

Centre of Excellence in Advanced Manufacturing Technology



Journey started



Established in 2018 with the support of **Department of Heavy Industry**, Ministry of Heavy Industries and Public Enterprises, Govt. of India, and a **consortium of Industry members**

6 Industry Partners



16 Faculty Members
from
5 Departments

4 Research Verticals

Specialty Materials

Design & Automation

Additive Manufacturing

Industry 4.0

Vision

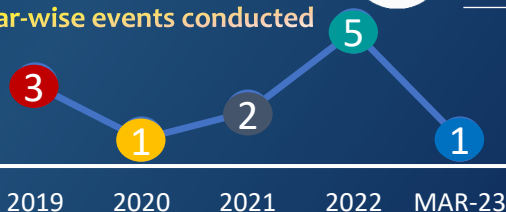


- Becoming the **TRUE PLATFORM** for Industry-Academia collaboration
- Manufacturing Catapult in **TRL 4-6**
- One-stop destination** for industrial manufacturing solutions at IIT Kharagpur



Events

Year-wise events conducted



Events conducted by CoEAMT

Composites 4.0: Present and Future	● ●
One-day workshop on Metallography	●
Hands-on training programme on CNC	● ● ● ● ● ●
Saturday Manufacturing Talks	●
Machine Vision for Robot Applications in Manufacturing	●
5G & Beyond in Smart Manufacturing	●
Specialized training programme on Industrial Robots for Tata Metaliks	●



<https://www.coeamt.com/>



coeamt@iitkgp.ac.in

Visit us

Infrastructure



5-axis metal hybrid additive manufacturing



Industry 4.0 compliant robotic friction stir welding



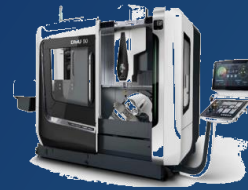
Submerged type 5-axis CNC wire-cut EDM



Robot-assisted structural vibration testing



450 kV CT-scan with large scanning area (*Upcoming*)



Full 5-axis CNC machining centre



UTM with non-contact video extensometer



Robotic TIG and MIG welding



Foundry-robot



CNC turning centre



Sustainability Model

52.78 Cr.
INR
MHI Phase-I projects

30.18 Cr.
INR
MHI Phase-II projects

0.48 Cr.
INR
Other industrial projects

3 NEW Industry Partners
TATA METALIKS
TATA MD
LM WIND POWER
a GE Renewable Energy business

1 NEW Research Vertical
Healthcare

16 NEW Faculty Members
from **5** Departments

Success Stories



4 Patents

1 Book



Developed Solutions



Real-time weld quality monitoring and control of FSW
Delivered to TCS

Algorithm developed to boost profit in India's manufacturing sector

Implemented in
Tata Metaliks



Delivered to GRSE

Weld quality inspection from radiography images

MoU/MoA signing



With GRSE



With RDCIS-SAIL

Participation in conferences

- National Conference on Industry 4.0: Challenges Ahead at Kevadiya, Gujarat
- 1st Digital Economic Working Group G20 Meeting at Lucknow