Invited Speakers

Prof. Joachim Wink
Helmholtz Centre for Infection Research, Germany

Prof. Michael Steinert
Technical University of Braunschweig, Germany

Prof. Tohru Dairi
Hokkaido University, Japan

Prof. Saisamorn Lumyong
Chiang Mai University, Thailand

Dr. Wasu Pathomree
Chiang Mai University, Thailand

Dr. Nandkumar M Kamat
Goa University, Goa, India

Prof. A.K. Dubey,
Netaji Subhas University of Technology, New Delhi, India

Prof. Chenghang Sun
Chinese Academy of Medical Sciences,China

Dr. Puspita Lisdiyanti
Indonesian Institute of Sciences, Indonesia

Prof. Satya P. Singh
Saurashtra University, Rajkot, Gujarat, India

Prof. K.Kannabiran
VIT University, Vellore, India

Dr. Syed G Dastager
National Chemical Laboratory, Pune, India

Dr. C. Subothra Devi
VIT University, Vellore, India

International Workshop on Biology and Applications of Actinomycetes
31st October-1st November 2019

Registration form

i.	Name of Participant	:	
ii.	Present Position	:	
iii.	Institutional affiliation	:	
iv.	Postal address with PIN [please provide your mobile and e-mail ID without fail]	:	
v.	Title of the paper	:	
vi.	Details of registration fee paid	:	Rs: DD No.: Date: Bank:
ix.	Do you require accommodation [to be paid by the participant]	:	YES / NO
	Signature with date	:	

International Workshop on Biology and Applications of Actinomycetes

Organized by

University of Mysore, Mysore, India

In association with

Helmholtz Centre for Infection Research
&
Technical University of Braunschweig, Germany

Venue: Vijnana Bhawan, University of Mysore
Manasagangotri, Mysore

Dates: 31st October-1st November 2019

INTERNATIONAL WORKSHOP ON BIOLOGY AND APPLICATIONS OF ACTINOMYCETES

Actinomycetes are one of the most important sources of natural products with industrial and therapeutical applications. Using traditional approaches, the search for novel natural products in Actinomycetes with bioactive properties is difficult as often known lead compounds get repeatedly rediscovered. However, new biosynthetic gene clusters have been identified using the genome mining techniques. These newly discovered genes in actinomycetes could be explored for the potential novel natural products.

The two days International Workshop on the Biology and Application of Actinomycetes will be a platform for discussions on the Diversity, Chemical biology and Ecology of Actinomycetes; and the application of modern genomic platforms for the discovery of antibiotics, anti-infectives and anticancer drugs from Actinomycetes. The first day of the workshop themed "Diversity, Chemical Biology and Ecology of Actinomycetes; and the Discovery of Natural Products" integrates talks on studies of natural products from soil, endophytic and marine-derived new natural products discovery, methods for discovering secondary metabolites, structure elucidation, biosynthetic research of natural products, and new biological activities. The session will focus on the effects of biological and chemical elicitation at molecular level on secondary metabolism in actinomycetes. On the second day of the workshop themed "Genomic and synthetic biology approaches in Actinomycetes drug discovery", the session will be held on topics including application of metabolic engineering to optimize natural product synthesis, the use of omics data and the engineering of regulatory genes. The advanced tools of synthetic biology and metabolic engineering including cluster assembly, CRISPR/Cas9 technologies, and chassis strain development for natural product overproduction in actinomycetes will be discussed. Also the use of bioinformatics tools for reprogramming of biosynthetic pathways through polyketide synthase and non-ribosomal peptide synthetase engineering will be covered.

The two days Workshop on Biology and Application of Actinomycetes will include two plenary talks and eight workshop sessions. It will include deliberations by both internationally recognized and well-established scientists as well as promising young researchers and students who are keen to unfold the natural product repository hidden in the Actinomycetes class. We anticipate active exchanges of ideas, advancements of new knowledges, approaches, techniques, and applications, encompassing nearly all disciplines of modern biology and biotechnology for discovery of natural products from Actinomycetes. The workshop is open to all scientists interested in the biology, ecology, taxonomy and natural product chemistry of actinomycetes. The workshop is expected to bring forth and foster many new collaborations among the actinomycetes biologists.

