Dept of PG Biotechnology, Alva's College, Moodbidri Annual Report 2022-2023

Third semester students joined internships from 10th of October 2022 for one month in various institutions across Karnataka and Kerala.

IIIrd Semester classes started on 21st November and for Ist Semester it was on 28th. November 2022. Both theory and practical classes initiated for 3rd semester from 21st November 2022. Students also started their project work by selecting topic for which synopsis to be prepared and presented in December. Seminar topics distributed.

Dr. Shrinidhi Shetty engaged Immunotechnology and Molecular Cell Biology theory and labs to Ist and IIIrd semester. All class distributions and workload calculations were prepared and submitted to college office. MsKavitha from Institute of Bioinformatics, St Aloysius College, Beeri Campus delivered Bioinformatics classes for IIIrd Semester.

A total of 22 students admitted to Ist semester and mentoring were also distributed to faculties.

For 1M.Sc.students orientations were conducted on 28th Nov 2022 by the faculty members.

Third semester students involved in Science model preparation for International Jamboree 2022. They also prepared different models on molecular biology, genetic engineering and biotechnology related aspects. There was exhibition stall from PG Biotechnology in association with degree Microbiology department.

Class seminars started for 2^{nd} M.Sc. on 2^{nd} December. Internship presentations were made on 9^{th} and 16^{th} December.

Fresher's day organized by final M.Sc. students on 14th December to previous M.Sc. students.

The 1st internal assessment tests of one hour duration were conducted for both 1st and 3rd semester students during 9-13 January 2023.

College declared holidays to students from December 18th to 29thon account of International Jamboree which was held from 20-27 December 2022. The regular classes resumed from 30th December.

The academic plan of the dept for the academic year 2023-24 if finalized and submitted to Principal and AO in January which will be presented in February 2023. This includes students institution visit, extension activities, guest lectures, wall magazine preparation by Ist year

students and evaluation, student-faculty programs, conference, workshop and industry-institution visits.

Students and faculties attend Yogathon program on 15th January 2023 atPuttige.

The faculties of the Dept. – Dr Rama Bhat and DrRaghavendra Rao attended BOS and BOE meetings of various boards of Mangalore University, Yenepoya University and St Aloysius College (Autonomous), Mangalore during January 2023.

Students and faculties attended Republic Day celebration function at Smt. Vanajakshi Shreepathi Bhat Vedike, Puttige on 26th January 2023.

First semester M.Sc. student seminar presentation was started on 3rd February 2023.

The project synopsis presentation by III semester students also carried out on 3rd Feb 2023.

Dr Rama Bhat attended a meeting on "Conservation of *Myristica* swamp" organized by Karnataka Biodiversity Board presided by Sri. N.M. Ravi Kalappa, Chairman, Karnataka Biodiversity Board, Bangalore held at Mangalore on 3rd February 2023.

The department organized "Wall magazine competition" for Ist M.Sc. students and the evaluation of the magazine was conducted on 15th Feb 2023. Dr. ShrinidhiShetty, Guest Faculty and Mrs. Shreya from Dept. of Zoology (UG) served as Jury members for evaluation.

The University theory examinations completed on 28th March and practical examinations started from 31st March and ended on 7th April 2023. The students were semester break till 16th April.

Even semester classes reopened on 17th April with time tables changed accordingly with regular staffs and other faculties. Dr. Shrinidhi Shetty assigned with Immunotechnology theory and practical for 2nd semester. Ms. Bhavyashree P.V. of UG Biotechnology distributed 3 hours of Animal biotechnology theory and Practical assigned to Mrs. Shwetha D Shetty of UG Biotechnology. Other workloads distributed among three regular staffs. Three students were present for open elective for which classes conducted on Saturday.

There were regular seminars on Friday for both semester students and review of literature presentation on Tuesday for final year students. There are two practical papers and other two practical hours for project work.

Second internal theory examinations of 3 hour duration were conducted for 1st and 3rd semester students during 6-9th March 2023. The practical examinations conducted in last week of

February for some papers and rests were conducted from 10th March onwards. 17th March was the last working day with classes for students.

The University theory examination was held from 20th to 28th March and practical exams from 31st March to 6th April 2023.

Students and faculties participated in annual sports meet held on 6th April, Alva's Graduation Day 13th April, Alva's Traditional Day 20th April and Alva's College Day on 27th April 2023.

The first internal examination of one hour duration for 2nd and 4th semester conducted from 29th May to 1st June 2023.

In Student- faculty program, Msc students with good teaching skills were given an opportunity to engage class for B.Sc. Biotechnology students. This was conducted in the 1st week of June.

Admission campaign was organized to B.Sc. 6th semester Life Science students of Alva's college on 7th June 2023 and collected their number and emails. Altogether 65 students were attended. Some of them are interested.

Second internal assessment theory examinations of three hour duration will be conducted from 10th to 13th July 2023. The internal practical exams will be followed in 3rd week of July along with presentation of project report for IA marks.

