

PG Dept. of Biotechnology Annual Report 2021-2022

Duration of the Current plan: From November 2021 To Sept 2022

Planning process:

- Number of teachers involved: 04
- Names of alumni involved: 10
- Name of Experts consulted: 05
- Number of Industrialists consulted: 06
- Name of the person Designated to monitor and report: Dr Rama Bhat P.

Dr. Rashmi K and Dr. Shrinidhi Shetty added to dept to complete the 2nd and 4th semester theory classes due to resignation of Dr Jenitta E.P. in the middle of even semester.

Academics

- Regular classes for III Semester started on Dec 12, 2021 and 1st Sem from 20th Dec 2021.
- Project work also started for III Sem students in Dec 2021.
- Regular classes started for IVth semester from 1st June and 8th June 2022 for IInd semester students.
- Project works were continued from 1st June 2022.
- 1st internal examinations of one hour duration for IInd and IVth semesters were conducted during 18-21 July 2022.
- IInd internal exams conducted during 5-6 Sept 2022.

Internship

Name of Faculty	No. of students guided	Duration of internship	Name of agencies
Dr Rama Bhat P.	07	15-30 days	04
Dr Jayadev K.	08	do	05
Dr Raghavendra Rao B	08	do	05
Dr Jenitta EP	07	do	04

Paid Internships selected by SLS, MAHE

Ms. Preaksha KK of IIIrd semester worked as Project Internee for two months- 1st January to 28th February 2022 at School of Life Sciences, MAHE, Manipal.

Ms Varsha Pereira of IInd semester worked as Project Internee for two months- 1st June to 31st July 2022 at School of Life Sciences, MAHE, Manipal.

Student-faculty program

- Five II M.. students involved in this program and taken classes to II and IV semester B.Sc. Biotechnology students.

Students strength: 30 each in 1st and IInd year

Results: II Sem and III Sem 100%

MoU : IIHR Bangalore, KVK Brahmavar and CBNR Coimbatore, Tamil Nadu

Certificate courses: For B.Sc. students

- Microbial Technology- Mushroom cultivation and Biofertilisers.
- Altogether 30 students enrolled.

Conference 2022

- Alumni sponsored International Conference on “Advances in Food and Medical Biotechnology” was organized on 26-07-2022 at Kuvempu Hall. Altogether 200 delegates from different colleges, University and R&D Institutions participated.
- Dr. Ravi, M., Dr. Rajagopal K., Dr. M. Mahesha Poojari, Dr. Shama Rao and Dr. Mahesh Prasad Bekal were the resource persons. Altogether 44 papers presented through oral and poster sessions. For best oral and poster presentations awarded with cash prizes sponsored by Alumni Student.
- 14 Poster were presentations by our Ist and IInd M.Sc. students which are the out comes from their minor projects and academic projects.
- Ms. Bhavyashree and Arpana, Research Scholars presented poster during the International Conference 2022

Guest Talk/Lecture

- Dr. Ajay KM, Researcher, Biomedical Research Institute, Madrid, Spain on 28-01-2022 11.00-12.30 at Kuvempu Hall through Google meet. Eight faculties and 60 students attended the program.
- Dr. DJ Bhat, Retired Professor, Goa University “Biotechnological applications of fungi” on 31-01-2022 11.00-12.30 at Kuvempu Hall through Google meet. Ten faculties and 60 students attended the program.

Research

- 11 Ph.D. students enrolled under Mangalore University till 2022.
- All II M.Sc. students carried out their academic project.
- Four minor research projects initiated by I M.Sc. students.

Ph.D. Viva (online)

Date and time	Candidate	Location	No. of participants
25 th February 2022, 11.00-12.30	Mrs. Dhanya P.	Online Google meet	58 participants + 5 staffs
7 th March 2022 11.00-12.30	Ms. Bindu C.	Online Google meet	60 students+ 3 staff members- total 88
12 th April 2022 10.00-12.00	Mrs. Prajna PS	Online Google meet	50 students+ 3 staff members+ online people- Total 75

Ph.D. Guide: Dr. Rama Bhat P.

Student Activity: Wall magazine preparation competition for I M.Sc. 30 students on 10th March 2022 at PG Department of Biotechnology Lab.

Workshops

- 17th March 2022 3.00-5.00pm on Mushroom Spawn production and Mushroom cultivation by Dr Raghavendra Rao B. PG Department of Biotechnology 30 I M.Sc. BT students.
- Instrumentation Workshop at School of Life Sciences, Manipal on 18th March 2022 09.00am-05.30pm. 60 students+ 3 Staff members participated.
- Workshop on “Research Methodology” for IM. Sc. students on 08th April 2022 from 03.00-04.00 pm conducted by Dr Rama Bhat P. (R. No. 313 Old PG Block).

