. CMB sem 2)	Swagata Banerjee
22.	21IABSC035	Aleshatha R (BSC. CMB sem II)	Aleshatha
23.	21IABSC041	Lokeshwari M (Bsc cmb sem II)	Lokeshwari M
24.	21IABSC066	Harish Iairan (BSC CMB sem II)	Harish Iairan
25.	20IABSC046	Shalini VH (BSC GBCMB IV sem)	Shalini
26.	20IABSC013	Nikshitha. M (BSC YBCBT IV sem)	Nikshitha M
27.	20IABSC039	K. Vanitha (BSC YBCMB IV sem)	Vanitha K
28.	20IABSC049	Jhanvika R (BSC YBCMB IV sem)	Jhanvika R
29.	20IABSC032	Nancy. A (BSC CZMB IV sem)	Nancy. A
30.	21IABSC068	S. Shabana Begum (2 nd sem CMB)	Shabana
31.	21IABSC036	Aspitha H.L (2 nd sem CMB)	Aspitha H.L.
32.	21IABSC064	Farhath Banu (2 nd sem CMB)	Farhath Banu
33.	21IABSC063	Deepika F.S (2 nd sem CMB)	Deepika F.S.
34.	20IABSC044	Rahul C (Bsc GBCMB IV sem)	Rahul C
35.	20IABSC018	Ravi Kumar (B.S.C GBCBT IV sem)	Ravi Kumar
36.	20IABSC033	Ranjith Kumar (BSC CZMB IV sem)	Ranjith Kumar
37.	20IABSC055	KAMINI G (BSC CZBT IV sem)	Kamini G.
38.	20IABSC026	Alaina (BSC CZMB IV sem)	Alaina
39.	20IABSC028	Deepthi (BSC CZMB IV sem)	Deepthi B
40.	20IABSC051	Annasa (BSC CZBT IV sem)	Annasa
41.	20IABSC058	Sukanya (BSC CZBT IV sem)	Sukanya
42.	20IABSC027	chandana (Bsc CZMB IV sem)	chandana
43.	20IABSC005	chiranth (BSC GBCBT IV sem)	Chiranth
44.	20IABSC025	Adithi C BSC CZMB IV sem	Adithi

45.	21PG223	Raju. E. K MSc I st sem (BC)	Raju. E. K.
46.	21PG386	Sagar. M. (MSc-B) - I st sem	Sagar. M.
47.	20TABSC038	Jeevitha. G (BSc, GBCMB) IV th sem	Jeevitha. G.
48.	20TABSC023	Vinitha. M (BSc. GBCBT) IV th sem	Vinitha. M.
49.	21TABSC011	JAISON WILLIAM. J. (BSc. BcBT) II nd sem	JAISON
50.	21TABSC078	YATHISH. S (ZBC) II nd sem	YATHISH
51.	20TABSC022	Vinay Kumar. V (GBCBT) IV th sem	Vinay Kumar. V.
52.	20TABSC040	KALOMBA KARAB IV SEM	KALOMBA
53.	21TABSC029	Vivekanand k. v. II nd sem	Vivekanand
54.	19TABSC089	Chaitanya. S. K.	Chaitanya
55.	19TABSC083	Abhinav. A. P.	Abhinav
56.	19TABSC051	Shejini Ruth Suresh	Shejini
57.	21PG376	Ajith. D. D MSc. BC 1 st	Ajith. D. D.
58.	21PG367	NIRMA KUMAR. R (MSc BC 1 st sem)	Nirma Kumar R.
59.	21PG374	Mahadevoprasad. B. CMSC Bc 1 st sem	Mahadevoprasad
60.	21PG378	Gagan M. Sc B. C 1 st	Gagan
61.	20TABSC059	Sueela Halder (4 th sem)	Sueela
62.	20TABSC030	Manisha Sri. K (4 th sem)	Manisha
63.	21PG282	Hadiya. K (MSc 1 st year) Biotech	Hadiya
64.	21PG382	Saisam vijayalakshmi (MSc 1 st yr) Bio Chem	S. Vijayalakshmi
65.	21PG372	Niveditha. M. (MSc 1 st yr) BC	Niveditha. M.
66.	21PG207	SABIRA (MSc 1 st sem Biochemistry)	SABIRA
67.	21PG339	Umme Ul Noor (MSc 1 st sem Biochemistry)	Umme Ul Noor
68.			
69.	MSc - MB 1 st	Pavan kumar. A	pavan.
70.	MSc - MB 1 st	Nikhil. IA	Nikhil
71.	M. Sc - MB 1 st	JASWANATH	Jaswanath
72.	M. Sc - MB 1 st	HARISH. K. R.	HARISH

73.	M.Sc. I MB	RAHUL.E	E. Bal
74.	M.Sc. I ^(MB) Sem	Praakash B	Praakash B.
75.	M.Sc. I ^(MB) Sem	Shashank.V	
76.	M.Sc. I ^(MB) Sem	Ranjith Kumar	
77.	IMSC I MB	ASHWINI V	Ashwini V.
78.	IMSC I MB	JOYCEE MADALEWE SRINIVASAN	Joyce
79.	IMSC I MB	RAKSHA.R	Raksha
80.	IMSC MB	JAVEETH	Javeeth
81.	II MSc MB	BHANUSHREE.C	Bhanushree
82.	II MSc MB	T. MOULI	Mouli
83.	II M.Sc MB	ANKITA BISWAS	Ankita
84.	II M.Sc mb	PRIYANSHI SINGH	Priyanshi.
85.	II nd Msc. MB	Devika P.R	Devika
86.	II M.Sc (MB)	Deeksha.P	Deeksha
87.	II M.Sc (MB)	HARSHITHA.C.K	Harshitha
88.	II M.Sc (MB)	Kolishwarri.M	Kolishwarri
89.	II MSc (MB)	Meghana Parthey	Megha
90.	II MSc (MB)	Monisha Tyappan	Monisha
91.	IV BSc (BT)	Rahul pravin	Rahul
92.	IV (GBcMb)	Shravani	Shravani
93.	IV (GBcMb)	Rachitha	Rachitha.
94.	IV (GBcMb)	Syeda Asma Iy	Syeda Asma
95.	IV (GBcMb)	vandana.s	Vandana
96.	IV (GBcMb)	Nida Khan	Nida Khan
97.	I. MSc (MB)	B. Priyanka	B. Priyanka
98.	I. Msc [MB]	Alice Sheba.S	Alice Sheba.S
99.	I.MSc (MB)	M.Moralisha	M.Moralisha
100.	I.Msc (MB)	Brunda.B	Brunda

101.	I MB.C (MB)	ANUSHA K.P	Anusha K.P
102.	I MSc (MB)	Divya . P	Divya
103.	I MSc (MB)	Monalisa . S	Monalisa . S
104.	I BSc (2 nd Sem)		
105.	2 nd IABSc 060 2 nd BSc (2 nd Sem)	K. Sree Nitya (GBC)	Nitya
106.	2 nd IABSc 064 2 nd BSc (2 nd Sem)	Dasari . S. Ajitha Roy	Ajitha
107.	2 nd IABSc 051 2 nd BSc (2 nd Sem)	Mrudula . G (GBC)	G. Mrudula
108.	2 nd IABSc 061 2 nd BSc (2 nd Sem)	Umme Javeria (GBC)	Umme J.
109.	2 nd IABSc 059 I MSc (MB)	Rajani . P (GBC)	Rajani . P
110.	I MSc (MB)	Sanjathe K.P	Sanjathe
111.	I MSc (MB)	Vaishnavi A.	Vaishnavi
112.	I M.Sc (MB)	Pooja Pandey	Pooja Pandey
113.	I M.Sc (MB)	Sidha Khousin	Sidha
114.	I M.Sc (MB)	Sukanya Dutta	Sukanya Dutta
115.	I M.Sc (MB)	S M.P Sandhya	Sandhya
116.	I M.Sc (MB)	Shilpa . S	Shilpa . S
117.	I M.Sc (MB)	Shalini M	Shalini . M
118.	I M.Sc (MB)	Rukranda . S	Rukranda . S
119.	I M.Sc (MB)	Keerthi Varma	Keerthi Varma
120.	I BSc (BcBE)	Harshitha . S	Harshitha
121.	I BSc (BcBE)	Varsha P.N	Varsha P.N
122.	I BSc (BcBE)	Shashikala . V	shashikala
123.	I BSc (BcBE)	Sahana . V	Sahana
124.	I BSc (GBC)	Hujilka . Rani NJ	Hujilka . Rani
125.	I BSc (BcBT)	Noor kateja	Noorkateja
126.	II ^{sem} BSc (BcBT)	Vishwas . M	Vishwas . M.
127.	II ^{sem} BSc (BcBT)	Akash . A	Akash . A
128.	II ^{sem} BSc (BcBT)	Nithin . S	Nithin . S
129.	II ^{sem} BSc (ZBC)	Sai Kumar	Sai

129.	^{sem} II BSc(CMb)	Manoj. S. N	(M)
130.	II BSc(BCB)	Shekar.k.v	Shekar.k.v
131.	II BSc(CMb)	Kumara Chandu. K	Kumara Chandu.k.
132.	II BSc(CMb)	Thammineni Paghui	Paghui.
133.	^{sem} II BSc(CZBC)	K.K.AKASH	AKASH
134.	^{sem} II BSc(RT&C)	Mohamed Sakel Khar	
135.	^{sem} II BSc(RT&C)	Kashif Pasha. F	
136.	BSc 2 nd sem (CBET)	Harshavardhana pandu. D.S.	Harshavardhana pandu. D.S.
137.	II MSc [BT]	AKbar babu	AKbar
138.	II MSc [B]	Manjunatha.VL	Manjunatha.VL
139.	^{fourth} II BSc(CZBT)	Rohith Rajesh	Rohith
140.	IV sem BSc(CZBT)	Thavathi . M	Thavathi . M
141.	IV Sem BSc(CZBT)	Teeshan Ahmed	Teeshan Ahmed
142.	IV th sem BSc(CZBT)	shiva sathya K.E	shiva sathya K.E
143.	IV th Sem (CZBT)	J. SATYA NARAYANA	J. SATYA NARAYANA
144.	IV Sem(CZBT)	Darshan . V	Darshan . V
145.			
146.			
147.			
148.			
149.			
150.			

