INDO-EU

Workshop on

THE RECENT DEVELOPMENTS IN MICROBIAL FUEL CELL AND MEMBRANE BIOREACTOR TECHNOLOGY

Feb 02-03, 2018

Indian Institute of Technology Kharagpur,
Kharagpur, India-721302
Indian Institute of Technology Kharagpur (IITKGP), Kharagpur, India welcomes you to the specialized INDO-EU joint workshop on “The Recent Developments in Microbial Fuel Cell and Membrane Bioreactor Technology”. This workshop is scheduled to be held on February 2 - 3, 2018 at IITKGP campus, Kharagpur, India. We are looking forward for your active participation.

About the workshop:

Wastewater treatment and reuse of treated water is becoming need of the time due to scarcity of the fresh water resources. For facilitating reuse of the treated sewage it is necessary to have a reliable and economical treatment option. Membrane processes are having potential to offer a reliable treatment; however higher cost of the membranes make this unaffordable for treatment of sewage and reduces acceptance of this technology. Hence development and application of low cost membrane technology is desired to encourage treatment and reuse of wastewater. If treatment system is properly designed and configured the organic matter present in wastewater can be considered as resource to recover energy in the form of electricity. Thus, instead of energy consuming wastewater treatment process, it could become an electricity recovery process.

In this workshop, the recent progress on the research of Microbial Fuel Cell (MFC) and Membrane Bioreactor (MBR) technology will be showcased by in house researchers, selected invited speakers from outside and Research Scholars across the globe. Special emphasize will be given on the hybridization of these two technologies for improving wastewater treatment efficiency and higher power output from the overall system. A panel discussion at the end will bring out the research direction to decide way forward for converting this technology from lab-scale to field-scale.

Workshop topics:

Anaerobic Wastewater Treatment Methods

Microbial Fuel Cell (MFC)

- Low cost membrane material
- Efficient membrane-electrode assembly
- Novel pre-treatment methods for inoculums
- Non-noble electrode catalysts
- CO$_2$ sequestration (Microbial Electrosynthesis Cell)
- Microbial carbon capture cell
- Microbial desalination cell

Membrane Bioreactor (MBR)

- Effective membrane fouling mitigation techniques
- Synthesis of filtration membrane material
- Design and modelling of MBR
- Case studies of aerobic / anaerobic MBR

Hybrid MFC-MBR Technology Experience

Language:

Workshop will be conducted only in English. No translation service will be provided.
Programme overview:
Invited speakers and other delegates will be able to share their research findings through oral presentations. Moreover, space will be allotted at the conference venue for displaying posters and exhibits. The technical tour will involve a trip to different facilities related to the workshop. Hands on Practical’s will also be conducted.

Call for abstracts:
Abstracts of papers (not exceeding 250 words) on the above workshop topics are invited latest by January 10, 2018 and the acceptance will be notified by January 15, 2018. The abstract of the paper can be sent to us by mail (E-mail id: iuwwmm2018@gmail.com).

Dates to remember:
- January 10, 2018: Last date for abstract submission
- January 20, 2018: Last date for submission of registration form along with the photocopy of money transfer receipt (As limited seats are available)
- February 02 -03, 2018: Workshop

Registration fees:
Students (IITKGP) INR 1500
Students (Non-IITKGP) INR 2000
Faculty INR 4000
Industry INR 10000
Exhibitor / Sponsors INR 20000

All Payments have to be made by bank transfer after receiving confirmation of participation from our side. The requisite amount to be paid by the participant at the following bank account:

Bank’s Name : SYNDICATE BANK
Branch Name & Address : SRIC-IIT, Kharagpur Branch, IIT Kharagpur-721302, West Bengal, Email- br.9556@syndicatebank.co.in, Ph. No.- 09433058246
Name of the Account : IIT Research Scheme
Account type (SB/Current) : Savings Bank Account
Account Number (as appearing on the Cheque Book) : 95562010000790
IFSC Code No. of the Bank : SYNB0009556
Swift Code : SYNBINBB120
Branch MICR No. : 721025103

To avoid errors, please specify your first name followed by “IUWMM2018” in the transfer copy. You have to attach the transfer copy to the mail id: iuwwmm2018@gmail.com along with the registration form.

P.S. - Right to participate is reserved on the basis of invitation only
Location:

By Air

The nearest airport to Kharagpur is the Netaji Subhas Chandra Bose International Airport (CCU), Kolkata. You can get a flight to Kolkata airport on regular basis. It is widely connected to almost all the major destinations of the country. From Kolkata Airport you can take a cab from the Airport taxi stand to Kharagpur. The distance is almost 140km. The travel time is approximately 2.30 hrs. It costs roughly Rs. 3000/- (depending on the taxi type) or you can take a cab and reach Howrah railway station. Take a taxi to Howrah Station (UBER and OLA is available). The cost is approximately Rs. 300. It takes around 1.30 hrs (if you get Traffic Jam) to reach Howrah station. There is regular Express and Local (choice is yours) trains to Kharagpur. It takes 2 hrs by an express train - Fare - Rs 60/- to 150/- depending on class and train type. The Institute is 5 km from Kharagpur railway station. (Kharagpur Railway station-IIT campus: Taxi fare Rs. 150/-, Rickshaw Fare Rs. 60/-, Auto rickshaw Fare Rs.100/-)

By Train

Kharagpur is well connected to most major cities of India by rail. There are frequent trains to Kharagpur. Check http://www.indianrail.gov.in/ for train details. Alternatively, you can reach the Howrah Railway station and take a local or express train to Kharagpur or book a cab to reach Kharagpur via road. The distance is almost 140km. The travel time is approximately 2.30 hrs. It costs roughly Rs. 3000/- (depending on the taxi type).

Invited Speakers:

Prof. S. Venkata Mohan, Principal Scientist, CSIR-Indian Institute of Chemical Technology (Council of Scientific and Industrial Research), Ministry of Science & Technology, Government of India, Tarnaka, Hyderabad-500007, Telangana, INDIA.

Prof. Kaido Tammeveski, Head of Chair, Associate Professor in Colloidal and Environmental Chemistry, University of Tartu, Institute of Chemistry, Ravila 14a, 50411, Tartu, Estonia.

Prof. Michaela Wilhelm, Senior Scientist, Advanced Ceramics Group, University of Bremen, IW3, R 2210, 28359 Bremen, Germany.

Contact details:

Organizing committee:

Convenor

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Workshop Secretariats

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