One-day Workshop on Innovating for Net Zero: Decarbonization and Sustainability Solutions

Feb 4th 2026 (Wednesday)
Time: 10:00 - 17:30
Venue: CDMM 303

Organized by
CO_2 Research and Green Technologies Centre
in association with
School of Mechanical Engineering,
Vellore Institute of Technology,
Vellore-632 014, TN, India

In association with
Teesside University, UK
Sponsored by

BRITISH COUNCIL

About VIT

VIT was established with the aim of providing quality higher education on par with international standards. It persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. The campus has a cosmopolitan atmosphere with students from all corners of the globe. Experienced and learned teachers are strongly encouraged to nurture the students. The global standards set at VIT in the field of teaching and research spur us on in our relentless pursuit of excellence. In fact, it has become a way of life for us. The highly motivated youngsters on the campus are a constant source of pride. Our Memoranda of Understanding with various international universities are our major strength. They provide for an exchange of students and faculty and encourage joint research projects for the mutual benefit of these universities. Many of our students, who pursue their research projects in foreign universities, bring high quality to their work and esteem to India and have done us proud. With steady steps, we continue our march forward. We look forward to meeting you here at VIT.

About CO_2 RGTC

The CO_2 Research and Green Technologies Centre **(CO_2 RGTC)** is a unique centre that carries out research exclusively on various aspects of CO_2 related research like CO_2 sequestration, conversion of CO_2 into useful fuels, development of transcritical CO_2refrigerators and supercritical CO_2 based extraction technology. The centre also focuses on cutting-edge research on energy and environmental related challenges leading to the development of sustainable technologies. **CO_2 RGTC** carries out research on the development of various sustainable technologies for the effective use of solar, wind, and bioenergy. Advanced research is also carried out to develop materials for energy storage, electrochemical systems for the production of value-added products, fuel cells, and hydrogen energy.

School of Mechanical Engineering (SMEC)

The School of Mechanical Engineering is one of the oldest and most prestigious schools of VIT. This school started functioning right from 1984, the year in which our institution began. The School of Mechanical Engineering offers 3 undergraduate and 6 post-graduate programs. The school has a team of highly qualified faculty members, many holding PhDs from elite institutes across the globe, to teach and train this country's best minds. The pride of the school lies in the significant research funding received from several National and International agencies such as DST, DRDO, MNRE, CSIT, CVRDE, CPDO, IE, AR&DB, BRNS, ISRO, UGC, NRB, Royal Academy of Engineering etc. The Department of Science and Technology, Govt. of India has recognized the school for its research activities and supported it in 2003, 2010 and 2022 under the FIST scheme. The school has modern facilities, enabling cutting-edge research in a wide spectrum of niche technological areas. The school is ranked 501-600 in the World as per THE World University Subject Ranking in 2024. Mechanical and Manufacturing Engineering is ranked within the top 10 in India and top 201- 250 in the world as per QS World University Rankings by Subject 2024.

About the Workshop

The *One-day Workshop on Innovating for Net Zero: Decarbonization and Sustainability Solutions* brings together experts from academia, industry, and policy to explore practical approaches to achieving net zero goals. The workshop focuses on emerging technologies, innovative decarbonization strategies, and sustainable practices across key sectors. Through expert talks and interactive discussions, participants will gain actionable insights and foster collaboration to support the transition toward a low-carbon and sustainable future.

Honourable Patron

Dr. G. Viswanathan, Founder & Chancellor

Patrons

Mr. Sankar Viswanathan, Vice President,
Dr. Sekar Viswanathan, Vice President,
Mr. G. V. Selvam, Vice President
Dr. Sandhya Pentareddy, Executive Director
Ms. Kadhambari S. Viswanathan,
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Dr. T. Jayabharathi, Registrar

Conveners

Dr. S. Murugavelh, Director, CO_2 RGTC
Dr P. Kuppan, Dean, SMEC
Dr. Daphne Lopez, SCORE

Faculty Coordinators

Dr. J. Ranjitha, CO_2 RGTC
Dr. K. Nanthagopal, SMEC
Dr. S. Nithya, SCORE

Brief of the Program

- Participants will gain a Comprehensive Understanding of Decarbonization Strategies.
- Innovative Sustainable Technologies.
- Policy Frameworks Supporting the NetZero Transition. The program will Enhance Research Capabilities.
- Foster Interdisciplinary Collaboration.
- Inspire Participants To Integrate Sustainable Practices and Climate-conscious Solutions into Academia
- Industry Partnerships
- Community Development Initiatives.

For Registration

Last date for Registration
3rd February 2026

The participants can register using the following link. There is no registration fee for the workshop. The program will be conducted in offline mode. A certificate will be provided with 90% of the attendance.

https://l1nk.dev/BuUNr

Contact Information

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Vellore-632014
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RESOURCE PERSONS

Prof. Kumar Patchigolla,
Net Zero Industry Innovation Centre, Teesside University, UK
Title: Global Pathways and Technologies for Decarbonizing Hydrogen Production

Prof. V. Aravindan,
Sustainable Energy Materials,
IISER, Tirupati
Title: Recent Progress on Energy Storage Systems

Dr. Ragothaman A
Project lead
Vehicle Engineering
VOLVO Group India Private Limited
Bengaluru
Title: Decarbonization Strategies towards sustainable solutions

Dr. N. Saravanan
Principal Engineer, Born Electric,
Advanced Engineering, Sustainability
Mahindra Research Valley,
Mahindra World City-Chennai.
Title: Reimagining Sustainable Mobility for the Future