Prof. P. Rajarajan

Faculty In-Charge

HoD

INDIAN ACADEMY

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Guest Lecture/ Seminar Expenditure

Department : Microbiology
Name of the Speaker : Mr. C. Senthil Kumar
Designation : Research Associate
Address : Directorate of National Centre for
Vector borne disease control, Bangalore
Date of the Programme : 26-04-2022
Audience : B.Sc. & M.Sc. life science students
Topic : Overview about biology of Parasitism
Hon[✓]orarium/Memento : ₹. 2000/-
Conveyance : Nil
Bouquet : ₹. 300/-
Miscellaneous : ₹. 10/-

Signature of the HOD

Date: 27/04/22

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Autonomous
Hennur Cross, Kalyan Nagar
Bangalore - 560043

INDIAN ACADEMY

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GUEST LECTURES

Speaker : C. SENTHEL KUMAR

Designation : Research Assistant,

Topics : Biology of Parasitism Malaria, Causes, mode of transmission, Sign & Sympt treatment

Nature of Audience : Very good, eager to learn

Date & Time : 26/4/2022 11 AM to 1.00 PM

Views of the Speaker : happy to interact with students and professors of Dept of Microbiology & life science



Signature of the guest

Views of the beneficiaries

Remarks

3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs) (2) & 3.2.2 Percentage of teachers having research projects during the last five years (2) 3.2.4 Average Percentage of departments having Research projects funded by government and non government agencies during the last five years (3)

S.No.	Name of the Principal Investigator/ Co Investigator (if applicable)	Name of the Funding agency	Type (Government/Non-Government)	Department of Principal Investigator/ Co Investigator	Year of Award	Funds provided (INR in lakhs)	Duration of the project	
1	Sudhakar Malla	SPP Biofuel Project	Government	Biotechnology	2020-2021	0.08	6 months	14000
2	Dr. Suma T K	SPP Biofuel Project	Government	Biotechnology	2020-2021	0.08	6 months	
					2	0.16		
1	Sudhakar Malla and Dr. Sibi G	SPP Biofuel Project	Government	Biotechnology	2019-2020	0.06	6 months	verified
2	Sudhakar Malla	SPP Biofuel Project	Government	Biotechnology	2019-2020	0.06	6 months	verified
3	P. Rajarajan	SPP Biofuel Project	Government	Microbiology	2019-2020	0.07	6 months	verified
					3	0.19		
1	Dr. Sibi G	SPP Biofuel Project	Government	Biotechnology	2018-2019	0.125	6 months	verified
2	Sudhakar Malla	SPP Biofuel Project	Government	Biotechnology	2018-2019	0.095	6 months	verified
3	Sudhakar Malla	SPP Biofuel Project	Government	Biotechnology	2018-2019	0.11	6 months	verified
4	Dr. Susanta Pahari	Establishing the facility for Molecular Biology and Bioinformatics Research	Government	Biochemistry	2018-2019	10	3 years	verified
5	Dr. Sibi G	INSPIRE Internship Science Camp	Government	Biotechnology	2018-2019	9.75	5 days	800000
					5	20.08		
1	Dr. Sibi G	SPP Biofuel Project	Government	Biotechnology	2017-2018	0.13	6 months	verified
2	Dr. Sibi G	SPP Biofuel Project	Government	Biotechnology	2017-2018	0.12	6 months	verified
3	Dr. K. Prashanthi	DBT Star College Scheme	Government	Biochemistry	2017-2018	82	3 years	6800000
4	Dr. Sibi G	INSPIRE Internship Science Camp	Government	Biotechnology	2017-2018	9.75	5 days	verified
					4	92		
1	Dr. Sibi G	SPP Biofuel Project	Government	Biotechnology	2016-2017	0.105	6 months	verified
2	Dr. Amrita Roy	Early Career Research Grant	Government	Biotechnology	2016-2017	52.64	3 years	2299684
3	Dr. Sibi G	INSPIRE Internship Science Camp	Government	Biotechnology	2016-2017	9.75	5 days	verified
					3	42.495		
					17	154.925		

1	New Horizons in Chemical & Biochemical Sciences	INDIAN ACADEMY OF SCIENCES	Chemistry & Biochemistry	2016-17	1.28
2	Mathematical Analysis and applications	INDIAN ACADEMY OF SCIENCES	Mathematics	2017-18	1.11
3	New Frontiers in Chemistry	INDIAN ACADEMY OF SCIENCES	Chemistry	2018-19	1.00
4	Cognitive and Behavioural Sciences	INDIAN ACADEMY OF SCIENCES	Genetics	2018-19	0.91
					4.30

INDIAN ACADEMY

Degree College - Autonomous

Department of Microbiology

Report on Industrial/Institutional Visit

Date: 17.12.2021

Industry: Mapro Food Industry, Mahabaleswar

Class: III sem M.Sc., Microbiology students

Objectives:

- To provide an insight to students into the internal working of companies.
- To provide students with a chance to meet industry professionals, who share their wisdom, learning, and experiences.
- To pursue knowledge about the production and processing of different food products.

About the Industry:

Mapro is a food processing company founded in 1959, in the hill-town of Panchgani, near Mahabaleswar - a popular tourist destination near Mumbai and Pune. Mapro is a market leader in Western India with an annual processing capacity of around 30 thousand MT, founded in 1959. The company has grown organically over the last five decades with sustained profitability. Started the first self-owned factory in 1989 and then set up state-of-the-art cold storage at Wai, in 2005, which is capable of precooling 20 MT of fresh fruits and produce chocolate. The company has grown organically over the last five decades with sustained profitability. Known for its quality and innovation, Mapro has been built on its founder's philosophy of developing products that are wholesome, nutritious, value-for-money, and imaginative.

Mapro's portfolio of products provides a high quotient of natural fruit in the form of Jams, Fruit bars and chews, Syrups, Crushes, Squashes, and Dessert Toppings. Its range of premium products such as Thandai crush and Kesar syrup are made from the finest selection of exotic ingredients. Mapro's products are known for their wholesome taste and quality, as

also their natural goodness and nutritive value. Mapro was the pioneer of fruit-based confectionery in India, with its first jelly sweets being made from fruit juices and liquid glucose. The 'Falero' pulpy fruit chews, which are better known as 'pates de Fruit' in the rest of the world – are excellent exemplars of Mapro's very own Innovation Labs. Faleros come in unique indigenous flavours that are suited to the Indian palate, like Kacchi Kairi (Raw Mango), Alphonso Mango and Strawberry.

About the Visit:

The visit started with the animation movie for showing glimpse of Mapro industry from its beginning at Panchgani. It also gave introduction of company profile and its present functioning in food industry for different products. The technical team has explained automation of different food products like chocolates, syrups and jams through presentation containing many functional block diagrams and existing machineries.

Outcome:

The Industrial Visit complemented theoretical knowledge with practical experience. Students also gained information about the development of processed foods ranging from jellies to fruit syrups and from crushes to dessert toppings.

