



## PROGRAM SCHEDULE

29th Aug 2024		
09:00-09:30	Inauguration Ceremony	
09:30-10:30	Exhibition Inauguration	
10:30-11:30	Registration & Tea Break	
Session Chair: Dr. Sarmishtha Palit Sagar		
11:30-12:15	J N Tata Visionary Lecture: New paradigms in Phased Array Ultrasound Technique	Prof Krishnan Balasubramaniam, IITM
12:15-13:00	Plenary Talk: How the 3 D's can enhance the 3 P's Digitization, Digitalization and Digital Transformation (3D's); Process Control, Product Quality Assurance and Predictive Maintenance (3P's)	Dr Shyamsunder Mandayam
13:00-14:00	Lunch Break	
Technical Session I (14:00 – 15:30): Sensors and AI for NDE & SHM Session Chair: Mr. N Rajesh Kumar		
14:00-14:30	Keynote Lecture I: Role of Distributed Fiber Sensors for 3P in Industrial Environments	Prof Balaji Srinivasan, IITM
14:30-14:45	Application of 1D-CNN in Ultrasonic Testing for Grain Size Prediction	Anuj Yadav, IIT, KGP
14:45-15:00	AI-Driven IIoT Sensors for Predictive Maintenance in Steel Rolling Mills	Prashant Verma; Nano Precise Sci Corp.
15:00-15:15	Innovative Monitoring System of Steel Cord Belt for Conveyor System	Kaushal Kr Singh, TATA Steel
15:15-15:30	Applications of Wireless Sensors for Real-Time Structural Health Monitoring through AI/ML methods	Abhiram Chavali, Consulting Engineer Measurement Solutions Pvt. Ltd.
15:30-16:00	Tea Break	

contd..





## PROGRAM SCHEDULE

### 29th Aug 2024

#### Technical Session II (16:00 – 17:30): Product Quality Assurance Session Chair: Mr. J C Pandey

16:00-16:30	<b>Keynote Lecture II:</b> Non-destructive evaluation on Spacecraft propellant tanks- Challenges and criticalities	Shri Ramprasad Bhaskaran, LPSC, ISRO
16:30-16:45	Sensor for real time damage assessment of engineering components exposed to high temperature (>500 deg C)	Chinmoy Bera, CSIR-NML
16:45-17:00	Asset Reliability improvement by Ultrasound Technology using Industry 4.0	Manohar Chidurala, UE Systems
17:00-17:15	Real-time Measurement and Control of Zinc Coating Weight in steel Wires in the Galvanised line	Nitish Kumar, CSIR-NML
17:15-17:30	Enhancing Reliability, Safety, and Energy Efficiency Through Improved Condition Monitoring Techniques in Thermography and Ultrasonic-based gas leak detection, at AM/NS India Plant	T A Gurusamy, Arcelor Mittal Nippon Steel India
19:00 onwards	Cultural Program followed by Dinner	

### 30th Aug 2024

#### Technical Session III (09:30-11:00): Signal & Image Processing in NDE Session Chair: Mr. B Ramprasad

09:30-10:00	<b>Keynote Lecture III:</b> Flexible and Printed Sensors - an overview	Prof Siddhartha Panda, IITK
10:00-10:30	<b>Keynote Lecture IV:</b> Role of Digital Signal and Image Processing for Process Control, Product Quality Assurance and Predictive Maintenance (3P) in today's competitive era	Dr Debi Prasad Das, IMMT
10:30-10:45	Estimation of Cathode Position in a Transferred Arc Plasma Using Electrical and Optical Signal with Kalman Filter Driven Artificial Neural Network	Nilotpall Kapri, IMMT
10:45-11:00	Intelligent Iron Ore Analyzer using Microwave- assisted Thermal Imaging	Suman Tewary, CSIR- NML
11:00-11:30	Tea Break	

contd..





## PROGRAM SCHEDULE

30th Aug 2024		
11:30-12:30: PANEL DISCUSSION Moderator: Dr. Shyamsunder Mandayam		
12:30-13:45	Lunch Break	
Technical Session IV (13:45 – 14:45): Ultrasonic NDE Session Chair: Prof. Siddhartha Panda		
13:45-14:00	Testing of an impacted CFRP sample with various NDT methods	Manish Sharma, NIT Rourkela
14:00-14:15	Quality evaluation of Al-Al friction stir weld using advanced ultrasonic techniques	Arnab Pattanayak, CSIR-NML
14:15-14:30	In line Testing with Multichannel UT : Single Element is not Dead with the advent of the Phased Array	Sandeep Murjani, Advanced OEM Solutions
14:30-14:45	Transforming Air Pollution Monitoring: Precision Analysis and Source Identification	Kunal Soni, HORIBA India Pvt. Ltd.
15:00-16:00	Valedictory Session	
16:00-17:00	High Tea	