Certificate course classes regularly conducted. Twenty five students enrolled.

Conference/Seminars attended/presented papers/Resource persons

Dr Rama Bhat P. attended 3day workshop- Lecture series on Nanotechnology organized by C-DNA, Indian Institute of Science, Bangalore during 8-10 November 2023 (online).

Dr RaghavendraRao delivered a talk as Resource person at Yenepoya Engineering College, Thodar, Moodbidri on 26th Nov 2022.

Dr Rama Bhat P. was the Guest at Analytical Chemistry Forum inauguration and delivered a talk on Research Methodology on 7th Dec 2022.

Dr Rama Bhat, Dr. Jayadev and DrRaghavendraRao served as Resource persons in a Hands on training on "Advanced Techniques in Science" for PUC faculties and students organized by Dept of Science, Alva's College on 22nd Dec 2022.

Dr RaghavendraRao attended as resource person and presented a talk on "Organic Farming" at AIET, Mijar on 27th January 2023.

Dr Rama Bhat attended and presented a research paper in National Conference on "Advances in Biotechnology and Nanotechnology" organized by PG Dept. of Studies in Microbiology and Biotechnology, Karnataka University, Dharwad held on 14-15 March 2023.

Ms. Ruchika, Research Scholar attended and presented a research paper of her Ph.D. work in National Conference on "Advances in Biotechnology and Nanotechnology" organized by PG Dept. of Studies in Microbiology and Biotechnology, Karnataka University, Dharwad held on 14-15 March 2023.

Ms. Ruchika, Research Scholar attended and presented a research paper of her Ph.D. work in International Conference on "Current technologies and Opportunities in Bioscience" organized by College of Agriculture, Hassan & Combett Institute, Bangalore-University of Agricultural Sciences, Bangalore held on 27-29 March 2023.

A special talk on "'Experimental Animal Handling" was delivered to 4th semester M.Sc. students by Dr Rama Bhat P on 3rd July 2023.

Dr. RaghavendraRao B. served as resource in a workshop entitled "Gel Electrophoresis" for IVth semester M.Sc. Analytical Chemistry students organized by PG Analytical Chemistry dept. on 5th July 2023. 47 students and two faculties participated.

Conferences/workshop organized

Biotechnology Alumni sponsored National Conference 2023 entitled ""Recent Innovations in Medical and Environmental Biotechnology" organized in association with KSPCB, Mangalore and MMR, Mangalore held on 5th May 2023 at Kuvempu Hall. This year we had MMR, Mangalore as an additional association for organizing the program. Altogether 5 lead talks from invited Speakers including Environmental Officer Dr. Ravi and former Scientist from Biocon/ Syngene, Bangalore Dr Shivakumar M, Dr Srinivasa Reddy from Syngene inaugurated the program and Principal Dr Kurian presided over the function. There were 49 abstracts received for both oral and poster presentations from different colleges, university and research institutions. Altogether 200 participants including students, faculties and research scholars from 12 colleges/institutions enrolled. Best oral and poster presentations were awarded with certificate and cash prize sponsored by Alumni DrKiran Kumar Shetty from Merill Life Sciences, Gujarat.

Karnataka State pollution Control Board, Mangalore organized "Awareness program on Nationwide Environmental Conservation and Protection Programme" which was initiation part of Life Mission, a Lead program of Prime Minister of India on 16th May 2023 to degree and PG Life Science students. Environment Officer, Dr Ravi D.R. delivered the talk. Dr Rama Bhat presided over the program.

Visits to institution/industry

M.Sc. 1st and IIIrd semester students along with three faculty members visited ICAR-CPCRI, Vittal and CAMPCO chocolate factory, Puttur on 10th Feb 2023 as a part of industry/academic-research/field program. The students exposed to the topics of plant breeding, molecular biology, plant disease, crop improvement and hybridization. They learned the processing of coca beans and processing and various product developments at the factory.

Industry and institution visit program was organized during 11-15 June 2023 to Chennai and Pondicherry. Altogether 42 students, three faculty members- Dr Rama Bhat P, DrJayadev K and MsBhavyashree PV in the team. Institutions visited were Central Leather Research Institute, Chennai, Vector Control Research Institute, Pondicherry, Department of Biotechnology and Biochemistry of Central University, Pondicherry. In all the departments various laboratories were visited, high end instruments, research activities were demonstrated in detail to our students. There were interactions with scientists in the research centres. Students also visited Aravindashram and Auroville to visualize yoga and other integral activities to use in their daily life.

Student Achievements

Shridhar Kokate of Ist M.Sc. won the **1st Prize** in *Quiz Competition*, Ramesh Gorbal and Hemanth of Ist M.Sc. won the **2nd Prize** in *Quiz Competition* and Deeksha of Ist M.Sc. won the **2nd Prize** in *Rangoli Competition* in "SCIGNIS" organized by PG Dept. of Physics, Alva's College, Moodbidri on the Eve of National Science Day on 24th February 2023.