Dr. P. Malaiyarasa Pandiyan



Dr. K. Sahithya



Faculties In-Charge

Prof. P. Rajarajan



HoD



M.Sc., Microbiology Students in Mapro Industry

INDIAN ACADEMY

Degree College - Autonomous

Department of Microbiology

List of students

Class: III Sem M.Sc., Microbiology

Date: 17.12.2021

Industry/Institute Name: Mapro Food Industry, Mahabaleswar

Staff In-charge: Dr. P. Malaiyarasa Pandiyan & Dr. Sahithya K

Sl. No.	Reg. No.	Student Name	Attendance
1	20IAMOS060	Anjana J	Present
2	20IAMOS061	Ankita Biswas	Present
3	20IAMOS062	Arshiya M E	Present
4	20IAMOS063	Asweshvaran R	Present
5	20IAMOS064	Ayesha G	Present
6	20IAMOS065	Bawanshisha Syiemlieh	Present
7	20IAMOS066	Bhanushree C	Present
8	20IAMOS067	Chaithanya M	Present
9	20IAMOS068	Deeksha P	Present
10	20IAMOS069	Devika P R	Present
11	20IAMOS070	Ekanayake Wasala Mudiyansele Amanda Kakusanda Ekanayake	Present
12	20IAMOS071	Harshitha C K	Present
13	20IAMOS072	Hemanathan D	Present
14	20IAMOS073	Javeeth J	Present
15	20IAMOS074	Katherin Sylvia R	Present
16	20IAMOS075	Koteshwari M	Present
17	20IAMOS076	Meghana M Pastey	Present
18	20IAMOS077	Monisha Iyappan	Present
19	20IAMOS078	N B Karthik	Present
20	20IAMOS079	Neha Gupta	Present
21	20IAMOS080	Prakash B	Present
22	20IAMOS081	Priyanshi	Present
23	20IAMOS082	Qurath Ul Ain	Present
24	20IAMOS083	Rabina Sait	Present
25	20IAMOS084	Sindhu R	Present
26	20IAMOS086	T Mercy Scorlet	Present
27	20IAMOS087	T Mouli	Present

INDIAN ACADEMY

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MB/2022-23/04

Date: 14.12.2022

DEPARTMENT OF MICROBIOLOGY

Circular

This is to inform all the III & V Semester B.Sc., Microbiology students that the Department is organising Industrial visit to KOMUL, Kolar on 19th December, 2022.

Objectives of the Visit:

1. To enhance the students' knowledge on essential steps in dairy industry
2. To provide students with a chance to meet industry professionals and entrepreneurs, who share their wisdom, learning, and experiences
3. To pursue knowledge about the organized collection of milk and production of pasteurized milk and milk products, toned milk, full cream milk and ice - creams with different flavours

Outcomes of the Visit:

- The visit will be a true learning experience for students and to understand the expectations of the dairy industry and interact with highly trained and experienced personnel.
- The visit will provide overall exposure to the microbiological aspects in the dairy industry
- The visit will also help the students to experience milk collection, processing, packaging, and storage units in dairy industry.

Location: Kolar-Chikkaballapura Cooperative Milk Producers Societies Union Limited (KOMUL), Kolar Dairy Premises, NH 75, Huthur, Post, Kolar, Karnataka 563102

Time of the departure: 9.00 AM

Time of arrival: 4.30 PM


HoD
Head

Department of Microbiology
Indian Academy Degree College
Hennur Cross, Hennur Main Road
Bangalore-560043


Principal
INDIAN ACADEMY DEGREE COLLEGE
AUTONOMOUS
HENNUR MAIN ROAD, KALYAN NAGAR
BANGALORE-560043, KARNATAKA

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DEPARTMENT OF MICROBIOLOGY

INDUSTRIAL VISIT TO KOMUL DAIRY INDUSTRY

DATE OF VISIT: 19th December 2022.

OBJECTIVE

The objective of the visit is to acquire knowledge in the dairy processing unit and production of dairy products

KOMUL DAIRY INDUSTRY

Kolar-Chikkaballapura District Co-operative Milk Producers Union Ltd., (KOMUL) is Karnataka's second highest Milk Producing District organisation. It is a District level apex body of milk cooperatives in Karnataka, which aims to provide remunerative returns to the farmers by eliminating the middlemen and also serve the interest of consumers by providing quality Milk & milk products, which are good value for money.

The area of operation is restricted to Kolar and Chikkaballapura Districts having 2919 villages of 11 revenue Taluks

Once the Dist. was named as Land of Gold & Silk, is making inroads in Quality Milk Production. It is KOMUL first installed " Bulk Milk Coolers & Community Milking Machines " at Society level in the state of Karnataka to get the quality milk required for UHT milk packed at Kolar Dairy under the brand name of nandini 'Good-Life '. Presently Union has full pledged dairy at Kolar with an installed capacity of 2.0 LLPD, and three chilling centers at Chinthamani, Sadli, & Gowribidnur with 1.0 LLPD capacity each respectively. KOMUL started marketing of liquid milk in polythene sachets in entire Kolar District and parts of Bangalore City since 1994. The Mnemonic Symbol of NDDB was adopted by the Union from April' 2002 to market the liquid milk.

STATUS

Kolar-Chikkaballapura District Co-operative Milk Producers Union is registered under Co-operative Societies act after bifurcation from Bangalore District Co-operative Milk

Producers Union on 23/03/1987. The area of operation is restricted to Kolar and Chikkaballapur Districts having 2919 villages of 11 revenue Taluks.

Dairy plants are found all over the world, but because their sizes and the types of manufactured products vary tremendously, it is hard to give general characteristics. The dairy industry can be divided into several production sectors. Each division produces wastewater of a characteristic composition, depending on the kind of product that is produced (milk, cheese, butter, milk powder, condensate). Dairy plants process the raw milk they receive from farmers so as to extend its marketable life. Two main types of processes are employed: heat treatment to ensure the safety of milk for human consumption and to lengthen its shelf-life, and dehydrating dairy products such as butter, hard cheese and milk powders so that they can be stored. The dairy industry involves processing raw milk into products such as consumer milk, butter, cheese, yogurt, condensed milk and ice cream using processes such as chilling, pasteurization and homogenization.

Dairy processing plants is divided into two categories:

Fluid milk processing involving the pasteurization and processing of raw milk into liquid milk for direct consumption as well as cream, flavoured milk and fermented products such as buttermilk and yogurt.

Industrial milk processing involving the pasteurization and processing of raw milk into value added dairy products such as cheese and butter and other milk fats, milk powder and condensed milk, whey powder and other dairy ingredients and ice cream and other frozen dairy products.

DAIRY PROCESSING ACTIVITIES:

Raw milk collection and storage: The raw milk is collected from various areas and nearby villages daily. The first steps in preserving the quality of milk should be taken at the farm. To achieve the best quality milk at intake, milking conditions must be as hygienic as possible. The milk must be chilled to below +4°C immediately after milking and be kept at this temperature during transport to the dairy. Raw milk is collected and transported to the processing plant in stainless steel.

Standardization: Separation and Centrifugal separation and clarification is common in dairy processing to ensure further processing of standard products avoiding quality variations. Standardization of the dry matter for fat, protein and lactose content of the milk usually takes place in the production phase of most dairy products.

MILK PRODUCTION: Typical starter bacteria include *Lactococcus lactis* subsp. *lactis* or *cremoris*, *Streptococcus salivarius* subsp. *thermophilus*, *Lactobacillus delbrueckii* subsp. *bulgaricus*, and *Lactobacillus helveticus*.

The initial process needs milk collection from the dairy livestock and after collection of milk it is transported to dairy plants, separations, clarification, homogenization, pasteurization and at the lastly pack the products for sell.

Milk Tanks: The milk tanks are the prime components in any milk processing plants that used to store raw milk, skimmed milk or cream. The pre-stack tanks, milk tanks, interim tank and mixing tanks are mainly used in processing plants to provide good quantity milk.

Pasteurizers: Pasteurization is the process of heat treatment of a product to reduce enzymatic activity and kill pathogenic bacteria. This process can be done by using pasteurizers The main purpose of pasteurization in dairy plants is to make the product safe for use and to extend product shelf life.

Separators: After pasteurizers, the separators come as third main equipment in milk plants that ensure the excellent products quality and high performance in milk skimming by preventing intake of destructive air.

Homogenizers: At last, the homogenizer helps to achieve the different variety of products, improves the texture, taste and viscosity of cream or juice-based drink and prevents a cream line and sedimentation in the milk products. It is essential to use homogenizers for set up effective and successful milk processing plants. The next milk plants procedure is that need to check all collected milk for transparency and quality. It is important to use separators that separate microbes and germs for milk consumption. It is also known as clarification process. After these steps, it is easy to collect whole milk in milk tanks for the packing and lastly packed in the packets and bottles. The final milk production process is the product packaging in the bottle, cartons and plastic bags. These packaging are useful for long life of products from the dairy to other different places.

LEARNING FROM THE VISIT:

The visit was very informative, and the entire working process of the industry was observed. The production of milk and other milk products were studied. The collection of milk, its processing, pasteurization, packaging and storage was observed and studied. The different storage environment with varying temperatures were seen and the cooling systems were observed. Other than the milk and milk products processing units the waste treatment plant of the industry was also observed. Anaerobic digester, aeration tank and oxidation ponds were observed in which the effluents of the industry were treated, and the water tanks and pipes were present to restore the less toxic effluents which can then be discharged. All this

techniques and learning helps us to better understand the milk and milk products processing and the effluent treatments which is helpful for various applications.



OUTCOME OF THE VISIT

II & III B.Sc., Microbiology students learned about the commercial production of milk and milk products and its quality control. In addition they learned the technical details of Milk Processing Unit.

Faculty In - Charge

DR.P.MALAIYARASA PANDIAN

DR.SAHITHYA K.