- Dr. Raghavendra Rao delivered a lecture and demonstrated an experiment “Electrophoresis” in a programme organized by UG Botany Department, Alva’s College, Moodubidire. A total of 35 VIth semester students were present in the program.
- Dr. Raghavendra Rao delivered a lecture and demonstrated an experiment “Electrophoresis” in a programme workshop to M.Sc. Applied Zoology students on 12th Sept 2022. A total of 12 IVth semester M.Sc. students were present in the program.

Students visits-industry/institution

- Manipal School of Life Sciences, MAHE, Manipal on 18th March, 2022, Friday 60 students and 3 staffs- instrumentation workshop.
- Dr. Rama Bhat P accompanied with 13 III Semester M.Sc. Biotechnology students attended the workshop “ Aquamarine Ideathon and Hackathon-2022” on 22nd June 2022 organised by Advanced Biotech Innovation Centre- Aquamarine, College of Fisheries, Mangaluru (KVAFSU, Bidar).
- Academic industry - institution visit as a part of academic activities mentioned in the department plan were conducted from 4th – 8th June 2022. 45 M.Sc. students, 2 faculties and a Research Scholar visited ICAR-Central Cotton Research Institute, Coimbatore, Sugar cane Research Institute, Coimbatore, T. Stanes & Co. Ltd, R& D section, T. Stanes & Co. product outlet, Coimbatore, Institute of Forest Tree Genetic Breeding, Coimbatore, Pasteur’s Institution with R& D Lab, Coonoor, Tea processing factory, chocolate factory and their outlets, Coonoor and Botanical Garden, Ooty.

Publications

- Two research papers published by M.Sc. students as an outcome of their project work under Dr. Jenitta EP in “International Journal of Novel Research and Development” June issue.
- Dr. Rama Bhat P. published two research papers in International Journal.
- Dr. Raghavendra Rao B has published one book chapter in Springer Publications.
- One research paper published by Dr Jayadev in peer reviewed international journal.

Students projects

- Six B.Sc. Biotechnology Students from Sri Bhuvanendra College, Karkala carried out their academic project work under Dr. Raghavendra Rao for a period of two weeks. They

carried out the project work with experiments in lab and prepared the report. This is paid project work and collected Rs. 10,000.00 as fee.

- Six final year B.Sc. (MBB) students working on their academic project under Dr. Rama Bhat P. A total of Rs. 3000.00 collected as project fee.

Conf/seminars attended/Resource persons

- Dr Rama Bhat P attended and presented a talk as Invited Speaker in 5th Global Cancer Summit 2022, International Collaborative Conference organised by Biogenesis Healthcare Cluster, Bengaluru on 22nd May 2022.
- Ms. Gagana, Research Scholar presented a paper in One day International Seminar on “Recent Innovations in Science and Technology for Sustainable Ecosystem” organized by Dept. of Botany, AVK College for Women, Hassan on 22nd July 2022. She awarded with **First prize in Oral presentation.**
- Dr. Rama Bhat P attended Alva’s Samveda-2022 - One day National Seminar “Research Methodology” jointly organized by ATMA Research Centre and Himalaya Wellness Company, Bangalore on 30th July 2022 at Kuvempu Hall, Vidyagiri, Moodbidri.
- Ms Gagana B. presented a research work in Alva’s Samveda-2022 - One day National Seminar “Research Methodology” jointly organized by ATMA Research Centre and Himalaya Wellness Company, Bangalore on 30th July 2022 at Kuvempu Hall, Vidyagiri, Moodbidri and won **1st Prize in Oral presentation.**
- Ali Jawad of II M.Sc. attended and orally presented a research paper in Alva’s Samveda-2022 - One day National Seminar “Research Methodology” jointly organized by ATMA Research Centre and Himalaya Wellness Company, Bangalore on 30th July 2022 at Kuvempu Hall, Vidyagiri, Moodbidri
- Dr. Raghavendra Rao served as **Resource person** in farmers workshop organized by ICAR- CPCRI, Kidu on 30th July 2022.
- Dr Rama Bhat served as invited speaker in National Seminar at CBNR, Coimbatore held on 15-16 Sept. 2022.
- A total of 10 review posters and one in drawing competitions participated from our department.
- Ms Gayathri Acharya and Padmini of I M.Sc. won **First Place with cash prize** in drawing competition during a seminar conducted by Society for Mitochondrial Research and medicine held at Alva’s College on 19th August 2022.

- Mr Ali Jawad and Ms Lavanya Hiremath of II M.Sc. won **First place and cash prize** in review poster presentation Mitochondrial Research and medicine.
- Ms Bhavana and Sameeksha Shetty of I M.Sc. won **Third place and cash prize** in review poster presentation Mitochondrial Research and medicine.
- Three faculties and 57 students of 1st and 2nd M.Sc. students actively participated in symposium on “Advances in Mitochondrial Research from bench to bed site” organized by Society for Mitochondrial Research and Medicine (SMRM) and Dept. of Life Sciences, Alva’s College, Moodbidri held on 19-08-2022 at Kuvempu Hall.

