



INDO-US Two-days Workshop

On

Circular Solutions to Sanitation – Making profits from Toilets

29th and 30th March 2023

Venue: Hall II, ICSR, IIT Madras

Timings: 09:00 AM to 06:00PM

Coordinator

Prof. Indumathi M. Nambi

Organised by

TAURI Research Group, Department of Civil Engineering, IIT Madras



Indian Institute of Technology Madras, India welcomes you to the specialized Indo-US joint workshop on “**Circular Solutions to Sanitation – Making profits from Toilets**”. This workshop is scheduled to be held on **29th and 30th March 2023 at IIT Madras**, Chennai, India. We are looking forward for your active participation.

About the workshop

Inadequate sanitation is one of the major health and environmental issues in India. Swachh Bharat Mission is aiming to provide the sufficient sanitation facilities as well as the modern and scientific waste management solutions. Undiluted human waste is the potential source of valuable nutrients (urine) and renewable energy (faeces). Our body excretes nutrients (phosphorous, nitrogen and potassium) that are highly essential for modern food production. Phosphorous is the non-renewable critical resource and India imports about 80% of it and 100% of potash from other countries and is in highly vulnerable condition due to price fluctuation. About 22% of the global phosphorus demand can be achieved through the recovery of phosphorus from human waste (urine and faeces). Presently the valuable nutrients are flushed into the sewer systems. Thus, we are in need to recover nutrients from these waste. In this context, the workshop is designed to disseminate the knowledge about applications of diverse technologies employed for circular economy in sanitation field. This platform helps for an **interaction between industries, researchers and startups for developing the innovations for real life applications**

Topics to be covered

- Sustainable wastewater treatment technologies
- Innovative toilet systems designed for resource recovery
- Nutrient recovery from wastewater
- Wastewater resource management for clean energy production
- Green and bio-hydrogen production methods
- Carbon sequestration techniques
- Sustainable char recovery from waste

Language

Workshop will be conducted only in English. No translation service will be provided.

Programme overview

Invited speakers and other delegates will be sharing their research findings through oral presentations. Moreover, space will also be allotted at the conference venue for displaying posters and exhibits. A special panel discussion forum is also organised as a part of the workshop.

Call for abstracts for poster presentation and product exhibits

For poster presentation, submit the abstracts (~300 words) on the topics listed above. The abstract pertaining to the workshop themes should be sent to the following registration link provided in registration steps. A single participant cannot present more than one poster. However, interested participants can also attend the workshop as an attendee without submitting an abstract for the workshop. For product exhibits, the photographs of the product along with one page write up describing the product novelty and applicability should be submitted.

Important dates

Abstract submission deadline : 15th March, 2023

Notification of abstract acceptance : 18th March, 2023

Registration and fee payment deadline : 25th March, 2023

Registration fee

Students : 4000 (workshop fee) + 18% GST = 2360

Faculty : 5000 (workshop fee) + 18% GST = 5900

Startup/Industries/Others : 7500 (workshop fee) + 18% GST = 8850

Product exhibitors : 10000 (workshop fee) + 18% GST = 11800

Note – **The registration fee includes complimentary lunch and snacks during both the workshop days.** However, the registration fee doesn't include the cost of accommodation. Accommodation will be provided for participants **ON PAYMENT BASIS in one of the IITM hostels/guest house (on twin sharing basis) based on the availability if requested.** Participants must make their own travel arrangements to reach the venue. **No TA/DA will be provided.**

Registration procedure

- Participants interested in attending the workshop should register in the link: <https://elearn.nptel.ac.in/CESP/> and pay the above stated fee as per your category.
- For poster presentation/product exhibits, if the submitted abstract/product is accepted for poster presentation/exhibit in the workshop, the participants need to pay the workshop registration fees via same portal (mentioned above) to confirm their participation.
- Upon successful payment of the registration fees, please note down the transaction ID and save the receipt of the payment which will be needed at the time of registration at venue.
- After submitting the above mentioned google forms, the participants will be notified about the accommodation details and confirmed about the workshop registration.

Invited speakers



Prof. George Tchobanoglous
Key note speaker,
Professor Emeritus,
University of California, Davis, USA



Mr. Roshan Shreshtha
Sanitation – Lead (South Asia)
Bill and Melinda Gates Foundation



Prof. Vijayaraghavan Chariar, Professor
Centre for Rural Development and Technology
Indian Institute of Technology Delhi
Chairman- Ekam Eco solutions, NewDelhi



Dr. Indrasis Das,
Scientist,
Environmental Engineering
CSIR- CLRI, Chennai



Mr. Sunil Agarwal,
Waste Management and WASH Professional
Toilet Board Coalition, India



Ms. Namita Banka,
Founder and Managing Director,
Banka BioLoo Ltd, Hyderabad



Ms. Padma Priya,
Chief- Executive,
Sanitation First (NGO), Chennai



Harold Leverenz
Environmental Engineer
University of California, Davis, USA



Prof. Mahesh Ganesapillai,
Professor,
Department of Chemical Engineering,
VIT Vellore



Dr. Nimish Shah,
Managing Director,
IAPMO India



Dr. Heather Bishcel,
Associate Professor,
Civil and Environmental Engineering,
University of California Davis

Organizing co-ordinator



Prof. Indumathi M Nambi,
Professor (Environmental Engineering)
Department of Civil Engineering
Indian Institute of Technology Madras

Organizing committee

Ms. Anusha Ganta, Secretary, Research scholar, EWRE, IITM
Dr. K. Uthradevi, Co-secretary, Project officer, EWRE, IITM
Dr. G. Dhivakar, Post-doctoral associate, IITM
Dr. Ranjith Kumar, Research associate, IITM
Mr. Ankit, M.Tech student, EWRE, IIT M
Dr. Devasena, Professor, Director- Research, PSGITECH