





Two Day Online Workshop

on

Emerging Trends in Non-Destructive Evaluation (NDE)

09th & 10th October, 2021

Organized by

Department of Metallurgical and Materials Engineering MAHATMA GANDHI INSTITUTE OF TECHNOLOGY Hyderabad-500075

In association with

Indian Society for Non-Destructive Testing
Hyderabad Chapter

Advisers

Mr. J. Syamsunder Reddy, Chairman, CBES

Mr. J. Pratap Reddy, Secretary, CBES

Chairman

Dr. K. Jaya Sankar, Principal, MGIT

Convenors

Dr. K. Ramanjaneyulu, Associate Professor and HoD, MME, MGIT

Mr. Adirae Dinesh, Assistant Professor, MME, MGIT

Organizing Committee

Dr. MP Phaniraj, Associate Professor, MME, MGIT

Mr. GVR Murty, Assistant Professor, MME, MGIT

Dr. RVSM Ramakrishna, Assistant Professor, MME, MGIT

Dr. J. Jhansi, Assistant Professor, MME, MGIT

Dr. M. Vijaya Lakshmi, Assistant Professor, MME, MGIT

Dr. PVSL Narayana, Assistant Professor, MME, MGIT

Mr. Bhomik K Deogade, Assistant Professor, MME, MGIT

Dr. S. Santhi, Assistant Professor, MME, MGIT

MGIT

Mahatma Gandhi Institute of Technology (Autonomous), affiliated to Jawaharlal Nehru Technological University (JNTU), Hyderabad, was established by Chaitanya Bharathi Educational Society in 1997 with an objective of imparting value-based education in an invigorating ambience at Gandipet, Hyderabad. MGIT has been accredited by National Board of Accreditation (NBA), New Delhi 3 times (2009, 2014, and 2018) and by NAAC with A Grade.

About the Department

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.

About the workshop

The world has been looking for novel technologies that will create a 'better tomorrow'. The Metallurgical and Mechanical Engineers strive towards manufacturing defect free components. Non-destructive Testing methods have been evolving as the most sought after tools. The National workshop on "Emerging Trends in Non-Destructive Evaluation (NDE) has been aimed at imparting knowledge on developments in NDE to facilitate the industry, research, and future engineers to perform better in their endeavors. This workshop will have lecture series on Advances in digital X-ray imaging, residual stresses, NDE 4.0, Corrosion Monitoring, and Testing of wind turbines along with live demonstrations on Remotely Operating Vehicles, TFM Technology, Usage of Artificial Intelligence & Robotics in NDE.

Technical Program

LECTURES					
Dr. RJ Pardikar	Mr. Manoharan Venugopal Principal Technologist &	Prof. M. Ashok			
Immediate Past President - ISNT	Radiological Safety Officer Visiconsult X-ray Systems & Solutions	Professor & Head, Department of Physics NIT - Tiruchirappalli			
Topic: Past, Present, Future of NDE	Topic: Digital X-ray Imaging - current status and future trends	Topic: Corrosion Monitoring using ultrasonic NDE method			
Dr. Phani Surya Kiran Scientist - E, DMRL -	Dr. TK Abhilasha	Mr. Dharmveer Singh			
Hyderabad	Chief Technical Trainer Industrial Inspection Quality Services	Regional Technical Manager - Middle East Stork, A Flour Company Topic: Industry 4.0 & NDE 4.0			
Topic: Residual Stress - Origin, Measurement	- Chennai				
Dr. RJ Pardikar Immediate Past President - ISNT Topic: Past, Present, Future of NDE Dr. Phani Surya Kiran Scientist - E, DMRL - Hyderabad Topic: Residual Stress - Origin, Measurement Techniques and Applications	Topic: Application of NDT techniques for wind turbines				
DEMONSTRATION ON A DVANCED NDE FOLIDMENT					

DEMONSTRATION ON ADVANCED NDE EQUIPMENT				
AI based Robotic Weld			Transition from conventional	
Inspection System using	Remotely Operating	Certification & Training	Transition from conventional	
AI based Robotic Weld Inspection System using TFM Technology	Vehicles	in NDE	PT/MT to Advanced NDT	
by	by	by	(ET)	
M/s Dhvani Research &	Planys Technologies	TWI India Pvt. Ltd.	By TOPAX NDT Solutions	
Development Solution	Chennai	Chennai	By TOFAX NDT Solutions	
by M/s Dhvani Research & Development Solution Pvt. Ltd. – Chennai			LLP. – Mumbai	

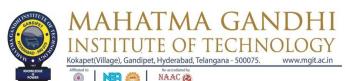
Faculty, Researchers, Industry Professionals, and Students can participate

Registration Link: https://forms.gle/AXYo65Szxm1ChgLL8

No Registration Fee Last Date for Registration: 07.10.2021

E-Certificate will be provided to all the participants, who attend all sessions and submit the feedback forms.

