



# 5<sup>th</sup> International Conference on Advances in Materials, Mechanics, Mechatronics & Manufacturing (IC4M 2025)

## Organizers



## Associates



## Schedule of Keynote Speeches

Name of Expert/ Affiliation	Topic	Date	Time (IST)
<b>Dr. Gagandeep Singh</b> Senior Publisher (STEM)   CRC Press   India and Sub-Saharan Africa Taylor & Francis India Pvt. Ltd., INDIA	<b>Emerging role of AI in STEM Publishing</b>	December 27, 2025	2:00 p.m. to 3:00 p.m.
<b>Dr. Arivazhagan (Ari) Anbalagan</b> Assistant Professor, Centre for Manufacturing and Materials Coventry University, UNITED KINGDOM	<b>Digital Twins and Generative AI in Manufacturing and Materials: Accelerating the Path to Net Zero</b>	December 27, 2025	4:30 p.m. to 5:30 p.m.
<b>Dr. Elammaran Jayamani</b> Associate Professor, Faculty of Engineering, Computing, and Science, Swinburne University of Technology, MALAYSIA	<b>Sustainable Materials and Manufacturing Technologies</b>	December 28, 2025	9:30 a.m. to 10:30 a.m.

## Bio-Sketch

### Dr. Gagandeep Singh

**Dr. Gagandeep Singh is currently working as a Senior Publisher in STEM at CRC Press, Taylor & Francis Group, India.** He has been associated with the organization for more than fifteen years. During this period, he has facilitated the publication of over 500 books across various domains and has acquired more than 1,000 book projects. He also leads an editorial team focusing on Mathematics, Statistics, Chemical Sciences, Plant and Life Sciences, and Medicine in India and the Sub-Saharan Africa region.

Dr. Singh holds a PhD in Forensic Chemistry and a Master's degree in Forensic Science. He has published 25 research papers in peer-reviewed international journals and holds one patent. He is also a recipient of the National Award for Commercializable Patents (2013–14) by TIFAC, Department of Science and Technology, Government of India, under the Technology Refinement and Marketing Programme (TREMAPP) for his patented innovation.



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## Dr. Arivazhagan (Ari) Anbalagan

**Dr. Arivazhagan Anbalagan** is an Assistant Professor in Digital Manufacturing at the Centre for Manufacturing and Materials, The Institute for Advanced Manufacturing and Engineering (AME), Coventry University, UK. He has a strong research background in manufacturing, and prior to joining Coventry University, Dr. Arivazhagan held various academic and postdoctoral positions across leading UK universities. His work focuses on implementing Manufacturing, Machining, CAD/CAM, CAPP, and automation technologies, as well as Industry 4.0 and Digital Twin solutions for industrial applications, contributing significantly to cost and lead-time reduction through academia–industry collaboration.

With more than 15 years of experience, he possesses commendable hands-on expertise in hardware, software, and ICT technologies. His skill set includes:

- Operation of CNC machines (Siemens, Heidenhain, Fanuc)
- Use of metrological equipment such as CMM (Carl Zeiss), Alicona 3D optical measurement systems, microscopes, SEM, etc.
- Extensive experience with CAD/CAM/CAPP tools (NX, SolidWorks, AutoCAD, Vericut, etc.) and software development using C, C++, Java, C#.NET, and Python.

## Dr. Elammaran Jayamani

Dr. Elammaran Jayamani joined Swinburne University of Technology, Sarawak Campus (SUTS), in 2007. **He is an Associate Professor in the Mechanical Engineering program at the Faculty of Engineering, Computing, and Science.** A creative educator with over 23 years of experience, he actively promotes research and development in sustainable materials.

He holds a PhD in Mechanical Engineering, specializing in Materials and Processes, and possesses expertise in learning and teaching, research and scholarship, as well as academic leadership and service. He is well-versed in training and mentoring students, research scholars, and educators. Dr. Elammaran has also completed a Graduate Certificate in Learning and Teaching (Higher Education) at Swinburne University of Technology, Melbourne, Australia.

He is a Member of the Institution of Mechanical Engineers (IMechE), UK, and a Chartered Engineer (CEng) – MIMechE (UK), as well as an International Professional Engineer (IntPE), UK.

His primary research interests include Polymer matrix composite materials, Energy and environmental sustainability, Learning and teaching methodologies

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**Dr. Premanand Singh Chauhan**

Conference Co-Chair, and

Director General, **ShriRam Group of Colleges (1998)**, Banmore, IN