DEPT OF BIOTECHNOLOGY (UG &PG)
ALUMNI SPONSORED ONE DAY NATIONAL CONFERENCE
ON
CURRENT ADVANCES IN MEDICAL AND INDUSTRIAL BIOTECHNOLOGY
ORGANISED IN ASSOCIATION WITH KSPCB, MANGALORE

Date: 20/2/2020

Venue: Kuvempu Hall

Total number of participants: 430 delegates from 12 college/Universities.

Inauguration: The conference was inaugurated through the lamp illumination and Abstract CD release by Chief Guest Dr. Girish B. Chandrashekar, Trustee Mr. M. Vivek Alva, Guest of Honour Mr. K. Keerthi Kumar, Senior Scientific Officer (KSPCB) Mr. Jayaprakash S. Nayak and Convener Dr. Rama Bhat P.

Convener of the conference Dr. Rama Bhat escorted the Guests to dais followed by prayer song by the College Choir. The convener briefed about the conference and welcomes the Guests on the stage. Faculties presented the flower as token of respect to the guests. Later guests illuminated the lamp and declared the conference is open. Inaugural address delivered by Dr. Girish B. Chandrashekar, Pathologist, Veterinary College, Hassan. This is followed by address by Guest of Honour Mr. K. Keerthi Kumar, Environmental Officer, Karnataka State Pollution Control Board, and Mangalore. Abstract CD was released by the Guests. Presidential remark given by Trustee Mr. M. Vivek Alva. Mr. Vivek Alva felicitated the guests with memento and Mr. Vivek Alva felicitated with memento by Dr. Rama Bhat. Lastly vote of thanks given by Ms. Bhavyashree P. V, Faculty, and Dept of Biotechnology. The program was anchored by MC Mr. Akshaya Shetty, II M.Sc. student.

Technical Session I: Resource Person's presentation and talk

Dr. Girish B.C. spoke on the on Non clinical safety evaluation for drugs and biologics. He highlighted on clinical trials and drug discovery and evaluation. The nonclinical testing demands clear understanding of pharmacodynamics, pharmacokinetics, toxicologic pathology, target organs, metabolism, off target effects, selection of right animal species, toxicity and safety pharmacology end points etc

Mr. K. Keerthi Kumar spoke on Innovative method for biomedical waste management. He gave the more emphasis on how to manage biomedical method, segregation and disposal of biomedical waste.

Dr. Karthik Kote spoke on Lignocellulosic biomass solution for energy crisis. His talk was mainly focused on lignocellulosic biomass to generate energy. Which are available resources of lignocelluloses and how manage the energy crisis.

Dr. Kowshik Kukkemane delivered a talk on Rhythms of life: Circadian clocks in health and diseases. His talk was mainly on effect of circadian rhythm in life of the entire organism,

especially on health and disease condition. He highlighted important of circadian clock in regulating the normal metabolism of organism.

Lunch break and poster presentation:

Total **76 posters** were presented by research scholars, Faculty members and students comprising participants from various other colleges and universities. The poster presentations were judged by Dr. Shama Rao and Dr. Sudarshan Prabhu and Dr. Karthik Kote.

Technical session II: Resource person's presentations and oral presentations.

Resource person's presentation:

Ms. Shruthi N. spoke on *Non Target centered drug discovery*. She mentioned about the drug discovery, validation, various approaches of drug discovery process. Also said about the clinical trials, modern approaches like proteomics, genomics and bioinformatics made easy the target drug discovery.

Dr. Sudarshan Prabhu spoke on Role of Diet in Neurodegenerative diseases. His talk was mainly on various aspects and factors of neurodegenerative disease. He also said how neurons die due reactive oxygen species due the unhealthy diet.

Oral Presentations:

There are **14** oral presentations on various topics were presented by research scholars, Faculty members and students which includes participants from different colleges and universities. Oral presentations were judged by Kavya shree Puranik S.R and Dr. Shama Rao.

Valediction and Prize distribution: Programme was headed by Dr.Rama Bhat.P, Dr. Shama Rao and Mr. Balakrishna Shetty AO, Alvas College.

Winner in Poster presentation

Faculty:

I prize: Ms Sajida, Yenepoya Research Centre.

II prize: Ms Akshaya Pai, Dept of Biosciences, Mangalore University.

Students:-

I prize: Preetham Mascarenhas, UG dept of Botany, Aloysius College.

II prize: P. Pallavi Prabhu, UG dept of Biochemistry, Aloysius College.

Winners in Oral presentation:

Faculty & Research Scholar category

I prize:- Gagana B, Dept. of Biotechnology, Alva's research Centre.

II prize:- Saketh Kapoor, Yenepoya Research centre.

Students (UG/PG) category

I prize: Abhijna V. S, UG Dept of Biotechnology, Alva's college.

II prize: Pallavi Bhat, Aloysius college.

Vote of thanks followed by National anthem.