HOD

PROF. P.RAJARAJAN

For

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DEPARTMENT OF MICROBIOLOGY

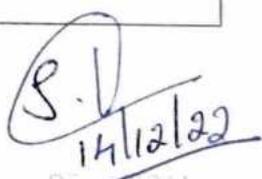
LIST OF STUDENTS FOR KOMUL VISIT

Class: III & V Sem B.Sc., Microbiology

Sl. No.	Reg. No.	Student Name	Sl. No.	Reg. No.	Student Name
1	20IABSC026	ALAINA ARA	24	21IABSC037	BELICIA E
2	20IABSC027	CHANDANA	25	21IABSC038	HARMINE TASNEEM
3	20IABSC028	DEEPTHI B	26	21IABSC040	LEKHA S
4	20IABSC030	MANISHA SRI	27	21IABSC039	KUMAR CHANDU
5	20IABSC032	NANCY	28	21IABSC040	LEKHA S
6	20IABSC033	RANJITH KUMAR	29	21IABSC041	LOKESHWARI M
7	20IABSC031	SHIVANI	30	21IABSC042	MANOJ SN
8	20IABSC037	HARI KEERTHANA	31	21IABSC043	NANDINI DEB SINGHA
9	20IABSC038	JEEVITHA	32	21IABSC044	NANDINI T
10	20IABSC039	VANITHA	33	21IABSC045	SONY T
11	20IABSC040	KALOMBO KAZADI	34	21IABSC046	SREEJONI ADHIKARI
12	20IABSC041	NIDA KHAN	35	21IABSC047	SUPRIYA P
13	20IABSC042	NIKITHA	36	21IABSC048	SWAGATA BANERJEE
14	20IABSC043	RACHITHA	37	21IABSC049	THAMMINENI RAGHU
15	20IABSC044	RAHUL	38	21IABSC062	ANKITA DIGAL
16	20IABSC045	RUDRAKSHINI	39	21IABSC063	DEEPIKA E S
17	20IABSC046	SHALINI	40	21IABSC064	DEEPIKA N
18	20IABSC047	SHRAVANI	41	21IABSC065	FARHATH BANU
19	20IABSC048	SYDA ASMA	42	21IABSC066	N HARISH KIRAN
20	20IABSC049	THANUSHA	43	21IABSC068	SHABANA BEGUM S
21	20IABSC050	VANDANA	44	21IABSC069	SINDHU J
22	21IABSC035	AKSHATHA R	45	21IABSC072	ZAKIYA KHANUM
23	21IABSC036	ARPITHA H L			


Dr P. Malaiyarasa Pandiyan & Dr. Sahithya K

Faculties In-Charge


14/12/22
INDIAN ACADEMY DEGREE COLLEGE
AUTONOMOUS
HENNUR MAIN ROAD, KAIVAN NAGAR
BANGALORE-560043, KARNATAKA

INDIAN ACADEMY

Degree College - Autonomous

Department of Genetics

Report on Seminar titled "Cancer Genes: Biology of Therapy".

Speaker:

Dr. Prathibha Ranganathan
Research Scientist
Center for Human Genetics
Bengaluru.

Date: 28.05.2022

Time: 11.15 AM

Faculty in-charge: Dr. Shubha Bhadran

Objectives:

- To enable the students to understand the biological nature of P53, BRCA1/BRCA2 Genes.
- To acquire in-depth understanding of carcinogenic agents.
- To instill the knowledge about contemporary biological therapy to treat manage various types of cancer.

Event Summary:

The Department of Genetics, Indian Academy Degree College Autonomous organized a seminar on "Cancer Genes: Biology of Therapy" for the benefit of B.Sc and M.Sc Life Sciences students. The session started at 11.15 AM with the introduction of the speaker. Dr. Prathibha Ranganathan commenced the session with introduction to Cancer genes. She defined Cancer as a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. Genes control how your cells work by making proteins. The proteins have specific functions and act as messengers for the cell. Each gene must have the correct instructions for making its protein. This allows the protein to perform the correct function for the cell. All cancers begin when one or more genes in a cell mutate.

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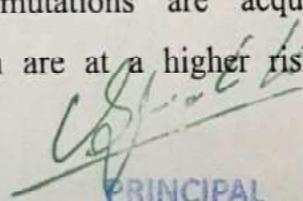


A mutation is a change. It creates an abnormal protein. Or it may prevent a protein's formation. An abnormal protein provides different information than a normal protein. This can cause cells to multiply uncontrollably and become cancerous. mutations happen often. A mutation may be beneficial, harmful, or neutral. This depends where in the gene the change occurs. Typically, the body corrects most mutations. A single mutation will likely not cause cancer. Usually, cancer occurs from multiple mutations over a lifetime. That is why cancer occurs more often in older people. They have had more opportunities for mutations to build up.

Dr. Prathibha described about types of genetic mutations, Acquired mutations and Germline mutations. These are the most common cause of cancer. Acquired mutations occur from damage to genes in a particular cell during a person's life. For example, this could be a breast cell or a colon cell, which then goes on to divide many times and form a tumor. A tumor is an abnormal mass. Cancer that occurs because of acquired mutations is called sporadic cancer. Acquired mutations are not found in every cell in the body and they are not passed from parent to child. Factors that cause these mutations include: Tobacco, Ultraviolet (UV) radiation, Viruses, Age.

A germline mutation occurs in a sperm cell or egg cell. It passes directly from a parent to a child at the time of conception. As the embryo grows into a baby, the mutation from the initial sperm or egg cell is copied into every cell within the body. Because the mutation affects reproductive cells, it can pass from generation to generation. Cancer caused by germline mutations is called inherited cancer. It accounts for about 5% to 20% of all cancers.

The speaker explained types of genes linked to cancer and many of the genes that contribute to cancer development fall into broad categories such as tumor suppressor genes. These are protective genes. Normally, they limit cell growth by monitoring how quickly cells divide into new cells, repairing mismatched DNA or controlling when a cell dies. When a tumor suppressor gene mutates, cells grow uncontrollably. And they may eventually form a tumor. Examples of tumor suppressor genes include BRCA1, BRCA2, and p53 or TP53. The most commonly mutated gene in people with cancer is p53 or TP53. More than 50% of cancers involve a missing or damaged p53 gene. Most p53 gene mutations are acquired. Germline p53 mutations are rare, but patients who carry them are at a higher risk of developing many different types of cancer.


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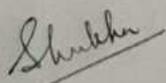


She explained about DNA repair genes. That DNA repair genes fix the mistakes made when DNA is copied. Many of them function as tumor suppressor genes. BRCA1, BRCA2, and p53 are all DNA repair genes. If a person has an error in a DNA repair gene, mistakes remain uncorrected. Then, the mistakes become mutations. These mutations may eventually lead to cancer, particularly mutations in tumor suppressor genes or oncogenes. Mutations in DNA repair genes may be inherited or acquired. Lynch syndrome is an example of the inherited kind.

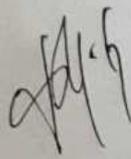
By end of the session students were familiarised with the various type of gene therapy. Somatic cell gene therapy (SCGT), the therapeutic genes are transferred into any cell other than a gamete, germ cell, gametocyte, or undifferentiated stem cell. Any such modifications affect the individual patient only, and are not inherited by offspring. Somatic gene therapy represents mainstream basic and clinical research, in which therapeutic DNA is used to treat disease. Germline gene therapy (GGT), germ cells (sperm or egg cells) are modified by the introduction of functional genes into their genomes. Modifying a germ cell causes all the organism's cells to contain the modified gene. The change is therefore heritable and passed on to later generations. The session concluded at 12:30 PM and the students' feedback was collected.

Learning Outcomes:

- Students understand the biological characteristics of p53, BRCA1/BRCA2 genes rigorously.
- Students Acquired extensive knowledge about the nature of carcinogens and ability to damage Human genome.
- Enable understanding of biology to cancer in the form of immune system to attack cancer cells and to prevent the spread of cancer with few side effects.

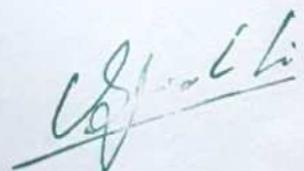


Faculty in-charge



HOD

Department of Genetics
Indian Academy Degree College



Principal

PRINCIPAL



INDIAN ACADEMY

Degree College - Autonomous

Date: 21.06.2022

CIRCULAR

The Department of Humanities is organizing a guest lecture for all the B.A students on **25th June 2022** from **12:30 pm**. All the students and faculty are invited for the Guest Lecture in **Multipurpose Hall**. Attendance is Mandatory.

Resource person	Title
Mr. Joseph K Daniel Staff Trainee, Asthma Shakthi Vidyalaya Society	Build the road from reality to your Dream



HOD

HEAD OF THE DEPARTMENT
Department of Humanities
INDIAN ACADEMY DEGREE COLLEGE
Autonomous
Hennur Main Road, Bangalore-560043

INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF HUMANITIES

Guest Lecture

1. **Title of the Event:** Build the road from reality to your Dream
2. **Place:** Multipurpose Hall
3. **Date:** 25th June 2022
4. **Time:** 12.30 pm
5. **Name of the Resource Person:** Mr. Joseph K Daniel
Staff Trainee, Asthma Shakthi Vidyalaya Society
6. **Broad Aim of the Event:** To motivate students and give an exposure on how to work and achieve the Dreams.

