

MAHATMA GANDHI

INSTITUTE OF TECHNOLOGY (Autonomus) Kokapet(Village), Gandipet, Hyderabad, Telangana – 500075. www.mgit.ac.in





A 2-Day National Seminar on

# Recent Advances in Materials and Manufacturing Technologies – 2025 (RAMMT-2025)

Organized by

Dept. Metallurgical and Materials Engineering, Mahatma Gandhi Institute of Technology (Autonomous), MGIT, CBES, Gandipet, Hyderabad-500075, Telangana, India In association with Tanjore Ramachandran Anantharaman Education and Research Foundation (TRAERF), Hyderabad Under the Aegis of IIM Hyderabad Chapter, Hyderabad; Society for Failure Analysis (SFA), Hyderabad

13<sup>th</sup> & 14<sup>th</sup> Feb, 2025 (09.30 – 17.00h) Venue: MGIT Auditorium, MGIT



#### **MGIT:** An Institution of distinctive eminence

Mahatma Gandhi Institute of Technology (Autonomous), Hyderabad, was established by Chaitanya Bharathi Educational Society (CBES) in 1997 in a serene and tranquil atmosphere at Gandipet, Hyderabad. MGIT is rated to be one of the premier Engineering Colleges in the self-financing category in the state of Telangana. The campus bustling with a number of activities, assiduously supported by the management, teaches a few unique branches of Engineering, namely flagship programs, Metallurgical and Materials Engineering and Mechatronics along with Civil Engineering, Mechanical, ECE, EEE, CSE, CSE-AI&ML, CSE-Business System, CSE-Data Science. MGIT also offers postgraduate programmes in the streams of Mechatronics, Digital Electronics and Communications Engineering, Power Electronics and Electrical Devices, Computer Aided Structural Engineering, and Artificial Intelligence. The Institution has been accredited by National Board of Accreditation (NBA), New Delhi for 4 times and by NAAC with A<sup>++</sup> Grade. This distinct Institute offers two Recently the Institution has been specially recognized by AICTE to initiate the undergraduate programs for working professionals, which has enhanced the reputation of the Institute across the nation.

#### About the RAMMT - 2025

Advanced Materials and Materials based Products as also their Manufacturing Technologies constitute the core competence of any Society. UN has identified materials and materials resources as the fundamental needs and also, ranked them in the first 5 important global resources. India is on the doorstep of a New Industrial Revolution to become Atma Nirbhar / Self-Sufficient. In order to reach this goal, one needs not only to learn the latest global developments, but also should be able to address the gaps in Advanced Materials Technologies, their Manufacturing Facilities and also, be able to predict future requirements for strategic and commercial consumption. The RAMMT-2k25 will be the platform for academic researchers, several national experts and local industrial luminaries to address the recent developments in Advanced Materials Research and their Manufacturing Technologies. RAMMT will also brainstorm on projects and programmes of national importance as also, identify a few specific areas of immense and immediate value for the Indian Industries. Eminent speakers will deliver the Keynote Lectures enhancing the value of the takeaways from the 2-day RAMMT-2025 National Seminar Proceedings.

#### About Department of MME, MGIT

The Department of Metallurgical and Materials Engineering (MME) was incepted along with other Engineering disciplines with the noble thought of spreading the importance of core engineering disciplines. The faculty members of the department are well qualified, highly experienced and are in consultation with renowned agencies in pursuing innovative research projects. The department enthusiastically motivates its undergraduate students to upgrade their technical, communicative and organizational abilities to transform them to be employment ready.

## **Seminar Topics**

- > Advanced Materials
- > Nano & Functional Materials
- Advanced & Modular Composites
- Niche Manufacturing Technologies
- > AI for & in Materials and Manufacturing

#### **Technical Programme**

#### 13.02.2025 (Thursday) **DAY – 01**

- 10.00h Inaugural Function
- 11.00h **Plenary Talk** By **Professor Dr. N Eswara Prasad New Materials & Niche Technologies**

#### 12.00h High Tea

- 12.30h Keynote Lecture - 01 Dr. Mithun Palit
- Keynote Lecture 02 13.10h By Professor SRK Malladi

#### 13.45h Lunch

- 14.30h **Invited Lecture - 01** By Professor Sukla Mondol
- **Invited Lecture 02** 15.10h By Dr. Ravi Bollina
- 15.40h **Invited Lecture - 03** By Professor Rajesh Korla
- 16.20h **ANNOUNCEMENTS** 16.30h DEPARTURES

### DAY – 02 14.02.2025 (Friday)

- 10.00h **Keynote Lecture - 03** 
  - By Professor K Ravi Sankar
- **Keynote Lecture 04** 10.50h By Dr. L Ramakrishna
- 11.40h **CAMPUS VISIT**
- 12.15h LUNCH
- 13.00h **Invited Lecture - 04** By Professor Bharath Bandi
- 13.40h **Invited Lecture - 05** By Professor RV Koteswara Rao



**Professor Dr. N. Eswara Prasad** FIIM, FAPAS/FTAS, FIE, FAeSI, FInSIS, FAPAM Director (R&D) & Professor, Dept. MME, MGIT, Hy MGIT Chaitanya Bharathi Educational Society (CBES) director rnd@mgit.ac.in



**Dr. Mithun Palit** Scientist G, DMRL solidification, magnetic materials & phase transformation. mithun.dmrl@gov.in



**Professor SRK Malladi** Assistant Professor IIT Hyd. In-situ Transmission Electron Microscopy srkm@msme.iith.ac.in



**Professor Sukla Mondol** Asst. Professor MME Dept. NIT Warangal Alloy development & Electron Microscopy suklam@nitw.ac.in

14.20h Special Keynote Lecture By Professor G Chandra Mohan Reddy

#### 15.10h HIGH TEA

#### 15.40h GROUP PHOTO

#### 16.00h Valedictory Function

#### 17.00h Closure of Seminar & DEPARTURES



#### Dr. Ravi Bollina

Technical advisor for the metal injection molding company Orange Koi. Hyderabad. Advanced composites for thermal management



### **Professor Rajesh Korla** Associate Professor in MSME Dept. at IIT Hyderabad.

Deformation behavior of materials at room temperature and high temperature

<u>rajeshk@msme.iith.ac.in</u>



Professor K. Ravi Sankar Professor in MME Dept. at IIT Madras. Temperature Deformation, Creep & Additive Manufacturing <u>ravi.sankar@iitm.ac.in</u>



Dr. Bharath Bandi

Assistant professor at the MME Dept. in NIT Warangal. Fusion energy materials, Automotive Steel, Phase Transformation, Dissimilar metal welding bharathb@nitw.ac.in





#### **Professor Koteswara Rao**

Professor in School of Engineering Science & Technology at University of Hyderabad. Nanomechanics and Nanostructured materials, High-entropy alloys, Next generation superalloys, Advanced high strength steels, Advanced welding methods. <u>kvrse@uohyd.ac.in</u>; 9959998228



#### Professor G. Chandramohan Reddy

Principal of MGIT & Professor in Mechanical Dept. Additive Manufacturing, Design & manufacture of aerospace components & Drone technology.

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#### For further Details:

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