

BITS takes lead to reduce carbon emissions with advanced centre

Staff Reporter

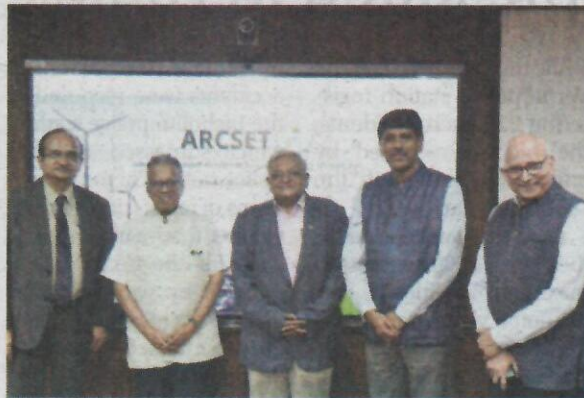
Panaji

Promoting efforts towards achieving India's net zero target, BITS Pilani-Goa has set up the Advanced Research Centre for Sustainable Energy Technologies (ARCSET), a multi-campus Centre of Excellence focussed on advancing clean energy solutions.

The centre aims to foster industry-academic collaboration and develop scalable and affordable solutions for reducing carbon emissions, enhancing energy security, and ensuring equitable access to sustainable energy resources.

It will focus on key areas such as hydrogen production, storage and utilisation, biofuels, renewable and alternative energy, and carbon capture, utilisation, and storage (CCUS).

The centre is working on a technology platform integrating advanced tools, innovative processes, and skilled human resources to address India's energy



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challenges. It is focussing on eight key areas, including renewable energy, hydrogen, e-mobility, and the circular economy, while collaborating with industry leaders, start-ups, and policymakers.

Leveraging techniques such as molecular modelling, AI-ML, and high-throughput experiments, initiatives like the Hydrogen Valley, CO₂-to-methanol conversion, and water electrolysis re-

search are expected to drive scalable advancements, strengthening collaborations between academia, industry, and start-ups to accelerate India's path to net-zero emissions.

Ramgopal Rao, Vice-Chancellor of BITS Pilani, said, "ARCSET embodies our dedication to tackling one of the major challenges of our times—global transformation towards sustainable energy. We are driving capacity

building and advanced research with industry collaboration to enable solutions that not only reduce carbon emissions but also ensure equitable access to clean energy resources."

Director of BITS Pilani, K K Birla Goa Campus, Suman Kundu, said ARCSET is "yet another diamond in the jewel crown of BITS Pilani in the Diamond Jubilee Year".

The inauguration was attended by Padma Bhushan J B Joshi, Chancellor of the Institute of Chemical Technology, Mumbai, as the chief guest, along with Dr Madhukar Garg, former Director of the Indian Institute of Petroleum and President of R&D Petrochemicals at Reliance Industries Ltd, as the guest of honour.

R R Sonde, Professor Emeritus at the Department of Chemical Engineering, outlined ARCSET's vision for developing scalable technologies to address global energy challenges.