

February 1-2, 2021



## International Webinar

# Advances in Materials Processing and Mechanical Testing



Department of Mechanical Engineering  
IIT Tirupati

# Program Schedule

<b>DAY 1: 1<sup>st</sup> February 2021</b>		
<b>Time (Indian)</b>	<b>Program</b>	<b>Duration</b>
1.00 PM	Welcome Address Dr. Ajay Kumar Webinar Coordinator, IIT Tirupati	15 min
1:15 PM	Opening Remarks Dr. Madan Mohan A. HOD Mechanical Engineering, IIT Tirupati	15 min
1:30 PM	Inaugural Address Prof. K.N. Satyanarayana Director, IIT Tirupati	30 min
2.00 PM	Prof. Pedro Vilaca, Aalto University, Finland <b>Title: Friction-based Welding and Processing: Fundamentals and Innovations</b>	60 min
3.00 PM	Prof. Gaurav Mohanty, Tampere University, Finland <b>Title: In-situ Mechanical Testing at Small Length Scales</b>	60 min
4:00 -4:45 PM	<b>BREAK</b>	
5.00 PM	Prof. TW (Bill) Clyne, Cambridge University UK & Dr. Jimmy Campbell, Plastometrex, Cambridge UK <b>Title: Obtaining Metal Plasticity and Failure Characteristics via Iterative FEM Modeling of Indentation – The PIP Methodology</b>	60 min
6:00 PM	Prof. Surya Kalidindi, Georgia Institute of Technology, Georgia, USA <b>Title: AI-Based Knowledge Systems for Accelerated Materials Innovation</b>	60 min

**DAY 2: 2<sup>nd</sup> February 2021**

10.00 AM	Prof. Satish T. S. Bukkapatnam, and Bhaskar Botcha, Texas A&M University, College Station, TX, USA <b>Title: AI-driven Characterization and Process Monitoring for Material-on-demand Smart Manufacturing</b>	60 min
11.00 AM	Prof. Pradeep Menezes, University of Reno, Nevada, USA <b>Title: Tribology in Advanced Manufacturing</b>	60 min
12:00 Noon	Prof. David Field, Washington State University, USA <b>Title: Microstructural Evolution during Deformation of Polycrystals with Gradient Microstructures</b>	60 min
6.00 PM	Prof. Nikhil Gupta, New York University Tandon School of Engineering, USA <b>Title: Reduction in the Materials Characterization Effort: A Transform to Extract Elastic Properties from Viscoelastic Measurements</b>	60 min
7.00 PM	Concluding Remarks Dr. N. Venkaiah, IIT Tirupati Dr. M. Ravi Sankar, IIT Tirupati	
	Vote of Thanks Dr. D.V. Kiran, IIT Tirupati	