All queries can be posted to adiraedinesh mme@mgit.ac.in, 9848068028







INVITATION

Department of Metallurgical and Materials Engineering

MAHATMA GANDHI INSTITUTE OF TECHNOLOGY

and

Indian Society for Non-Destructive Testing (Hyderabad Chapter)

Cordially Invites you to

The Inaugural Function

of

Two Day Online National Workshop

on

Emerging Trends in Non-Destructive Evaluation (NDE)

on

9th, 10th October, 2021

INAUGURAL PROGRAM (ONLINE) 9th October, 2021

10:00 AM Welcome Address : Mr. G. V. R. Murty

Assistant Professor, MME, MGIT

10:05 AM About the Workshop : Mr. Adirae Dinesh

Assistant Professor, MME, MGIT

Convenor, NDE - 2021

10:10 AM About the Department : Dr. K. Ramanjaneyulu

Associate Professor & HoD, MME, MGIT

Convenor, NDE - 2021

10:15 AM Address by Principal : **Prof. K. Jaya Sankar**

Principal, MGIT

10:20 AM Address by Secretary : **Mr. J. Pratap Reddy**

Secretary, CBES

10:25 AM Address by Chief Guest: Mr. G. V. Siva Rao

Scientist – G, Technology Director

DSMT, DRDL – Hyderabad

Vote of Thanks : Mr. G. V. R. Murty

Assistant Professor, MME, MGIT.

Technical Program Follows

TECHNICAL PROGRAM

9th October, 2021

10:30 to 11:30 AM

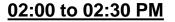
Dr. RJ Pardikar

Immediate Past President - ISNT.

Rtd. GM – BHEL Trichy.

Keynote Address: Past, Present, Future of

NDE



Prof. M. Ashok

Professor & Head

Department of Physics, NIT - Tiruchirappalli.

Topic: Corrosion Monitoring using ultrasonic

NDE method



Mr. Manoharan Venugopal Principal Technologist & Radiological Safety Officer

Visiconsult X-ray Systems & Solutions.

- Rtd. Sr. Scientist GE Global Research Bangalore.
- Ex. Scientific Officer IGCAR, Kalpakkam.

Topic: Digital X-ray Imaging - current status and future trends

02:30 to 03:00 PM



Demonstration on Remotely Operating
Vehicles

by

Planys Technologies - Chennai.

12:30 to 01:00 PM



Demonstration on AI based Robotic Weld Inspection System using TFM Technology

by

M/s Dhvani Research & Development Solution Pvt.

Ltd. - Chennai.

03:00 to 03:30 PM



Demonstration on Transition from conventional PT/MT to Advanced NDT (ET)

By TOPAX NDT Solutions LLP - Mumbai.

10th October, **2021**

10:00 to 11:00 AM

Dr. Phani Surya Kiran

Scientist - E

DMRL - Hyderabad.

Topic: Residual Stress - Origin, Measurement Techniques and Applications

11:00 AM to 12:00 PM

Dr. TK AbhilashaChief Technical Trainer
Industrial Inspection Quality
Services – Chennai.

• Former Faculty, NIT-Tiruchirappalli.

Topic: Application of NDT techniques for wind turbines

12:00 to 1:00 PM

Mr. Dharmveer Singh
Regional Technical Manager
Middle East.
Stork, A Flour Company.

Topic: Industry 4.0 & NDE 4.0



02:00 to 02:30 PM

Certification & Training in NDE

by

TWI India Pvt. Ltd. - Chennai



02:30 PM 02:40 PM Closing Remarks Vote of Thanks

Mr. Adirae Dinesh, Assistant Professor, Department of MME, MGIT – Hyderabad. Dr. RVSM Ramakrishna, Assistant Professor, Department of MME, MGIT – Hyderabad.