7. Objectives

- Educating the students to focus their attention on a key goal.
- Motivating the students to break old habits and to develop healthy ones to achieve their goals.
- Encourage group activities

8. Outcomes

- Students were motivated to learn persist longer, produce higher quality effort, learn more deeply, and perform better in classes and on their dreams.
- Students worked on their habits which they thought were bad and then noted down what can be done to break the chain of these old habits.
- Students learnt how important it was to understand how to coordinate and work with each other.

9. Brief details about the event:

The event started with the speaker telling us about how important it was to set goals and work hard towards the dreams and achieve them. Groups were made and activities were conducted with each group carried on by general discussions and opinions. Where the students spoke about what they think of the different professions and what are their plans about the future and how far have they worked on those plans etc. The event ended by playing a group event where all the students in the auditorium had to participate and coordinate with each other. By the end it was a fun event with a lot to take back with us. It was a fun learning experience.

10. Feedback:

- Got to know how to set the goal
- Learn about the team spirit through the group activities.

INDIAN ACADEMY

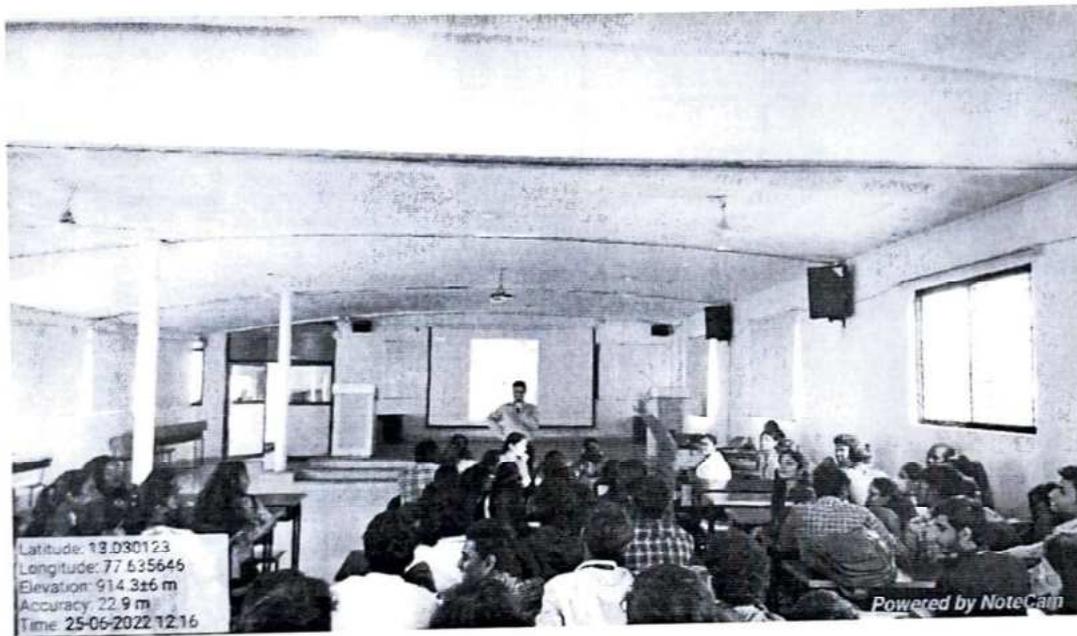
Degree College - Autonomous

DEPARTMENT OF HUMANITIES

GUEST LECTURE

“BUILDING THE ROAD FROM REALITY TO YOUR DREAM”

25-6-22





JOSEPH K DANIEL

PROFESSIONAL SUMMARY

Currently pursuing MSc Psychology in the 4th semester from Kristu Jayanti College Autonomous in Bangalore. The course facilitates training in a variety of psychological assessments, theoretical foundations of clinical psychology competencies, and other related professional competencies.

PROFILE

Passionate to work in the clinical field of psychology and gain experience that will soon be invaluable to utilize in the future for contribution to research and academic teaching.

Interested in working with clients to gain experience and develop further competence in all relevant areas of psychology.

Referred to as a gentleman who works sincerely and is good at psychological assessments.

CONTACT

PHONE:
+91-8790708430

EMAIL:
jkdaniel777@gmail.com

HOBBIES

Reading Fiction
Writing
Classical Music Enthusiast
Singing

EDUCATION

**[St Andrews High School]
[2009] – [2013]**
CBSE curriculum
Percentage 91.2 %

**[Indian Academy Degree Autonomous]
[2017] – [2020]**
B. A. Psychology, Journalism and
Optional English
Percentage 77 %

**[Kendriya Vidyalaya AFS
Begumpet]
[2013] – [2015]**
CBSE curriculum
Percentage 70.8 %

**[Kristu Jayanti College Autonomous]
[2020] – [2022]**
Currently pursuing MSc Psychology
Percentage 65 % (3 Semesters)

WORK EXPERIENCE

[National Institute for the Empowerment of Person's with Intellectual Disabilities] [Intern]

[3rd January] – [2nd February]
Interned at NIEPID for 150 hours conducting and increasing proficiency in various assessments on children affected by Intellectual Disability and other comorbid disorders (BKT, DST, VSMS, SFBT, CPM).

[Mind and Brain Psychiatric Hospital] [Intern]

[3rd March] – [5th May]
Interned at Mind and Brain for 99 hours getting exposure to various patients with clinical disorders and also conducting and taking case histories and mental state examinations. Applied Movement Therapy related skills and techniques learnt at a 2-day workshop conducted by Diana Tholoor.

SKILLS



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DEPARTMENT OF HUMANITIES ATTENDANCE OF GUEST LECTURE

“BUILDING THE ROAD FROM REALITY TO YOUR DREAM”

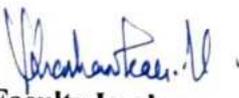
DATE: 25/6/22

CLASS: I, II & III Years B.A

SL NO	REGISTER NO	STUDENT NAME	REMARKS
1	19IABOA001	AMULYA NETHAJI	Present
2	19IABOA002	CHANDAN R	Present
3	19IABOA003	DAVID LALRINGUM	Present
4	19IABOA004	FAITH LALIA LAWRENCE	Present
5	19IABOA005	GOKUL RAJ N	Present
6	19IABOA006	JAI SHRUTHI S	Absent
7	19IABOA007	KEERTHANA T T	Absent
8	19IABOA008	KSHETRIMAYUM HEROJIT SINGH	Present
9	19IABOA009	LAITONJAM WANGLEN MEITEI	Present
10	19IABOA010	MOHAMMAD MUDASSIR NADEEM	Absent
11	19IABOA011	MONISH GOWDA N	Absent
12	19IABOA012	MUBARAK JADEN JADA SALMOUN	Absent
13	19IABOA013	NKIUKAMBOU WIJUNAMAI	Present
14	19IABOA014	SAMIYA SHAHANA	Present
15	19IABOA015	SUTHARI SAI ABHINAV	Present
16	19IABOA016	ANGEL V	Absent
17	19IABOA017	CHANDER MOHAN	Absent
18	19IABOA018	DEV DIP KUMAR BOSE	Present
19	19IABOA019	DORA GRACE SAM	Present
20	19IABOA020	FRANCIS ZORAMMUANA	Present
21	19IABOA021	GARRYBAYEVA LEYLA	Present
22	19IABOA022	IBA ZEHE GRACE CHRISTELLE	Absent
23	19IABOA023	IMKONGAKUM JAMIR	Present
24	19IABOA024	KOSHELNGAM JAGVEI LAMKANG	Present
25	19IABOA025	MAMTHA R	Absent
26	19IABOA026	MARFUHA TABASSUM	Present
27	19IABOA027	NGACHANSO R W	Present
28	19IABOA028	REENA RAJ R	Present
29	19IABOA029	ROHITH V	Present
30	19IABOA030	SAMEER TIGGA	Absent
31	19IABOA031	SANJAY SANTHOSH	Present
32	19IABOA032	SORAM SONY	Present
33	19IABOA033	SWATHI	Present
34	19IABOA034	TAMANE GOUALI SARAH	Absent
35	19IABOA035	Y DEVYANI	Present
36	20IABOA001	APARNA SAHU	Present
37	20IABOA002	DANISTHA TAHNIN	Present
38	20IABOA003	MOHD YAHYA	Present

