



## DEPARTMENT OF MICROBIOLOGY

### *Department activities (June 2022-July2023)*

The Department organises workshops, seminars, webinars, hands-on-training, lecture series, educational trips and skill development programme to enrich teaching learning process of students and to kindle their interest in the subject. Eminent speakers and Alumni from various prestigious institutes are invited to deliver lecture on their topic of research and interact with. The students and faculty continuously strive to attain greater heights in terms of academics, talent nurturing, innovative research and contributions to the emerging boundary-less world.

From July 2022- June 2023 Department of Microbiology has conducted **7 online lectures** from eminent speakers of the field and **4 offline lectures** along with a one-day symposium.

We have celebrated the special days like **World Biofuel day** on 10<sup>th</sup> August 2022 by organizing a webinar on the Topic “Implementation of Biofuel and its future roadmap in India” by Prof. V.K.Vijay, CRDT, IIT Delhi.

Another lecture was delivered by Prof. Michael Sauer on 17<sup>th</sup> Sep 2022. He explained how microbes can help us to survive on the planet earth. He also shared his novel research on plastic degradation with the help of microorganism. We only know about 1 % of the microorganism coexist with us. There is a huge scope to explore their useful properties for making our life easy.

The Department of Microbiology, IHE (DU) organised a sustainability lecture series in association with Indian National Young Academy of Sciences and Microbiologists' Society, India (Delhi Unit) having its first lecture was delivered by Dr.Amit Chandra Kharkwal, Dy. Director and Associate Professor of Amity Institute of Microbial Technology on the topic “Plant Microbe/Microbe- Microbe Interaction for Sustainable Agriculture” with the objective of including the role of microbes in sustainable practices performed on the fields. He shared the result of his case study involving *Piriformospora indica*, *Talaromyces albobiverticillius* (HNB9) and their interaction with other microbes. The application of their consortia in the field boosted the growth of crops and increased their resistance to pathogens, making them a great biocontrol agent.

The second lecture was held on 25<sup>th</sup> Feb 23 on the “Microbes as bio fertilisers, types, importance and benefits” with the objective of including the role of microbes in sustainable practices performed on the fields. The eminent speaker for the talk was Dr. Seema Sangwan, Scientist (Senior Scale) Division of Microbiology, Indian agricultural Research Institute. The programme was held online at Zoom and was live streamed on You tube. It started with an opening remark delivered by Dr. Seema Sangwan. The talk proceeded by stating basic facts on fertilisers, difference between macro and micro nutrients, mycorrhiza, rhizosphere, hyphosphere and the effects of long term usage and abuse of fertilisers.

The third lecture of the series was held on 25<sup>th</sup> March 23 by **Dr. Vishal Mishal**, Assistant Professor in School of Biochemical Engineering, IIT (BHU) Varanasi. He delivered a very informative lecture on “Sources of Sustainable Energy”, elaborating on benefits of sustainable energy and Global Renewable Energy Markets and Policies.

The 4<sup>th</sup> lecture on 8<sup>th</sup> April 23 was conducted on “National Agricultural Higher Education Project: A Revolutionary Tool for Strengthening Agricultural Education in India” with the objective to support the participating Agricultural University systems (AUs) and ICAR in providing students with more relevant and higher quality education. The distinguished speaker of the talk was Dr. Sanjay Singh Rathore, Principal Scientist and National Coordinator, NAHEP, ICAR, New Delhi. The success stories on entrepreneurship by NAHEP were shared which encouraged the students and ignited a spark in them to attain quality education and accomplish their research projects.

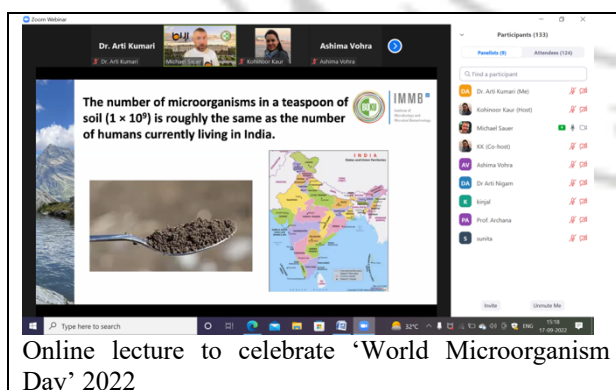
This lecture series was a grand success and appreciated by the peers of Microbiology.

