Department of Microbiology

Microbiology and Biotechnology society was established for the session 2018-19 on dated 08/09/2018. This society was inaugurated at the hands of Dr. K. R. Yadav, Dy.Director. Bio-Processing and Herbal division, Mahatma Gandhi Institute of Rural Industrilization, (MGIRI) Wardha on 8th September 2018. On this occasion. Dr. Yadav delivered guest lecture on the topic 'Production of Calcium Lactate'. Miss Pooja Bhoge from M.Sc. Sem. III and Miss Vaishanvi Mankar and Kanchi Goeyanka of B. Sc. Final were selected as Chairman, Secretary and Treasurer of the society respectively.

A series of Virtual Lecture was arranged in the department. Prof. Dr. A.M. Deshmukh, Former Prof. and Head, Department of Microbiology, Babasaheb Ambedkar Marathwada University (BAMU), Sub Centre- Osmanabad delivered the topic Biofertilizer, on 14/08/2018 and on Actinomycetes, on 23/08/2018 respectively. Prof. Dr. Ms. Chandrakanta Mahindranathan, Department of Botany Faculty of Science Eastern University, Sri Lanka delivered the topic Plant Pathogenic Microorganisms, on 21/08/2018. All P. G. students attended the lectures and get benifited.

One day **National Webinar** on **Ingress into Industry** was arranged for the students which was organized by K.K.Wagh Arts, Commerce, Science and Computer Science College, Nashik in collaboration with Microbiologist Society of India on 28/12/2018. Mr. Kapil Kulkarni Deputy Manager, Quality control, Serum Institute Pune covered the topic ''Vaccine Industry An Overview'', Mr. Kakasaheb Kore Asst. Prof. Bhor Pharmacy College delivered Career, Scope and Responsibilities of Microbiologists in Bioindustries, Career Orientation for Microbiology Students in Health Care Industry, was covered by Mr. Prasad Talware ,Area Nutrition Manager, Danone Nutricia Pvt. Ltd., Dr. R.D. Joshi Vice Principal and H.O. D. Microbiology, Yogeshwari Mahavidyalaya , Ambojogai delivered the topic Interview skills . One day **International Webinar** on **Trends in Genetic modification** arranged on 9th February 2019. Dr. Usha B. Zehr, Director and Chief Technology officer at Maharashtra Hybrid Seed Company Private Limited (MAHYCO), India delivered the topic: Plant Breeding Innovation: Advances in Agriculture ,Dr. Tanzima Yasmin Professor, Dept. of Biochemistry and Molecular Biology, University of Rajshahi, Rajshahi, Bangladesh delivered topic: GMO and General Concerns ,Prof. Dr. Abdullah Mohammad Sohael ,Dept. of Biochemistry and Genetic Engineering, Jahangirnagar University, Savar, Dhaka, Bangladesh talked on Optimization of Genetic Engineering approach for Disease Resistance

in Citrus and Suhas Bharat Sutar from Institute of Crop Science, Chinese Academy of Agricultural Sciences, Beijing, China Talked on CRISPR/Cas9 mediated editing of Wheat. These Webinars were interactive and prove to be beneficial for PG students of Microbiology, Botany and Zoology.

18th State Level MicrobiOlympaid Microbiological Contest was conducted by the department for UG students. R.C Patel College, Shirpur, Dhule in collaboration with Microbiologists Society of India organizes this competition on state level. This contest was arranged at J. B. College of Science, Wardha on 9th January 2018. In this contest 75 students of department from B.Sc. part I, II and III participated in categories essay writing, contest screening test (MCQ based).Total number of students qualified this examination is 58.

In this session, 03 workshops were organized by the department. Under Industry-Academia workshop **HI media** workshop and hands on on "**Transformation in bacteria"** was conducted by Dr. Girish Pai, Molecular biology specialist, Molecular biology section, **Hi Media laboratories Pvt. Ltd** on **7th February 2019**. In this one day workshop 42 PG students from Microbiology, Botany and Zoology participated and learned the techniques. In DBT star programme under Edu-Bridge between JBCS-NCCS, Pune ,department organized two workshops. Dr. Yogesh Shouche , Director NCMR, NCCS , Dr. Dhiraj Dhotre , Dr. Shrikant Pawar, and Dr. Praveen Rahi wereconducted these workshops. Dr. Yogesh Shouche delivered a lecture on **Bioinformatics and human genome project. He delivered the topic Translating science into business as well as how to face an interview.** Dr.Dhiraj Dhotre gave **hands on, on Bioinformatics technique, construction of Phylogenetic tree.** Dr. Shrikant Pawar demonstrated **Isolation of genomic DNA from bacteria and PCR techniques** and also delivered the lectures, on 14th and 15th January 2019. Total 56 students M. Sc. IV semester attended the workshop.

