

Two-day International Conference
on
**Net-zero Emission Technologies for Sustainable
Development: Challenges and Opportunities
(NOET - 2022)**

Supported by
Department of Scientific and Industrial Research
Access to Knowledge for Technology Development and
Dissemination - Event Programme

December 12-13, 2022



NOET 2022



Organized by



**Department of Chemical Engineering
IIT (ISM) Dhanbad**

<https://people.iitism.ac.in/~NOET-2022/>

ABOUT THE CONFERENCE

“Net-zero emission” refers to achieving a balance between the anthropogenic GHG emission and its removal from the atmosphere. Attaining net-zero emission for sustainable development requires innovations in technologies that decarbonize conventional resource use while controlling fresh emissions of CO₂ into the atmosphere. Without strong and targeted research and development initiatives in critical technology areas, achieving the goal of the net-zero emission is impossible. Technology innovations in the field of carbon capture, utilization and storage; direct CO₂ capture from the atmosphere; use of low-carbon hydrogen or hydrogen-based fuels; use of bioenergy and other renewable energy sources; and large-scale energy storage systems are going to play a major role in achieving the goal. However, each field mentioned faces techno-economical challenges. Academia, public and private sectors need to work together on planning policies and developing technologies to achieve this objective by mid-century, limiting the global average surface temperature rise to 1.5 °C set by the Paris Agreement.

ABOUT THE DEPARTMENT

Since its inception in 2010, the department aimed to instill in all the students the essential skills of critical thinking, and creative problem solving for their success in the practice of chemical engineering. The department offers academic and research programs leading to B.Tech, M.Tech and PhD degrees. Many of the graduated students are placed in reputed national and multinational organizations such as IOCL, BPCL, ONGC, GAIL, Reliance Industries, L&T, Vedanta, and Aditya Birla. A substantial number of the students are also engaged in higher studies and research in reputed institutes in India and abroad. The department has been actively involved in different collaborative and multidisciplinary research projects sponsored by CIL, DST, DST-FIST etc., thereby maintaining and modernizing its research infrastructure. The department strongly emphasizes developing and maintaining strong collaborative and cooperative links with private and public sector industries, R&D houses, government user departments as well as premier academic and research institutions within the country and abroad for the advancement of the knowledge and benefit of the society.

MAJOR THEMES

- Clean Energy Innovation
- Carbon Capture, Utilization & Storage (CCUS)
- Hydrogen Production, Storage & Utilization
- Energy Storage System
- Solar Energy System
- Other relevant areas



CALL FOR ABSTRACTS

The conference invites abstracts from faculties, students, scientists, researchers and industry professionals. The abstract should be limited within 250-300 words. The abstract should report original academic or industrial research, in any of the topics in the major themes/ relevant areas highlighted, but not limited to, the major themes.

For detailed guidelines on the abstract submission, please visit the following link

<https://people.iitism.ac.in/~NOET-2022/>

All the submitted abstracts would be subject to peer review.

IMPORTANT DATES

Commencement of Abstract Submission	1st Sept., 2022
Abstract Submission Deadline	20th Sept., 2022
Notification of Abstract Acceptance	30th Sept., 2022
Submission of Full-length Manuscript Deadline	30th Oct., 2022
Commencement of Registration	4th Nov., 2022
Early-Bird Registration Deadline	15th Nov., 2022
Online Registration Deadline	30th Nov., 2022

REGISTRATION FEE

Type of Participant	Early bird	Regular
Industry	INR 7000/-	INR 10000/-
Faculty	INR 5000/-	INR 8000/-
Students and Research Scholars	INR 3000/-	INR 5000/-
International Participants	\$ 250	\$ 300

For further details on registration and payment, please visit the following link

https://eps.eshiksa.net/DirectFeesv3/IIT_Dhanbad/index

SPONSORSHIP

Sponsorship solicited / Get Involved and support the conference. Please visit <https://people.iitism.ac.in/~NOET-2022/> for further details.

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