39	20IABOA004	MUJEERULLA KHAN	Present
40	20IABOA005	NAMDI CHUILO	Present
41	20IABOA006	P ISAAC THANGZOM ZOU	Present
42	20IABOA007	SURAJ S	Absent
43	20IABOA008	THANGCHUNGNUNG HAOKIP	Absent
44	20IABOA009	THARUN KUMAR S	Present
45	20IABOA010	ABIGAIL	Present
46	20IABOA011	BABY ZEBA	Present
47	20IABOA012	BHAKTHI J	Present
48	20IABOA013	DISHA HOLLA	Present
49	20IABOA014	DIVYA S	Present
50	20IABOA015	EASTHER SUSAN PAUL	Present
51	20IABOA016	JENIFER B	Absent
52	20IABOA017	JOBIN JOHN	Absent
53	20IABOA018	JYOTI HARPAL	Present
54	20IABOA019	KARTHIKEYAN G I	Absent
55	20IABOA020	MARCONI NINGTHOUJAM	Present
56	20IABOA021	MARIA SYNTHIA J	Absent
57	20IABOA022	MOIRANGTHEM NETALION	Present
58	20IABOA023	MUSKAN AHMED	Absent
59	20IABOA024	NIZAR DJEMA	Present
60	20IABOA025	PRIYANKA SHARMA	Present
61	20IABOA026	PULIPATI YASHWANTH SONA	Present
62	20IABOA027	RUTH KRUPA K	Present
63	20IABOA028	SNEHA M	Present
64	20IABOA029	SREENISHA S	Present
65	20IABOA030	SUMANT CHHETRI	Absent
66	20IABOA031	THONDUP BHUTIA	Absent
67	20IABOA032	VIJAYASHREE S K	Present
68	20IABOA033	YANGKEE MOYONG	Absent
69	21IABOA001	FALAK FATHIMA	Absent
70	21IABOA002	GUHAN S	Present
71	21IABOA003	K A ARBAZ ALI KHAN	Present
72	21IABOA004	MEHTAB A	Present
73	21IABOA005	MURALI S	Absent
74	21IABOA006	NIKITHA MICHAEL	Present
75	21IABOA007	NITHIN RAJ KUMAR	Present
76	21IABOA008	RAKSHITHA S P	Present
77	21IABOA009	S VIKRAM	Present
78	21IABOA010	SHARON KEZIAH L	Present
79	21IABOA011	V SAI KEERTHI	Present
80	21IABOA012	ASHA	Present
81	21IABOA013	AYUSH TIWARI	Present
82	21IABOA014	MOHAMMED IZHAN S S	Absent
83	21IABOA015	MONIKA H	Present
84	21IABOA016	PARVEEN TAJ A	Present

85	21IABOA017	RAJA JUNAID JAVID	Absent
86	21IABOA018	RENUKA	Present
87	21IABOA019	SANJANA P	Present
88	21IABOA020	TENZIN LHAKPA	Absent
89	21IABOA021	U NITHISH KUMAR	Present
90	21IABOA022	ASWIN S	Absent
91	21IABOA023	BHARATH KUMAR G S	Present
92	21IABOA024	JANCY W	Present
93	21IABOA025	KRIPA RAI	Present
94	21IABOA026	MONICA S	Present
95	21IABOA027	NANI R	Present
96	21IABOA028	RACHANA R	Present
97	21IABOA029	S R JOSEPH MARY	Absent
98	21IABOA030	SHARANYA M	Present
99	21IABOA031	VERONICA J	Absent
100	21IABOA032	ALVIN OLIVER MILTON	Absent
101	21IABOA033	ASHWIN ROZARIO	Present
102	21IABOA034	DEEPA K NAIR	Present
103	21IABOA035	GRACE LALTHANKIMI	Absent
104	21IABOA036	KARTHIK B	Present
105	21IABOA037	MARIYA R	Present
106	21IABOA038	MEGHANA C	Present
107	21IABOA039	N SRUSHTI	Present
108	21IABOA040	NANCY ARUN SHRIKANDE	Present
109	21IABOA041	S MANOJ KUMAR	Present
110	21IABOA042	SHAKTHIVEL R	Present
111	21IABOA043	SHIJAGURUMAYUM ARINA	Present
112	21IABOA044	SIDDHARTH P	Present
113	21IABOA045	SUKANYA ACHARYYA	Present
114	21IABOA046	SYEDA SABAHATH HAFSA	Present
115	21IABOA047	SYLVESTOR LAZARUS A	Absent


Faculty In-charge


HOD
HEAD OF THE DEPARTMENT
Department of Humanities
INDIAN ACADEMY DEGREE COLLEGE
Autonomous
Hennur Main Road, Bangalore-560043

INDIAN ACADEMY

Degree College - Autonomous

ONE DAY WORKSHOP ON EMBEDDED SYSTEM

Date: 17/06/2022

Time: 9:15 AM-4:00 PM

Event: One day workshop on Embedded system.

Venue: Seminar Hall II, IADCA, Bengaluru

Name of the Resource person: Mr. Prateek K P, B.E.,
Senior Embedded Engineer
CADD center - Livewire
Kalyan Nagar
Bangalore – 560 043

The workshop was organized for BSc Electronics students on 17/06/2022.

Broad Aim: To make students skillful and efficient for all the hardware and software related concepts for 8051 microcontrollers.

OBJECTIVES

- To know the career opportunities in the field of Embedded systems.
- To understand the market of the Embedded systems.

OUTCOMES

- Able to identify the Scope of Embedded systems.
- Gain knowledge on programming.
- Able to understand the coding in the commercial equipment.

One Day Workshop on Embedded System

FRIDAY, 17TH JUNE 2022

09:15AM - 04:00PM



ELECTRONICS LAB

OVERVIEW OF WORKSHOP

Embedded systems are the core of every intelligent device. Everything around you from a simple watch to the space ship is using embedded systems. Your mobile phones, PDAs, Washing Machines, Microwaves Ovens, Automobiles & all the automated electronics gadgets are having one or another form of embedded systems responsible for their intelligent functioning. Electronic devices are rapidly finding applications in many of the areas, from simple coffee vending machines to space science to environmentally friendly products such as big belly etc. Indian embedded market worth \$5.9 billion dollars, & expects 30% growth by 2015. This will certainly increase the demand of professionals in the field of embedded systems. Main aim of this training module is to make the students skill full & efficient for all the hardware & software related concepts for 8051 Microcontrollers.

TOPICS TO BE COVERED IN WORKSHOP

1. Introduction to Embedded C
2. Difference between C & Embedded C
3. Embedded C Constructs & Data Formats
4. Mapping 8051 Architecture to Embedded C
5. Introduction to KEIL Cross-Compiler & its features
6. General Discussion & Overview of Embedded Systems



SPEAKER

Mr. Prateek K P, B.E.,Senior Embedded Engineer, Cadd Center-Livewire,
Kalyan Nagar, Bengaluru - 560 043

PROGRAM - I

Inauguration

Time: 9:15AM - 9:45AM

PROGRAM - III

Validator

PROGRAM - II

Session-I: Introduction to Embedded Design program

Time: 10:00AM - 11:00AM

Tea Break: 11:00AM - 11:30AM

Session-II: Hands on experience on Embedded System

Time: 11:30AM - 01:00PM

Lunch Break: 1:00PM - 2:00PM

Session-III: Embedded hardware program

Time: 2:00PM - 3:30PM

ORGANIZING MEMBERS

Dr. Srinidhi K Parthasarathi

Principal, IADC - A

Dr. E Parasuraman

HOD - Electronics, IADC - A

Mrs. Sherin Nitisha

Faculty - Electronics, IADC - A

Brief details about the event:

The Electronics department has arranged the special talk on “**One day workshop on Embedded system**” for Indian Academy Degree College- Autonomous (IADC-A) BSc Electronics students. The resource person **Mr. Prateek K P, B.E., from CADD center - Livewire** has taken responsibility for giving a talk on Scope of Embedded systems. The program was organized in three sessions.

Session - I

Introduction to Embedded design program

He gave an introduction to Embedded design programming . He has explained the programming concept of C & Embedded language. The Programming was done by the students. Students' response was very good with the resource person as it was based on real time experiences.