Department of Microbiology arranged an educational tour under industry-academia programme on 12th February 2019. Total 34 post graduate students of M. Sc. semesters II and IV along with PG Coordinator Dr. Ulka Malode and faculty Mr. M. G. Ingale, visited Ankur Seeds and Genetek Life sciences, Nagpur, with kind cooperation from Principal Dr. Om Mohodaya and Head of the department, Dr. Ms. Suhas Khandare. Students get benefited by this tour since they get motivated by the working of the laboratories and the research carried out in the field of Microbiology and Genetic Engineering in these research institutes.

The department organized the State Level Student Seminar Competition Scintillation -2019. Total 19 participants from RTM Nagpur University, SGB Amravati University and Gondawana University delivered their topics through power point presentations. Mr. Anirben Mukharjee of Sindhu Mahavidyalaya, Nagpur received first prize. Mr. Ameya Tidke, Dr. Ambedkar College Nagpur got second prize. First consolation and second consolation prizes won by Ms. Tasneem Kausar Qureshi of D. B. Science,College ,Gondia and Mr. Mantaiah Mallaiah Panem from S. P. College, Chandrapur respectively.

Students of Microbiology were enrolled for Online Swayam NPTEL courses. One online course on Industrial biotechnology designed by Dr. Das from IIT Kharagpur was completed. 23 student from UG and PG were enrolled for this course. Students completed this course with flying colours. Two courses were on going namely **Food Microbiology and Food Safety** designed by Dr. Tejpal Dhewa, UGC -SWAYAM coordinator and coordinator-food safety training and certification (fostac) and **Waste to Energy Conversion** designed by Dr. Prasenjit Mondal ,Associate Professor, Dept. of Chemical Engineering IIT Roorkee.

Department have celebrated achievements of staff and students. Our faculty Mr. **Nikhil Samarth** Got selected for Ph.D. programme at NCCS, Pune. **Mr. M. G. Ingale** Asst. Professor, Dept. Of Microbiology got IInd prize in paper presentation on the topic ‘‘**Production, Extraction and quantification of prodigiosin produced by Serratia marcescens & its antibacterial activity aganist pathogenic bacteria”** Presented at National seminar on diversity of Environmental Allergens and its Threats to Human Health, at Taywade college, Koradi on 09th February 2019. **Ku. Pooja D. Bhoge** M.Sc. IInd year ,got Ist consolation prize in Poster presentation on **“Antogonistic potentials of plant growth promoting rhizosphere associated bacterial isolates aganist plant pathogenic fungi”.** Presented at National Symposium cum workshop on Biowaste as Biosresource at Shankarlal Khandelwal College, Akola on 23 February 2019. **Ku Pooja D. Bhoge** M.Sc. IInd and **Kanchi Goyanka** B.Sc. IIIrd year Selected as a best students during academic session 2018-19 by Microbiology Society, India. **Ku Anam Sayyad and Ku Trupti Murkute,** B.Sc. IInd year Selected for summer research fellowship program organised by National academy of science students during academic session 2018-19. **Ku Nivedita Dambhare and Nitya Varsha,** B.Sc. IIIrd year qualified IIT-Jam 2019 exam from life sciences. **Dr. Mrs. Suhas. S. Khandare,** Head, Dept. Of Microbiology Submitted **nucleotide sequences to National Centre for Biotechnology Information (NCBI)** and got **the accession Nos**. for

three bacterial isolates. She participated in the University level syllabus framing workshop held at J. M. Patel college, Bhandara on 12 February 2019. In this session, the faculty and students jointly presented 06 papers in National and International conferences and 04 papers were published.

Since large cases of Dengue Fever were found in vidarbha region so awareness campaign under social outreach programme was planned by M. Sc. Students, under the guidance of Dr. Ms. Suhas Khandare, Dr. U. A. Malode, Prof. Suraj Kombe and Prof. Nikhil Sarmrth . **Flash Mob and PPT** were done to raise awareness and combating against deadly disease Dengue Ms. Ayushi Chaudhary, Ms. Pooja Sharma, Pooja Gawale, Ms. Riya Chahande, Ms. Nikita Burase, Ms. Mrunali Mitkari, Ms. Ruma Khan, Sweta Patil, Divya Hood, Ms. Ashwini Tijare, Ms. Komal Sadrani, Ms. Sharddha Ekunkar, Ms. Pranali Gode, Mr. Mayank Shukla, Mr. Aaditya Bhasakarwar, Mr. Surendra Rajpurohit, Vaishanvi Kakade and Megha Parkhad participated. The presentations were done at Swami Vivekanand School wardha for the students of 4 th class, Z. P.Shivaji- Sindhi Middle School,Shivajinagar Wardha for the students of 7 th class (both Z. P. schools) and Golden Kids convent and school , Boargaon (meghe),wardha , for the students of 6th and 7 th class on 28/09/2018.

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