



NAHEP-CAAST sponsored Workshop on "Rhizosphere Engineering: Genomes to Metagenomes"



Organized by

Division of Microbiology & Division of Plant Pathology ICAR-Indian Agricultural Research Institute New Delhi

Date and time 10 February 2020 & 10:00-17:00h Venue: Auditorium, Division of Plant Pathology ICAR-Indian Agricultural Research Institute New Delhi

High-throughput DNA sequencing technologies has revolutionized the research in the field of microbial genomics. In the last decade, several microbial genomes, and metagenomes of different ecological regions and plant microbiomes have been sequenced and analyzed using different computational techniques. Various meta-omics approach has significantly improved our knowledge about the structural and functional diversity of microbial communities in a particular environment. The 'Big data' have provided microbiologists with information regarding gene functions, genome structures, biological pathways, metabolic and regulatory networks, and evolution of microbial genomes. These insights have greatly enhanced our understanding of microbial metabolism, plant microbiome and molecular aspects of plant microbial interaction. These approaches have further led to new knowledge on the composition and activities of microbial communities and have enabled the discovery of many novel taxa, genes, enzymes, and molecules. The workshop is designed to sensitize the students and young faculty members about recent advances and experiences of learned speakers in the field of rhizosphere microbiome and the scope of genomics and metagenomics information to usher in new revolution in agricultural microbiology research. The workshop will provide ample opportunities for networking with the national experts from the academic institutions and the industrial leaders.

Theme

The main theme of the workshop is *Rhizosphere microbiome profiling and function, Basis of microbe induced growth promotion, Microbial biostimulant, Metagenomics tools for deciphering plant microbiomes, Microbe induced plant defense, Endophytic microbiome of roots and suppression of plant diseases*

Speakers

i. Prof. L. C. Rai, BHU-Varanasi; ii. Prof. Tulika Prakash, IIT- Mandi; Dr. Piyush Pandey, Assam University-Silchar; iii. Dr. K. Annapurna, IARI-New Delhi; iv. Dr. B. Ramakrishnan, IARI-New Delhi; Dr. Murali Gopal, CPCRI-Kasaragod; Dr. Rajeev Kaushik, IARI- New Delhi; Dr. A. Kumar, IARI-New Delhi.

Who can participate

Faculty and M. Sc. and Ph. D. students of ICAR-Deemed to be universities/SAUs/CAUs/CUs/ other UGC recognized Universities and Research Institutes are eligible to apply. A maximum of 50 participants will be selected for participation in the workshop programme.

Travel and Accommodation

Travelling allowances (by shortest route in III TIER AC TRAIN) will be provided ONLY TO STUDENT PARTICIPANTS by the organizers as per the norms. Participants should produce a certificate duly approved by their host institute (Head of the Department/Institute) to claim travelling allowances. Accommodation will be provided at the IARI guest house/hostel and working lunch/refreshments will be provided on the day of workshop.

How to apply

The complete application form in the prescribed format forwarded by Head of the institute or Department authority should reach *Dr. K. Annapurna, Coordinator-Workshop, NAHEP-Centre for Advanced Agricultural Science and Technology (CAAST)* on Genomics assisted crop improvement and management, *ICAR-IARI, New Delhi* on or before <u>31st December 2019</u>. Application form can be downloaded from <u>www.nahep-caast.iari.res.in</u> Selected candidates will be intimated by email on or before 5th January, 2020.

Contact

Email: workshopmicrobiome2020@gmail.com