Session - II

Hands on experience on Embedded System

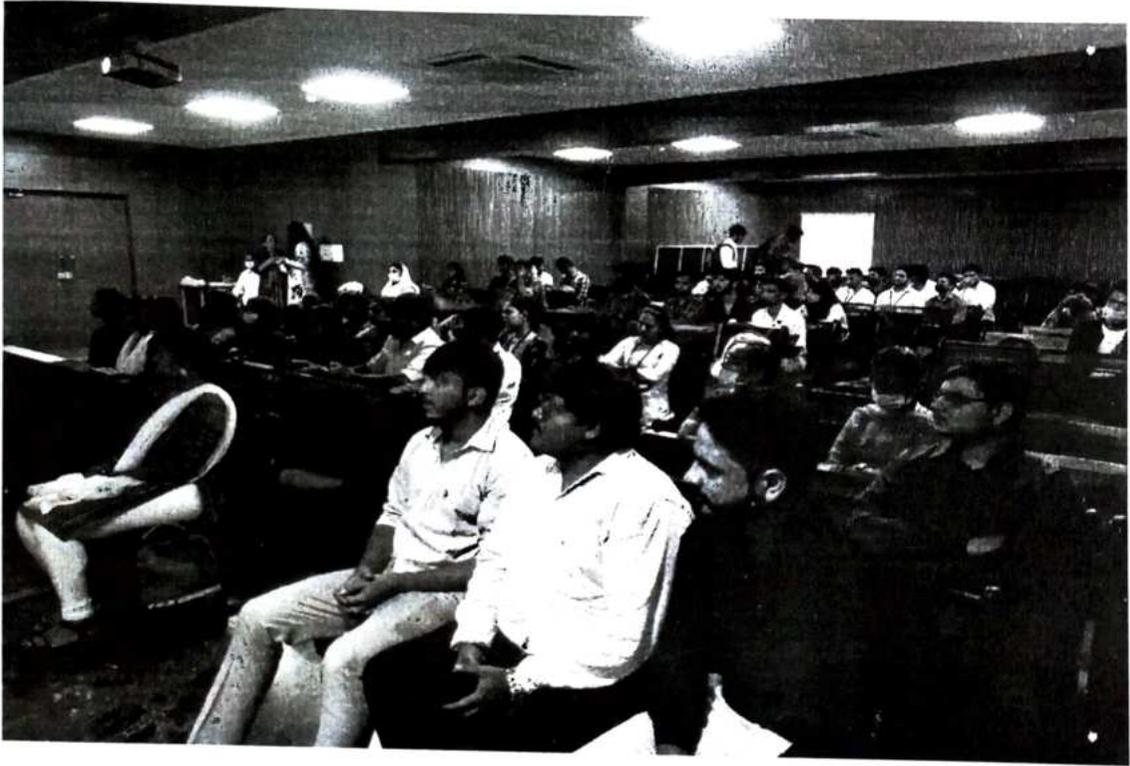
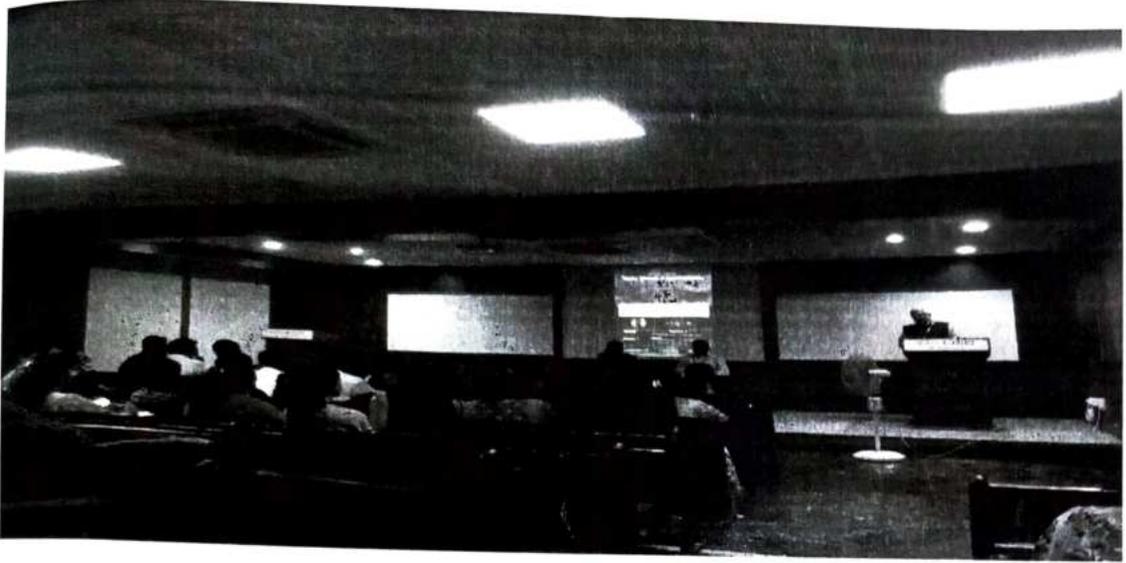
Embedded systems are the core of every intelligent device. Everything around you from a simple watch to the spaceship is using Embedded systems. Mobile phones, washing machines, microwave ovens , etc., are having one or the another form of Embedded systems responsible for their intelligent functioning.

Session - III

Embedded hardware program

Embedded programming is not only with the programming C, also with the hardware. The mapping of 8051 architecture to embedded C is in very much boon. The opportunities toward this are increasing day to day as our world is becoming more technology oriented. Now everything in fingertips as an Embedded system is dashing to the sky.





Faculty Incharge: Sherlin Nitasha

HOD 

HOD
DEPT. OF ELECTRONICS
Indian Academy Degree College
Kalyan Nagar, Bangalore




Principal

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BANGALORE - 43

INDIAN ACADEMY

Degree College - Autonomous

DEPARTMENT OF BIOTECHNOLOGY

Date: 28th January-2023 - Fertilizer Orientation Programme organized by Fertilizer Association of India in collaboration with GPS Institute of Agricultural Management.

Programme: M.Sc. 3rd semester students

Location: GPS INSTITUTE OF AGRICULTURAL MANAGEMENT #1, Techno Industrial Complex, Peenya Industrial Estate Peenya 1st Stage, BENGALURU – 560 058.

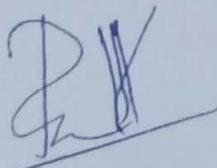
Objectives of the visit:

1. To impart knowledge on the fertilizer and its nutrient composition for crop production.
2. To provide the students with an opportunity to learn practically through interaction, working methods and employment practices from the orientation.
3. To facilitate the students to better visualize assessing the direct and residual effects of organic and inorganic fertilizer on growth, yield of crops.

Outcomes of the visit:

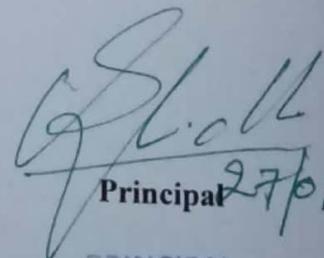
The students

1. Imbibe the deeper insight of the fertilizer, its variants, composition of nutrients and application methods.
2. Learn the use of types of fertilizers enhancing crop yield and soil properties while restraining pests and diseases.
3. Develop the composite knowledge of fertilizer users, producers and customer interaction with experts in the concerned field.



Head of Department, Biotechnology

Head of the Department
Department of Biotechnology
Indian Academy Degree College - Autonomous
Bangalore - 560 043



Principal

27/01/2023

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THE FERTILIZER ASSOCIATION OF INDIA
SOUTHERN REGION
in Collaboration with
**GPS INSTITUTE OF
AGRICULTURAL MANAGEMENT**
(INITIATIVE OF DR. G P SHETTY AGRICULTURE RESEARCH AND EDUCATIONAL TRUST)

We are cordially inviting you for the

FERTILIZER ORIENTATION PROGRAMME

on 28th January 2023 (Saturday)

VENUE: AUDITORIUM, GPSIOAM, PEENYA, BENGALURU.

PROGRAMME SCHEDULE

08.30 - 09.00	Registration	13.45 - 14.15	Market Development Activities
09.00 - 09.30	Inaugural Session	14.15- 14.45	Inventory Management and Warehousing
	Technical Sessions	14.45 - 15.15	Direct Transfer of Fertilizer Subsidy to farmers - Issues and Concerns
09.30 - 10.00	Fertilizer Scenario, Policy and It's impact on Soil Health and Balanced Fertilization	15.15 - 15.45	Fertilizer Imports - Operations
10.00 - 10.30	Manufacturing Process of Fertilizers	15.45 - 16.05	Promotional Programmes organized by Fertilizer Industry
10.30 - 11.00	Logistics Operations in Fertilizer Industry Dealer Net Work Development	16.05 - 16.30	Legal aspects under FCO and ECA for fertilizer marketing and distribution
11.00 - 11.30	Financial Aspects of Marketing	16.30 - 17.00	Valedictory Session and Vote of Thanks
11.30 - 12.00	New Generation Fertilizers - Nano Urea	17.00 - 17.15	Tea
12.00 - 12.30	Sale of Fertilizers through PoS Machines		
12.30- 13.00	Marketing Research and Business Intelligence		
13.00 - 13.45	LUNCH BREAK		

Note: Certificate of Participation will be issued to all the students who will be attending the programme.

