

DETAILS OF SESSION SPEAKERS



Dr.-Ing. M. Duraiselvam
Professor & Dean
(Planning and Development),
NIT, Trichy

Dr. N.L. Parthasarathi
Scientific Officer-E, IGCAR



DETAILS OF SESSION SPEAKERS



Mr. Vinod Kumar Pandey
Director, Adroitec Information
Systems Pvt Ltd



Dr.K.Senthil Kumaran
Associate Professor,
IIITDM Kancheepuram



Dr. Elammaran
Associate Professor &
Assoc. Dean, Swinburne
University of Technology,
Australia

Mr.C.Chenna Raidu
Scientist E, TOT Division,
CVRDE-DRDO



Dr.T.Ram Prabhu
Scientist-E, DRDO



Dr. S. Vijayan
Professor,
SSN College of Engineering



Dr Jinoop Arackal Narayanan
Assistant Professor
Teesside University, UK

Dr. P.Narayanasamy
Associate Professor,
King Mongkut's University of
Technology, Thailand



Details of Coordinators

Dr. P. Sevel (Ph.d)
Professor / Mech Eng
S.A Engineering College



Mr. C. Dhanesh (M.E(Ph.d))
Associate Professor / Mech Eng
S.A Engineering College



S.A. ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to Anna University)
Accredited by NAAC 'A' Grade & ISO 9001:2015 Certified Institution
Poonamallee – Avadi Main Road, Veeraraghavapuram,
Thiruverkadu, Chennai – 600 077



Department of Mechanical Engineering

Organizes

Six Days Online ATAL FDP On

“Recent trends in AI empowered 3D Bio Printing
technologies towards fabrication of smarter
Bio medical implants”

Co-ordinators

Dr. P. Sevel
Mr. C. Dhanesh

10.02.2025 to 15.02.2025

www.saec.ac.in

ABOUT SAEC

S.A. Engineering College, an outcome of Dharma Naidu Educational & Charitable Trust was established in the year **1998**. College has spacious, high infrastructure and peaceful surroundings with 4 lakhs sq. ft of constructed area. The campus comprises aesthetically designed buildings that are networked by **fiber optic cables** and **Wi-Fi**. SAEC has emerged as one of the premier Professional institutions in this region within a short span of time. The college maintains a high standard of education by providing a wide array of **world class academic facilities**, employing **highly qualified and experienced faculty members**. The college offers **11 UG courses** in Engineering and **6 PG courses**, affiliated to **Anna University** and approved by **AICTE**. The Institution is accredited by **NBA** and **NAAC** with '**A**' grade.

ABOUT MECHANICAL ENGG DEPT

Department of Mechanical Engineering was established in the year **1998** in our college; it was affiliated to **Anna University in 2001** and got **permanent affiliation in 2013**. The post graduate programme, **M.E. CAD/CAM** was established in the year 2014 with an intake of 18 students. The department has been recognized as a **research center by Anna University in the year 2012**. The students are given hands on training about the theoretical concepts they are learning through various labs such as **Manufacturing Technology Lab, I C Engines lab, Heat Transfer Lab, CAD CAM LAB, Dynamics Lab, Mechatronics Lab**.

ABOUT THE WORKSHOP

3D printing or additive manufacturing is the construction of a three-dimensional object from a CAD model or a digital 3D model. This workshop aims to provide a forum & platform for young researchers, faculties, PG students to learn & gain hands on training in various latest advancements in 3D bio printing of metal implants. Distinguished & outstanding professors from prestigious universities including IITs, NITs, Scientists from DRDO are about share their experience & train the participants.

CONTENTS OF THE WORKSHOP

- 3D bio printing of various medical implants using AI based advanced equipment.
- Latest trends in 3D Bio printing of medical implant structures and components.
- ML based Characterization of 3D printed implants.
- Testing & Analysis of 3D Printed Components under various load Conditions.

ADDRESS FOR COMMUNICATION

Dr. P. Sewel & Mr. C. Dhanesh

**Department of Mechanical Engineering,
S.A Engineering College (AUTONOMOUS)
Poonamallee – Avadi Main Road, Veeraraghavapuram,
Thiruverkadu, Chennai – 600 077.
Ph: 9445048418, 9962589616**

Topics to be covered

- ☑ 3D printing of bio medical implants by SLM.
- ☑ Recent developments in the field of 3D printing of implants.
- ☑ Fuzzy multi-criterion decision-making approach for AM of medical implants.
- ☑ Applications and Future Scope of Additive Manufacturing.
- ☑ Fabrication of implant structures using laser powder bed fusion additive manufacturing.
- ☑ 3D printing, principles and practices.
- ☑ Challenges in Designing 3D Printed Biomedical Implants.
- ☑ AI-Enhanced Multi-Material 3D Bioprinting for Complex Tissues and Organ.
- ☑ AI and 3D Bioprinting in Regenerative Medicine.
- ☑ Advanced Manufacturing Techniques for Smarter Implants.
- ☑ Smart Biomedical Implants.
- ☑ AI-Driven Design and Optimization of Bioprinting for 3D Printing.
- ☑ Future Scopes in 3D Printing of bio implants.

Programme Timings

**Session Timings:
6:00PM to 9:00PM**

Registration

**"No Charge for Registration,
Course and Certification"**

You can Register here:
www.saec.ac.in