

INTERNATIONAL CONFERENCE ON NEXT-GENERATION MATERIALS

for Sustainable Energy & Circular Resource Recovery through Membrane Technologies

Venue : National Institute of Technology, Tiruchirappalli, India

Date: 15 to 17 October 2026

Submission Abstract or Paper

Delegates can please submit your abstract on or before 30 August 2026

We invite short poster presentation from registered participants. Abstract for short poster presentation can also be submitted by email

About the Conference

The aim of this conference is to disseminate of chemical engineering, wastewater treatment and purification, membrane separation and industrial applications.

About Department of Chemical Engineering

The department was established in 1967 and it is regarded as one of the premier centers for chemical engineering in India by industries as well as academia. It also has the distinction of being ranked as one of the top seven chemical engineering divisions in India. It offers under graduate, post graduate and PhD program in various chemical engineering disciplines. The department is backed by highly qualified and experienced faculty. The program is supplemented by several laboratories like Fluid Mechanics, Heat and Mass transfer, Mechanical Operations, Reaction Engineering, Process Control and Biotechnology.

Expected Benefits from the conference

The ideology of green technology implementation is presumed to curb out all the environmental related issues. Such awareness about novel technologies is the immediate need for present world to meet out all the environmental problems. The expertise from variegated fields is being planned for this conference from whom the wide perspective of ideas could be nurtured among the delegates/participants of the conference. With high rate of technology transfer, dissemination of numerous new ideas would be possible among the research community. Futuristic perspective, environmental awareness and management are the benefits that are most anticipated at the end of this three day international conference.

Organizing Committee

- Dr. M. Matheswaran, Department of Chemical Engg, NITT, India
- Dr. (Mrs.) VIRIVINTI Nagajothi, Department of Chemical Engineering, NITT, India
- Dr. K Sankar, Department of Chemical Engineering, NITT, India
- Dr. Jyoti Sahu, Department of Chemical Engineering, NITT, India
- Dr. Kartikya Shukla, Department of Chemical Engineering, NITT, India
- Dr. Rupam Sinha, Department of Chemical Engineering, NITT, India
- Dr. Nandlal Pingua, Department of Chemical Engineering, NITT, India
- Prof. C. T. Aravindkumar, MGU, Kottayam, India
- Prof. Sirshendu de, Indian Institute of Technology, Kharagpur, India
- Dr. N Venkatesh, CECRI, Karaikudi, India
- Dr. Ahmad Fauzi Ismail, Universiti Teknologi Malaysia, Malaysia
- Dr. Wirach Taweepreda, Prince of Songkla University, Thailand
- Dr. Tatiana Plisko, National Academy of Sciences of Belarus
- Dr. Jakub Čespiša, VSB-Technical University of Ostrava, The Czech Republic
- Dr. Muzafar Zulkifli, UniKL MICET, Malaysia
- Dr. Zsuzsanna László, University of Szeged, Hungary
- Dr. Sudip Chakraborty, University of Calabria, Italy

Deadline
Abstract Submission (oral/poster):
20.09.2026
Intimation of Acceptance:
25.09.2026

Invited research area

- Novel materials
- AI-driven process design
- Hybrid separation systems
- Next-generation energy technologies
- Nanomaterials and nanocomposites
- Functional polymers
- Metal-organic frameworks (MOFs)
- Hydrogen production and purification
- Fuel cells and electrolyzers
- Carbon capture and utilization (CCUS)
- Bioenergy and renewable fuels
- Energy-efficient separation processes
- Industrial effluent valorization
- Zero liquid discharge systems
- Waste-to-resource technologies
- Wastewater resource recovery (nutrients, metals)
- Nanofiltration, ultrafiltration, reverse osmosis
- Gas separation and hydrogen purification
- Membrane distillation and electrodialysis
- Bio-inspired and smart membranes

Probable Speakers (Online/Offline)



Dr. Frank Lipnicki,
Lund University, Sweden



Dr. A.F. Jamal,
Universiti Teknologi
Malaysia,



Dr. Michael Karasek,
Technische Universität Wien,
Austria



Dr. Erna Yuliawati
Universitas Muhammadiyah
Palembang, Indonesia



Dr. Wirach Taweepreda,
Prince of Songkla University,
Thailand



Dr. Usha Aravind,
Cochin
University, India



Dr. M.V. Shankar,
Konkuk University Korea



Prof. C. T. Aravindkumar,
MGU, Kottayam, India.



Dr. P. Chinnai,
Pondicherry University, India.



Dr. N. Venkatesh,
CECRI, Karaikudi, India



Dr. Nidheesh P. V.,
CSIR



Dr. Zsuzsanna László,
University of Szeged,
Hungary



Dr. Khoa Tran
Dang-VNU-
UET, Vietnam



Dr. Tatiana Plisko,
National Academy of Sciences of
Belarus, Belarus



Dr. Selvaraju
Narayanasamy
IIT Guwahati



Dr. P. Theertharajan
CSIR-CERI Director.



Dr. B. Jelluri, IIT,
Pondicherry university, India

Convener

Dr. G. Arthanareeswaran,
Department of Chemical Engineering
National Institute of Technology
Tiruchirappalli



Chief Patron

Dr. G. Aghila
Director,
National Institute of Technology,
Tiruchirappalli



Awards and Recognition

Outstanding contributions will be recognized through the following awards:

- Best Paper Award – For the most innovative and impactful research.
- Best Student Paper Award – For exceptional student-led research contributions.
- Best Poster Award – For outstanding poster presentations.
- Young Scientist Award – For notable contributions by early-career researchers.

Awardees will receive certificates and mementos during the valedictory ceremony.



Registration

Category	India (INR)	Abroad (USD)
Faculty and Researcher	4500	300
Delegates from Industry	5500	350
Research Scholars/PG students	3500	150
UG Students	2500	100
Attendees and Accompany person	2000	100

Participants are requested to register using the Google Form provided
<https://forms.gle/6VCSnVh42Fx2NvzFA>

Special Issue- Publications

Accepted abstracts and presented works will be considered for publication in reputed peer-reviewed journals in Elsevier.

- Separation and Purification Technology
- Chemical Engineering Journal



Contact Details

✉ icngmnit@gmail.com ☎ +91 8939126151 <https://icngm.nitt.edu/>