RSVP
Dr. Prashanth K M
Mob: 9964043468



Scan the QR code for location

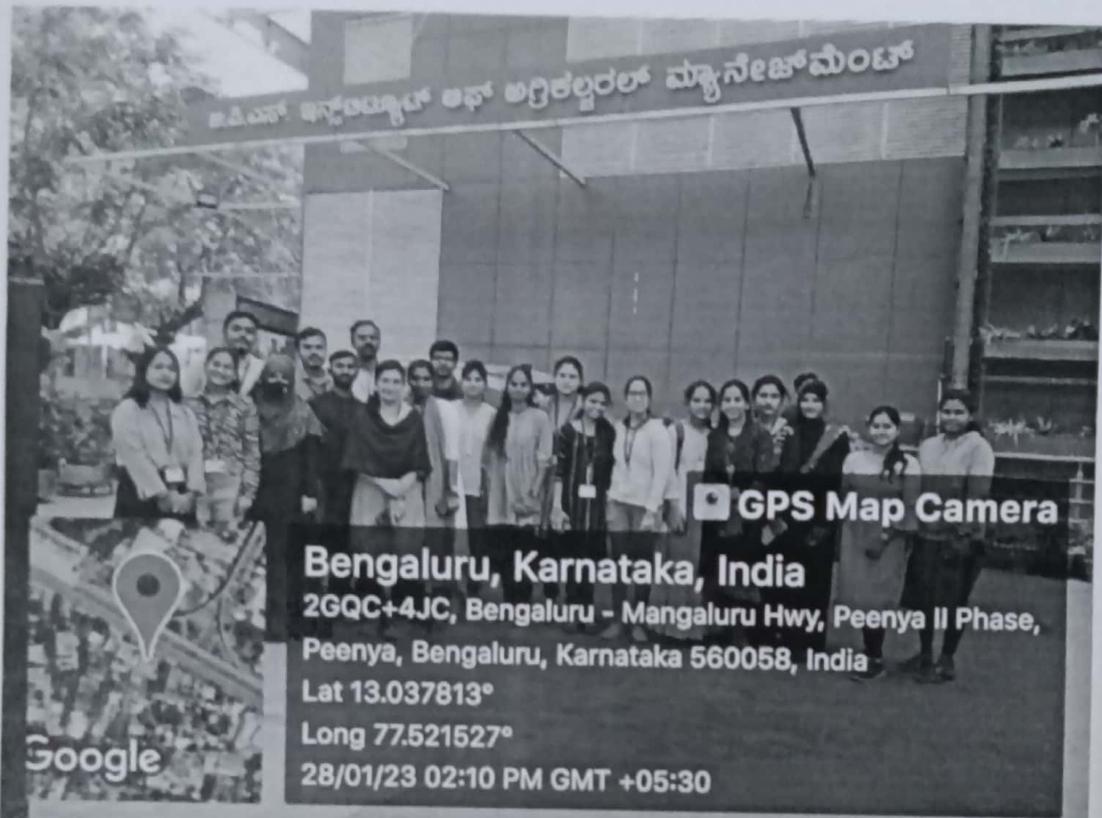
GPS INSTITUTE OF AGRICULTURAL MANAGEMENT

#1, Techno Industrial Complex, Peenya Industrial Estate, Peenya 1st Stage, Bengaluru - 560 068.
☎ 086-2972 3543 ☎ +91 70222 51111 ✉ administration@gpsioam.org 🌐 www.gpsioam.org



Sl.No	Reg. No.	Student Name
1	21IAMOS025	Aditya Mandal
2	21IAMOS026	Aimen Nawar
3	21IAMOS027	Aishwarya Puranic
4	21IAMOS028	Archana Kumari
5	21IAMOS029	Ariba Hafeez
6	21IAMOS030	Bhagyashree Mahendran
7	21IAMOS031	Bhanu Shree S
8	21IAMOS032	Bhavani S
9	21IAMOS033	Chandan K
10	21IAMOS034	Chedulla Bhavyasri
11	21IAMOS035	Divya R
12	21IAMOS036	Gokul A
13	21IAMOS037	Jaya Surya Raju K
14	21IAMOS038	Kavyashree L
15	21IAMOS039	Khamnam Urmila Devi
16	21IAMOS040	Kondakamarla Hadiya
17	21IAMOS041	Koppala Padmapriya
18	21IAMOS042	Lavanya LV
19	21IAMOS043	Mallepalli Lokesh
20	21IAMOS044	Manasa N
21	21IAMOS045	Manasa P
22	21IAMOS046	Manasa SG
23	21IAMOS047	Monisha A
24	21IAMOS048	Moolinti Myna
25	21IAMOS049	Navya GN
26	21IAMOS050	Navya HL
27	21IAMOS051	Neemashree N
28	21IAMOS052	Nitesh Gowda S
29	21IAMOS053	Niveditha V
30	21IAMOS054	Pankhi Borah
31	21IAMOS055	Preethi V
32	21IAMOS056	Preeti Sao
34	21IAMOS058	Sankhadip Dolui
35	21IAMOS059	Sara Salomi
36	21IAMOS060	Sathish Maharaya Gavade
37	21IAMOS061	Shwetha GK
38	21IAMOS062	Soniya KM
39	21IAMOS063	Sridhar CA
40	21IAMOS064	Subhankar Pradhan
41	21IAMOS065	Thoti Bhanuprakash
42	21IAMOS066	V Pushpalatha
43	21IAMOS067	Vandana
44	21IAMOS068	Veena N





ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲಾ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ನೌಕರರ ಮೈನೇಜ್‌ಮೆಂಟ್

GPS Map Camera

Bengaluru, Karnataka, India
2GQC+4JC, Bengaluru - Mangaluru Hwy, Peenya II Phase,
Peenya, Bengaluru, Karnataka 560058, India
Lat 13.037813°
Long 77.521527°
28/01/23 02:10 PM GMT +05:30

Google



THE KARNATAKA ASSOCIATION OF INDIA
KARNATAKA REGION
GPS
GPS INSTITUTE OF AGRICULTURAL MANAGEMENT,
BANGALORE
FERTILISER ORIENTATION PROGRAMME

GPS Map Camera

Bengaluru, Karnataka, India
No.1, Techno industrial Complex, Peenya 1st Stage, Peenya Industrial
estate, Peenya police station road, Vivekananda Nagar, Peenya,
Bengaluru, Karnataka 560058, India
Lat 13.037696°
Long 77.521582°
28/01/23 09:38 AM GMT +05:30

Google



To,
The Principal
INDIAN ACADEMY Degree College Autonomous
BANGALORE.

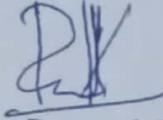
Date: 31-10-2022

Respected sir,

Subject: Requisition for approval for Industrial visit regarding.....

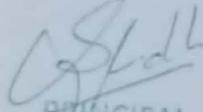
As a part of undergraduate curriculum for III and V Semester students an Industrial visit is been planned on 7th November, 2022, Friday to Sri Chamundeswari Sugars Limited, Mandya. The travel agent was asked to provide quote for one day with due consideration into all possible safety details and economics for the visit. The quote provided by the travel agent is attached herewith this letter for your perusal. Also, would like to mention that the students (45 no.s) were informed about the details of the industrial visit. So, with all the preparation required for would like to request for an approval of the visit.

Thanking you



Dr. Paramesh H.
Head of the Department
Department of Biotechnology
Indian Academy Degree College - Autonomous
Bangalore - 560 043

OK.



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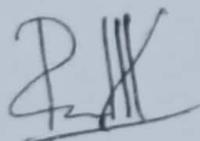
31-10-2022

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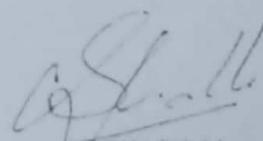
Date of visit: 07-11-2022

Programme: B. Sc. 3rd and 5th semester students

Department of Biotechnology is organizing an industrial visit for B.Sc. 3rd and 5th semester students on November 7th, 2022 to Sri Chamundeswari Sugars Limited. Bharathi Nagar (K M Doddi) Mandya District, Karnataka - 571 422, India. The class teachers of respective classes kindly permit them with attendance.

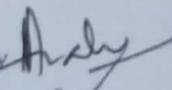
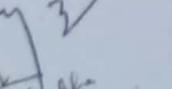


HOD, Biotechnology
head of the Department
Department of Biotechnology
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HoD, Dept. of Chemistry 
HoD, Dept. of Genetics 

HoD, Dept. of Microbiology 
HoD, Dept. of Zoology 



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Date: 07th November-2022

Programme: B.Sc. 3rd and 5th semester students

Location: Sri Chamundeswari Sugars Limited. Bharathi Nagar (K M Doddi) Mandya District, Karnataka - 571 422, India.

Objectives of the visit:

1. To provide a technical exposure to the students about the manufacturing process and technology of sugar from sugarcane.
2. To inculcate the students with an opportunity to learn practically through interaction, working methods and employment practices.
3. To enable the students to better visualize what they have learned in classroom to the real industrial situations.

Outcomes of the visit:

The students

1. Understand the technical procedure, tools and methodology of manufacturing sugar from sugarcane.
2. Learn the skills, interacting with the industrial experts, imbibe the methods followed and gain the knowledge of practices followed in the industry.
3. Observe and realize the practicality of the work flow and the complete production cycle followed in actuals at site of production to that of learnt in the classroom.

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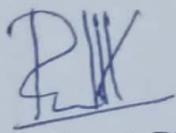
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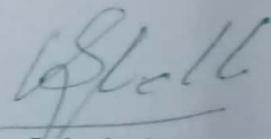
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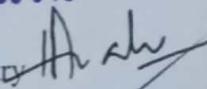


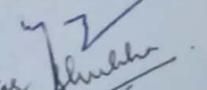
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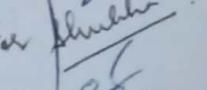


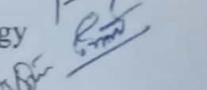
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