WORKSHOP THEMES

Day 1: Diversity, Chemical Biology and Ecology of Actinomycetes; and the Discovery of Natural Products

Plenary talk: Natural products from Actinomycetes: their discovery and biosynthesis.
Session 1: Isolation of Actinomycetes from various sources, identification (cultural and molecular techniques), and systematics.
Session 2: Diversity of nonribosomal peptide synthetase and polyketide synthase gene clusters among taxonomically close Actinomycetes strains.
Session 3: Elicitation of secondary metabolism in Actinomycetes/ Regulation of antibiotic biosynthesis in Actinomycetes/ Screening of Inhibitors against Cancer Cells.
Session 4: Role of Endophytic Actinomycetes in the synthesis of Bioactive Metabolites.

Day 2: Genomic and synthetic biology approaches in Actinomycetes drug discovery

Plenary talk: Biomedical, Biotechnological and Industrial Applications of Actinomycetes
Session 5: Genomics-Driven Natural Product Discovery in Actinomycetes/ Genome mining of rare actinomycetes and cryptic pathways/ Genome engineering for overproducing bioactive secondary metabolites
Session 6: Synthetic biology and metabolic engineering in actinomycetes for natural product discovery
Session 7: Metabolic engineering for antibiotic production in actinomycetes
Session 8: Bioinformatic tools for use in PKS and NRPS discovery in Actinomycetes.

ABOUT THE UNIVERSITY

The University of Mysore was established on 27th July, 1916 during the benevolent reign of the Maharaja of Mysore, His Highness Nalvadi Krishnaraja Wodeyar (1884-1940). The genesis of the University of Mysore stems from a five year long in depth reading and analysis on higher education across the globe. The mission of the University of Mysore, laid down in the 1916 regulations published in the Mysore Gazette Extraordinary, aims at 'promoting teaching and research in conventional and traditional domains of Arts, Humanities, Pure and Applied Sciences and Professional disciplines'. Sir M Visvesvaraya (1860-1962) played a decisive role in the launch of the University. The University, since then, has gone through different phases of development. Today the University has 63 Postgraduate Departments, offering 76 PG programmes, at the Main Campus, Manasagangotri, 3 Postgraduate Centres, Mandya, Hemagangotri, Hassan and Satellite Centre at Chamarajanagar. It is providing higher education to about 85 lakhs students, of which over 10,000 are Postgraduates. Considering the progress of the University in all directions and its contributions to the society, the Ministry of Human Resource Development, Government of India has considered University of Mysore as 'Institution of Excellence' and has awarded special grant of Rs.100 Crores for establishing Centre of Excellence in 'Biodiversity, Bioprospecting and Sustainable Development' and also to strengthen infrastructural facilities in the University. University of Mysore is recipient of several research and other academic programs of UGC, CSIR, DST and DBT and other agencies of Govt. of India. It is pertinent to mention that recently, University Grants Commission has awarded University of Mysore - University with Potential for Excellence (UPE) and has extended financial assistance of Rs. 50 Crores for research activities and for holistic development of the University. The other major achievements of the University include the recognition with Centre with Potential for Excellence in Particular Area by UGC with grant of Rs. 9.5 Crores in 2012 and PURSE Scheme of DST for the top 20 Universities in Scientific Publications which was renewed for Second phase in 2016 with Rs. 8.5 Crore.

CALL FOR PAPERS

Abstracts not exceeding 250 words are invited for oral/poster presentation in any of the themes of the conference. The one page abstract should be typed in 12 point, Times New Roman, normal font and single space. The size of poster should be length x width (3 x 4'). If the papers are selected for oral presentation, 10 minutes will be given with PPT presentation facility. Please send the abstract(s) by Electronic mail ONLY. E-mail: actinoral@gmail.com. Last date for submission of the abstracts: October 5th 2019. Acceptance shall be communicated by October 10th 2019.

REGISTRATION

Registration Fees Details

Indian Delegates

Students/ Research Scholars: Rs.1000/-, Faculty/ Scientists: Rs.2000/-

Foreign Delegates: $200

Registration fee should be paid by DD drawn in favor of "Finance Officer, University of Mysore", payable at Mysore and sent to the following address:

Organizing Convener

Dr. Ravishankar Rai V
Department of Studies in Microbiology
University of Mysore, Manasagangotri
Mysore , India 570006
Cell No : 9845950155 Office Phone: 918212419441
Email: actinoral@gmail.com

Note: Accommodation will be provided at University Guest house for limited participants on advance payment, based on the availability, on first come first served basis.