



TECHNOLOGIES FOR A BETTER TOMORROW

A CSR Bulletin by IIT Madras

Centre for Sustainable Energy to Lead India's Clean Energy Transformation

IIT Madras and Coal India Limited (CIL) have partnered to establish a Centre for Sustainable Energy to drive India's transition toward a low-carbon future and support the nation's Net-Zero 2070 goals.

This collaboration combines IIT Madras' research excellence with CIL's industrial expertise to create scalable, clean-energy solutions for India's long-term energy security and sustainable growth.



The Center will focus on:

- Sustainable Materials and Circular Economy
- Mine Repurposing and Fleet Electrification
- Environmental Remediation and Pollution Control
- Materials for Energy Storage from Coal

CSR PROJECT SHOWCASE



Building Tomorrow's Digital Talent

IIT Madras, in collaboration with Vertiv, a global leader in critical digital infrastructure, and IITM Pravartak Technologies Foundation, has launched a CSR-driven initiative to upskill India's future workforce in data center operations and maintenance. The partnership aims to strengthen education and skill development in critical digital infrastructure.

Over 2,000 STEM students will be trained through a 35-hour self-paced online program in data center operations and maintenance, available for [diploma holders](#) and [engineering graduates](#). A select group of 160 students will also participate in a 5-day immersive program at IIT Madras and earn the Certified Intelligent Data Centre-Operations & Maintenance (CIDC-O&M) certification, recognized for data-driven, AI-powered data centers.

CSR SPOTLIGHT

Reviving Siddha Medicine through Modern Science



Despite its 2,500-year-old legacy, the **Siddha system of medicine** lacks dedicated **fundamental research facilities in India**, limiting its global scientific recognition. This gap contrasts with the success of Traditional Chinese Medicine (TCM), which has achieved international validation and integration into modern healthcare.

To address this, IIT Madras, in collaboration with Manipur Central University, proposes a **Centre of Excellence for Indian Medicine Systems** with an emphasis on Siddha Medicine. The Centre will conduct cutting-edge research on herbo-mineral formulations and Varmam techniques to **treat non-communicable diseases** such as **cancer, diabetes, and cardiovascular conditions**.

By integrating traditional wisdom with molecular biology, bioinformatics, and clinical studies, the Centre aims to validate Siddha medicine scientifically, ensuring its wider acceptance and translational application.

Key factors:

- Scientific validation of Siddha formulations for major diseases
- Mechanistic insights into Varmam therapies (Autism, ADHD, pain, stress)
- Development of skilled Siddha researchers
- Strong collaboration between IIT Madras, NIS, AIIMS Jodhpur, and Manipur University.
- Global visibility for India's Siddha medical heritage

[Know More](#)

NEWS AND EVENTS



IIT Madras Develops Low-Cost Device for Rapid Antibiotic Testing

IIT Madras researchers have developed 'e-μD', a low-cost, chip-based device that detects antibiotic resistance in under three hours. Using electrochemical impedance spectroscopy and screen-printed carbon electrodes, the device offers a fast, affordable alternative to traditional tests that take up to 72 hours.

[Read More](#)

PARTNER SPEAK

"Our collaboration with IIT Madras over the past six years has been truly impactful. Together with the R2D2, we've worked on innovative assistive technologies like NeoBolt, NeoFly, and Pluto, helping improve mobility and independence for people with disabilities. It's been a rewarding journey, and we believe this partnership is just the beginning of what technology can achieve for social good."



Mr. Anantanarayanan
Krishnamachari
Delivery Head, Tata Elxsi

We would love to hear from you!

We trust you enjoyed perusing our CSR Newsletter Bulletin!

Do get in touch and let us know your thoughts. We look forward to hearing from you!

An initiative by the
Office of Institutional Advancement, IIT Madras