Final project presentations were arranged for IV semester students by ppt method, 10 minutes for presentation and two minutes for discussion. Ms. Chaithra Acharya won First place and second place was shared by Ms. Anjitha and Ms. TrushtiSalvi.

Publication

Gagana B. and Rama Bhat published a research paper in International Journal.

DrJayadev K. published a research paper entitled "Comparative docking studies of potential candidate from Kokum and Cranberry as anti-adhesins against UTI" in *Biomed Pharmacol Journal*.

Ph. D. Thesis

Ms. Gagana got permission to submit her Ph.D. thesis from Mangalore University after Pre-Colloquium presentation.

MsGagana B submitted her Ph.D. thesis to Mangalore University in April 2023, which was the first student under Alva's College from Biotechnology Dept. after its recognition as Research Centre. The Centre has three Recognized Guides and 11 registered Scholars.

Student Placement

Till date 25 out of 30 students placed.

Eleven students of II Semester attended written tests for teaching posts in Azim Premji Foundation which was held on 2nd February 2023. Five students of selected for interview. Ms Trushti K. Salvi selected and opted the Lecturer Post after the interview for the post of Lecturer in Biology at Azim Premji Foundation.

PG Dept of Biotechnology in association with Training and Placement Cell, AEF organized "Resume Building Workshop " for 4th Semester students in 27th June 2023 in Room No. 318. Ms Ranjitha R Acharya, Asst. Training and Placement Officer delivered talk as resource person. 30 students participated.

Conference Report

Recent innovations in medical and Environmental Biotechnology 05-05-2023

The department of biotechnology Alva's college Moodbidri successfully hosted the national conference on recent innovations in medical and Environmental Biotechnology in association with Karnataka State Pollution Control Board, Mangaluru on 5th May 2023.

The presence of dignitaries, an impressive, line of scholars, the support from sponsors and Alumni's, an array of well-presented oral and poster presentations all came together to help admirably conclude this huge endeavour.

The inaugural ceremony started at 9.30 in the morning. The programme was inaugurated by Dr. Srinivas Reddy, senior principal investigator, Syngene Bangalore. Dr. Ravi D.R, EO, Karnataka State Polloution Control Board, Mangalore, was the chief guest of the programme. The principal of the college DR. Kurian and HOD of the department of biotechnology Dr. Rama Bhat were also present on the dais for the inaugural session.

The programme was started with prayer followed by welcome address which was delivered by Dr. Rama Bhat. Later the formal inauguration was done by lighting the lamp. After that, inaugural address was delivered by all the dignitaries on dais. Later we moved on to the Souvenir release programme where dignitaries present on the dais released the complied form of the abstracts of oral and poster presentation. After this memento was presented to all the guests as a token of gratitude.

The inaugural programme was hosted by Thejaswi Bhat of II M.sc Biotechnology. The vote of thanks was delivered by Navya Shet. There were total of five guest talks, three in the morning, two in the afternoon.

Morning sessions are as follows:

"Geo environmental pollution sources effects and treatment" – delivered by Dr. Ravi D.R, Environmental officer, KSPCB Mangalore.

"Current and emerging methods in expediting drug discovery" – delivered by Dr. Srinivas Reddy B. senior principal investigator Syngene Bangalore.

"Marine microbial enzyme: As anticancer agents" – delivered by Dr. Vineetha M.S, Asst. Prof. Department of biotechnology, School of basic and applied sciences, Dayananda Sagar University Bangalore.

After these three sessions there was oral presentation where participants from different colleges presented their work. Lunch break was given at 1.45 after which the afternoon session began.

The first talk of the afternoon was given by Dr. Preethika A., Asst. Prof. Centre for clinical trials and research, SRM medical college and hospital and research centre, Kattankulathur, Chennai. On the topic "How vaccines are developed and approved for use".

The second talk was by Dr. Shivakumar M.C on the on topic "Contributions of Biotechnology industries in medical and environmental field". Simultaneously evaluation of poster presentations also took place. The last session was followed by valedictory programme.

Mr. Vivek Alva was the president of the programme. Dr. Vineetha M.S and Dr. Preethika A. were the chief guests. HOD and Principal were also present on the dais.

The prize winners of oral and poster presentation and also winners of wall magazine competition of I and II M.Sc Biotechnology were felicitated in the programme. Prize winners are as follows:

Oral presentation:

1st place – Ms. Manju Babu (Yenepoya University Mangalore)

2nd place – Mr. Akash Mitra (Yenepoya University Mangalore)

Poster presentation:

1st place – Mohammad Amjad Hussein (Yenepoya University Mangalore)

2nd place – Anjitha P. (Alva's College Moodubidri)

- Liyona Jovita D'cunha (St. Aloysius College Mangalore)

After prize distribution there was Presidential address by Mr. Vivek Alva. Later there was presentation of memento for all the dignitaries present on the dais. The Valedictory session was hosted by Megha Savanth of I M.Sc. Biotechnology. The programme was ended with National Anthem.















