



2nd International Symposium on Sustainable Energy and Technological Advancements

(24th – 25th February, 2023)

ISSETA 2023 Special Session on


Advances in Microelectronics-Enabled Smart Additive Manufacturing (AM) for Industry 4.0 & Beyond

With Industry 4.0 in the realm of affairs and a global supply chain crisis at deposition, there is a greater need for smart manufacturing in the aerospace, semiconductor, and cyber-physical domains. Additively manufactured (AM) parts using diverse ingredients have been ubiquitous in commercial and military platforms at various levels. Integration of horizontal/vertical systems with AM concepts and the Industrial Internet of Things (IIoT) is where the focus of the proposed special session lies. The special session explores the requirement for Industry 4.0 technologies for AM processes and studies the advantages of applying information technologies (IT) in AM. Also, 4D Printing announces a significant modification in the product design and manufacturing process from static structures to dynamic structures like Shape Memory Material (SMM) with integrated functionalities.

Manuscripts are solicited in the following areas, but not limited to:

1. 4D Materials
2. Smart Materials for Supercapacitors in Electric Vehicles
3. Materials for Energy Storage
4. Thermo-electric Sensors for Smart Manufacturing
5. Additive Manufacturing processes in IoT
6. Cyber-Physical Systems
7. 3D microelectronics and power/signal integrity
8. Reliability and failure analysis in Additive Manufacturing processes

Special Session Organizers:

	<p>Dr. Srikanth Itapu, Acting Head, Electronics & Communication Engineering, Alliance College of Engineering and Design, Alliance University, Bengaluru, India 562106 E-mail: srikanth.itapu@alliance.edu.in Phone: +91-9848938961</p>
	<p>Dr. Vamsi Borra, Assistant Professor, Electrical and Computer Engineering Program, Rayen School of Engineering Youngstown State University Youngstown, OH. 44555 E-mail: vsborra@ysu.edu Phone: +1-330-941-3014</p>
	<p>Dr. Ramana Murthy G, Professor, Electronics & Communication Engineering, Alliance College of Engineering and Design, Alliance University, Bengaluru, India 562106 E-mail: ramana.murthy@alliance.edu.in Phone: +91-7810095502</p>