



VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)



ONE DAY WORKSHOP

Hydrogen Production and Storage

11 February, 2026

9:00 a.m. - 5:00 p.m.

Venue: Vellore Institute of Technology, Vellore

Funded by



Anusandhan
National
Research
Foundation

Spoke Institutions



Organized by:

School of Mechanical Engineering, Vellore Institute of Technology, Vellore
Sponsored Research and Industrial Consultancy (SPoRIC)

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Dr. M. Manikandan

HOD, Design & Automation

COORDINATORS

Dr. A. Satheesh

Professor, SMEC

Dr. D. Sakthivadivel

Associate Professor, SMEC

Vellore Institute of Technology (VIT)

Vellore Institute of Technology (VIT) was founded in 1984 as Vellore Engineering College by the Founder and Chancellor Dr. G. Viswanathan. University status was conferred in 2001 by MHRD Govt. of India in recognition of its excellence in academics, research, and extracurricular initiatives.

Ranking and Accreditation

VIT has emerged as one of the best institutes of India and is aspiring to become a global leader. Quality in teaching-learning, research and innovation makes VIT unique.

- Engineering and Technology: 142nd in the World and 9th best in India (QS World University Rankings by Subject 2025)
- Data Science and AI subject areas are within the Top 100 in the world. Computer Science, Information Systems, Electrical, Electronics, and Materials Science subject areas are within the top 200 in the world (QS World University Rankings by Subject 2025)
- Within the top 2 in India and top 600 in the world (Shanghai ARWU ranking 2025)
- NAAC Accreditation with A++ grade (3.66 out of 4)
- Within the top 20 in University, Research and Engineering categories in India (NIRF Ranking, Govt. of India 2025)
- 352nd in the world and 7th in India (QS World University Rankings: Sustainability 2026)

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, CSIR, 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. This School got NBA accreditation on 2025 for 6 years.

Description:

This workshop focuses on Biomass steam gasification based Hydrogen production and Metal Hydride Tanks for Bio-Hydrogen Applications offers participants practical experience in designing, operating, and evaluating Hydrogen production and Storage systems. The solid state storage, particularly metal hydrides, ensures compact operation and safe containment of hydrogen. The workshop also explores the infrastructure and technology behind the compressed hydrogen storage and distribution for stationary and mobile applications. Through the interactive demonstrations and real-time experiments, participants will gain a deep understanding of hydrogen absorption and desorption processes, system integration, and its real-world applications. This session bridges theory and practice, equipping with the essential skills to advance sustainable hydrogen storage technologies.

Schedule:

Inauguration

(09.30 a.m. – 10.00 a.m.)

Chief Guest & ANRF-PAIR Team

Tea Break

(10.00 a.m. – 10.30 a.m.)

Bio-Energy Conversion Technologies for Hydrogen Production

(10.30 a.m. – 11.30 a.m.)

Dr. D. Sakthivadivel

Associate Professor, Vellore Institute of Technology, Vellore

Metal Hydride-Based Hydrogen Storage and its Applications

(11.30 a.m. – 12.30 p.m.)

Dr. A. Satheesh

Professor, Vellore Institute of Technology, Vellore

Lunch Break

(12.30 p.m. – 02.00 p.m.)

Field Visit to Bio-Energy Conversion Systems

(Biomass Gasification and Biogas Digester)

(02.00 p.m. – 03.00 p.m.)

Dr. D. Sakthivadivel

Associate Professor, Vellore Institute of Technology, Vellore

Tea Break

(03.00 p.m. – 03.30 p.m.)

Research Laboratory-Based Hands-on Training

“Metal Hydride Hydrogen Compression Storage System”

(03.30 p.m. – 04.30 p.m.)

Dr. A. Satheesh

Professor, Vellore Institute of Technology, Vellore

Vote of Thanks and Distribution of Certificates

(04.30 p.m. – 04.45 p.m.)

Dr. N. Rajasekar

Project Director, ANRF-PAIR

Target Participants:

Faculty members, PhD scholars, M.Tech, MS and B.Tech students

Important Dates:

Event Date: 11 February 2026

Registration Starts: 03 February 2026

Last date for registration: 06 February 2026

Registration:

The participants can register using the following link. There is no registration fee for the event. The program will be conducted on offline mode.

Contact:

Dr. A. Satheesh

Professor, School of Mechanical Engineering (SMEC),

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Student Coordinators

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Registration Link



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