Government of India
Department of Science & Technology
Ministry of Science & Technology

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Science brings Europe and India closer NEW INDIGO

Indo-EU Workshop on 'Microbial Electrochemical Technologies for Sustainability: Fuels, Chemicals and Remediation' (metSUS-2017)

28th February, 2017

Sponsored by

Department of Science and Technology (Bio-e-MAT Project)

Organised by

Bioengineering and Environmental Sciences Lab, EEFF Department
CSIR- Indian Institute of Chemical Technology
Hyderabad – 500007, India

Co-organised by

Yildiz Technical University, Turkey

Tampere University of Technology, Finland

Indian Institute of Technology Delhi

About metSUS – 2017

The workshop intends to depict the diverse scope of Microbial Electrochemical Technologies (MET) as a futuristic and sustainable platform in the context of bioeconomy. In recent times, MET applications have amassed significant focus in the domain of bioenergy, waste remediation and resource recovery. Functional classification of METs includes Microbial Fuel Cell (MFC) for bioelectricity generation, Bioelectrochemical Treatment (BET) for waste remediation, Bioelectrochemical System (BES) for biobased product synthesis, Microbial Electrolysis Cell (MEC) for biohydrogen production and Microbial Desalination Cell (MDC) for salt removal. The workshop provides a cohesive gathering of young researchers, scientific fraternity and stake holders to deliberate on MET as sustainable and futuristic domain in correlation with the present state of research through a series of expert lectures and interactive panel discussions followed by visit to the research facility. It also provides a platform to discuss the translational scope of MET from lab to land.

Bio-e-MAT Project

A multi-national team of Scientists from CSIR- IICT and IIT Delhi, India, Tampere University of Technology, Finland and Yilidiz Technical University, Turkey are working on a collaborate project entitled 'Low-Cost and Efficient MFC Materials for Bioelectricity Production from Waste Materials (Bio-e-MAT)' under 'NEW INDIGO' Programme. The project is funded by Department of Science and Technology (DST), Government of India for the Indian partners. The objective of the project is to design a novel and low-cost MFC for bioelectricity generation utilizing waste. Workshop is being organized under the aegis of the project to disseminate the research findings as well as to motivate young researchers towards MET.

Key Areas

- Microbial electrochemical catalyzed systems and their application
- Microbial fuel cell as a novel energy generator
- Bioelectrochemical treatment system for wastewater remediation
- Bioelectrochemical system for resource recovery and synthesis
- Electro-fermentation
- Microbial Desalination
- Design aspects of MET
- Electromicrobiology and Electron transfer mechanism
- Electro-fuels and products synthesis
- Gaseous waste utilization

About CSIR-IICT

CSIR-Indian Institute of Chemical Technology (CSIR-IICT) established in 1944, is a constituent laboratory of Council of Scientific and Industrial Research (CSIR) with expertise in chemistry and chemical technology, it provides solutions to challenges faced by Industry, Government Departments and Entrepreneurs through basic and applied research, and process development. IICT is internationally recognized for its contributions to chemistry research and is an ideal place for taking ideas to commercialization through state of the art research and development (http://www.iictindia.org/)

About BEES

BEES major focus is to comprehensively address fossils depletion and climate change by maintaining ecological/environmental principles through designing a 'waste biorefinery' in the framework of circular bioeconomy. BEES coalesces basic and applied research in developing waste remediation strategies with concurrent value addition in the form of fuel and biobased products using advanced biological strategies. BEES has comprehensive technical competence and project management skills in the areas of Industrial wastewater treatment, design and up-gradation of effluent treatment plants, resource recovery from waste, solid waste management, bioremediation of soils, development of novel bioreactors, production of biobased products, measurement of green house and trace gases in ambient air, carrying capacity studies and environmental auditing/impact assessment studies.

Who can attend

- Graduates (Final Year), Post-Graduates and Doctoral Students
- Entrepreneurs

Application Procedure

- No registration fees
- Applications have to submitted online through the link below
  https://goo.gl/forms/EWZkwDovaAK5IFS83
- First come first serve basis (Maximum of 50)

Important Dates

Last Date of Application submission: 31st January 2017
Acceptance of the application will be notified by 5th February,2017
Date of Workshop: 28th February, 2017

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