

For Immediate Release: December 24, 2024

Press Release

Dr. K.V. Vidyanandan Delivers Lecture on Hydrogen's Role in Power and Transport Sectors at IIT (ISM) Dhanbad

Dr. K.V. Vidyanandan, Professor of Practice in the Department of Electrical Engineering at the National Institute of Technology (NIT) Calicut, Kerala, delivered an insightful lecture titled *Emerging Roles of Hydrogen in Power and Transport Sectors* at IIT (ISM) Dhanbad. The lecture, held in the Conference Room of the Department of Electrical Engineering at IIT (ISM) Dhanbad, was attended by faculty members, research scholars, and students. The session was led by Prof. Sukumar Mishra, Director of IIT (ISM).

Prof. Sukanta Das, Head of the Department of Electrical Engineering at IIT (ISM) and other faculty members of the Department were also present during the lecture.

During his talk, Dr. Vidyanandan explored the vast potential of hydrogen as a clean energy carrier. He highlighted advancements in hydrogen technologies for power generation and transport, discussed the challenges and solutions associated with integrating hydrogen into existing systems, and provided a global perspective on the role of hydrogen in the energy transition.

Dr. Vidyanandan's Professional Journey

Before joining NIT Calicut in 2023, Dr. Vidyanandan had a distinguished 38-year career at NTPC Limited, where he retired as General Manager at the Power Management Institute (PMI) in Noida. His tenure included assignments at major NTPC Super Thermal Power Stations such as Farakka (West Bengal), Korba (Chhattisgarh), and Singrauli (Uttar Pradesh).

Dr. Vidyanandan holds a B.Tech in Electrical Engineering from REC/NIT Calicut, a D.C.A from Raipur, and both M.Tech and Ph.D. degrees in Electrical Engineering from IIT Delhi.

Research Interests and Contributions

Dr. Vidyanandan's research interests include wind and solar PV systems, energy storage, grid integration of renewables, electric vehicles, and hydrogen and fuel cells. He has authored five thermal power plant simulator operation manuals and published 23 articles in national and international journals and conferences, with his work garnering over 1,200 citations.

International Experience and Professional Engagements

He has undergone professional training in England and Australia and has conducted technical training programs for engineers in the Middle East. A qualified simulator instructor for 210 MW, 500 MW, and 660 MW power plants, Dr. Vidyanandan regularly delivers lectures to both national and international audiences. He is a senior member of IEEE (USA) and serves as a peer reviewer for IEEE and IET research articles.

Dr. Vidyanandan's lecture at IIT (ISM) Dhanbad offered valuable insights into the emerging and transformative role of hydrogen in the energy and transport sectors, reaffirming his expertise and thought leadership in the field.

Rajni Singh

Dean (Corporate Communications)