**Microbiology department has also celebrated National Science Day** on 28<sup>th</sup> Feb 2023 in offline mode. We have organized one lecture on the topic “Role of Bioinformatics to understand the genome Biology” by Dr. Shailesh Kumar, NIPGR, New Delhi. This was followed by quiz and some fun activities. The main aim of the seminar was to make us more aware about bioinformatics and its contribution in Research fields.

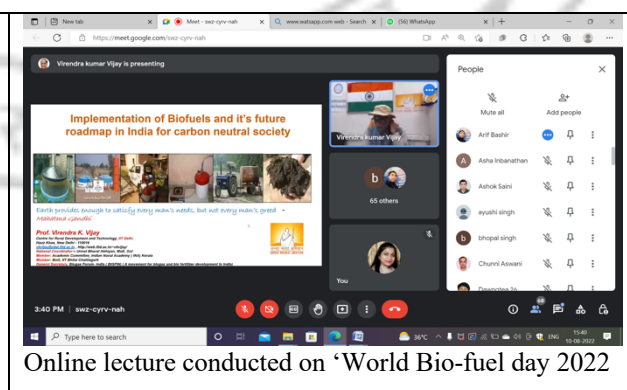
The students had an interaction with one of our alumni, Alumni interaction with Dr. Harshita Mittal, Research Consulting Manager, Putnam Inizio Advisory on 3rd April 2023, where she talked about the need to increase the awareness about tuberculosis.

On 17<sup>th</sup> April, interaction of students was arranged with Prof. A.M. Deshmukh, President Microbiologist Society of India, who put highlights on the future career avenues for students.

Department has also organized visits to premier institute in Delhi NCR viz; IARI, BioNEST UDSC and IUAC. These visits made the students aware about the latest equipment and technologies being used in field of microbiology and allied fields. The students had one to one interaction with the scientists, academicians and research scholars and get exposure about the thrust research areas, these institutes are working on. Some of the students of semester 5 also visited NII as part of ‘Science Setu. Pgm’.



Online lecture to celebrate ‘World Microorganism Day’ 2022



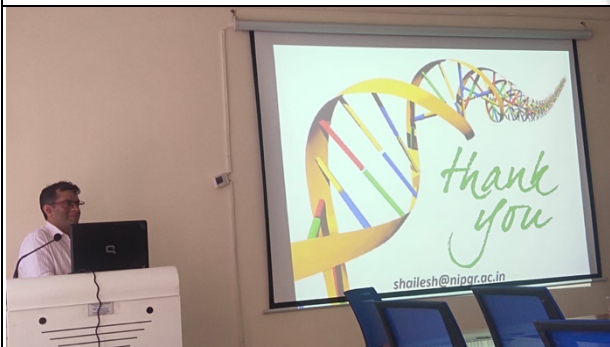
Online lecture conducted on ‘World Bio-fuel day 2022



Alumni interaction with Dr. Harshita Mittal, on 3<sup>rd</sup> April, 2023



Best Student Award given to ' Ms. Kriti Kalra by Prof. A. M. Deshmukh, along with Director Prof. Renu Arora



Dr. Sailesh Kumar, Scientist at NIPGR, NEW Delhi Delivering a talk on "Genome assembly and annotations with different genome assemblers".



Students participating in the games and quiz on the occasion of National Science Day 2023



Centenary Celebration of the University of Delhi. Oration at the India Habitat Centre on 18<sup>th</sup> October, 2022. Our students Ms. Priyanjali and Ms. Kritika performed classical dance at Centenary celebrations of DU



Azadi ka Amrit Mahotsava 15<sup>th</sup> August, 2022