

9th INTERNATIONAL CONFERENCE OF INSCR-Indian Network for Soil Contamination Research

Microbes & One Health

Date: 17-18th January 2025

Venue: Auditorium, Campus-11, KIIT University

DAY-1	17th January 2025
0900-1000h	REGISTRATION
1000-1030h	INAUGURATION Welcome Address: Dr Srinivas Patnaik , Dean, School of Biotechnology, KIIT About the Conference: Dr Vishakha Raina , Professor, School of Biotech, KIIT About the Ecosystem: Dr Mrutyunjay Suar , DG R&D and Innovation, KIIT About INSCR: Prof Rup Lal , President, INSCR Address by: Prof. Saranjit Singh , Vice Chancellor, KIIT Address by Guest: Dr Alok Dhawan , Director CBMR, Lucknow Address by Guest: Dr Debasisa Mohanty , Director, BRIC-NII, New Delhi Note of thanks
1030-1145h	KEYNOTE TALKS Keynote Talk (20 min): Dr Alok Dhawan, Director CBMR, Lucknow "Biomarker discovery and biodevices for Better Patient Care " Keynote Talk (20 min): Dr Debasisa Mohanty, Director, BRIC-NII, New Delhi "AI/ML guided microbiome mining for deciphering novel bioactive molecules and antimicrobial peptides" Keynote Talk (20 min): Dr Manmohan Parida, Director, DRDE Gwalior "Microbes and One Health: Relevance, Challenges, and Future Prospects" Q&A
1145-1215h	Tea Break
1215-1315h	Technical Session-I Microbes and Infection Chair: Dr Debasisa Mohanty, Director, BRIC-NII, New Delhi Keynote Talk (20 min): Prof. Chandravanu Dash, Meharry Medical College, USA "Mechanism of HIV-1 escape from cytotoxic T-lymphocyte antiviral response" Invited Talk (12 min): Dr Sunil Raghav, BRIC-ILS Bhubaneswar "NCoR1 fine-tuned metabolism controls Mycobacterium tuberculosis pathogenesis" Invited Talk (12 min): Dr Ravi Tandon, JNU, New Delhi "Gut dysbiosis with increased abundance of <i>Prevotella</i> is associated with microbial translocation and inflammation in HIV-infected children"

Power Talk (7 min): Dr Utkarsh Sood, Kirori Mal College, Delhi University
“Enhancing Rifamycin B Analogs Yield in *Amycolatopsis mediterranei* through Genetic Engineering of the Shikimate Pathway”

Q&A session

1315-1415h

Lunch & networking

1415-1445h

Session: Startup Showcasing

Moderator: Dr Bhaskar Das, KIIT TBI

Platform Talk (5 min): Ms Nishita Baliarsingh, Co-Founder Nexus Power Pvt Ltd

Platform Talk (5 min): Dr Neera Singh, Founder ProCyto lab Pvt Ltd

Platform Talk: (5 min): Dr Bijayananda Panigrahi, Founder Biopioneer India Pvt Ltd

1445-1600h

Technical Session-II One Health

Chair: Dr Alok Dhawan, Director, CBMR, Lucknow

Keynote Talk (20 min): Dr Subeer S Majumdar, Gujarat Biotechnology University

“Biotechnology-based solutions for addressing One Health”

Keynote Talk (20 min): Prof. Leon J Schurgers, Univ of Maastricht, Netherland
“Canonical and non-canonical functions of vitamin K in health and disease”

Invited Talk (12 min): Dr Niladri B Pati, Manipal University

“Human gut microbiome: An approach toward NextGen therapeutics”

Invited Talk (12 min): Dr Jugal Kishore Das, Shiv Nadar University, Delhi-NCR
“Harnessing Engineered Microbes and Immunotherapy: Pioneering Solutions for Cancer, Autoimmune Diseases, and Diabetes”

Q&A session

1600-1625h

SPECIAL TALK

Prof. Rup Lal, President INSCR

“*Amycolatopsis mediterranei*: A Key Player in Rifamycin B Analog Production to Combat Rifampicin-Resistant Tuberculosis”

1625-1655h

Tea Break

1700-1800h

Technical Session-III Microbial Diversity

Chair: Prof. Rup Lal, President, INSCR

Keynote Talk (20 min): Prof. Niyaz Ahmed, University of Hyderabad
“From soil to society - genome dynamics of pathogenic bacteria in the environment”

Invited Talk (12 min): Dr Rakesh Sharma, CSIR-IGIB, New Delhi

“Microbial Diversity of Gut Microbiome from a Pan India Cohort”

Invited Talk (12 min): Dr Surajit Das, NIT Rourkela

“Deciphering the interaction of biofilm-EPS of marine bacteria with recalcitrant environmental organic pollutants for biodegradation”

Power Talk (7 min): Dr Helianthous, Ramjas College, Delhi University
“A Comparative Genomics of 174 *Mycobacterium Tuberculosis* strains
Focusing on the Potential Drug Targets for Combating Tuberculosis”

Q&A session

1900h onwards Cultural Program

DAY-2 **18th January 2025**

0930-1015h **POSTER SESSION**

1015-1100h **KEYNOTE TALKS**

Keynote Talk (20 min): Dr Manoj Prasad, UDSC, New Delhi
“ATG8 and Sw5: Defenders of Plant Health Against Viral Infections “

Keynote Talk (20 min): Prof. Apparao Podile, University of Hyderabad
“Understanding of *phytomicrobiome* is crucial for "One Health”

Q&A session

1100-1200h **IGNITION SESSION DRDO- ChemBio Defence Technology Outreach**
Chair: Dr Manmohan Parida, Director, DRDE Gwalior

Research vertical in Chemical Defence: Dr B N Acharya, Sc-F, DRDE Gwalior

Research Verticals in Biodefence: Dr S Ponmarriappan, Sc-F, DRDE Gwalior

Q&A session

1200-1230h **Tea Break**

1230-1330h **Technical Session-IV Environmental Biotechnology**
Chair: Prof. Tapan K Adhya, School of Biotechnology, KIIT University

Keynote Talk (20 min): Dr Celin Acharya, BARC Mumbai
“Insights into the heavy metal resistome of a *Bacteroidetes bacterium*
inhabiting metal enriched soil of uranium ore deposit”

Invited Talk (12 min): Dr Vishakha Raina, KIIT University, Bhubaneswar
“Metagenomic study of lake microbial mats reveals protease-inhibiting
antiviral peptides from a core microbiome member”

Invited Talk (12 min): Dr Sourav Das, ILS, Bhubaneswar
“Harnessing Amoeba-Bacteria Interactions in Recycled Wastewater
Irrigation to Promote Sustainable Soil Health”

Power Talk (7 min): Dr Pushp Lata, Delhi University
“Deciphering the Microbial Composition of Manikaran: A SeqCode-
Oriented Methodology for the Identification of Metabolic Functions
within the Hot Spring Ecosystem”

Q&A session

1330-1430h **Lunch & Networking**

1430-1515h **Session: IDEATION SESSION**
Moderator: Dr Vishakha Raina

Selected students will pitch here for innovative ideas each 2 min (15 number)

1515-1615h **INTER-DISCIPLINARY SESSION**

Keynote Talk (20 min): Prof. Yogendra Kumar Mishra, Univ of Southern
Denmark
“Tetrapods based Smart Materials for Advanced Technologies”

Power Talk (7 min): Dr Baljeet Kaur, Hansraj College, Delhi University
“Artificial Intelligence/Machine Learning (AI/ML) Strategies: Role in Peptide-based Therapeutics”

Power Talk (7 min): Dr Jasvinder Kaur, Gargi College, Delhi University
“Integrative characterization of pesticide-degradation *Sphingomonads*; from phylogenetic analysis to enzyme purification”

Power Talk (7 min): Dr Pooja Arora, Hansraj College, Delhi University
“Machine learning strategies for effective prediction of peptides with antiprotozoal activities”

Mr Abhilash Kumar (7 min), Ramjas College, Delhi University
A Genomic Taxonomic Pipeline for Microbial Taxonomy: A Case Study in the Genus *Williamsia*.

1615-1700h

VALEDICTORY SESSION followed by HIGH TEA