

Event Title	Advancements in VLSI for Biomedical and Defence Applications
Event category	DRDO Sponsored 3 Day National Seminar
Date and duration	23 <sup>rd</sup> - 25 <sup>th</sup> June, 2025
Conducted By	Department of ECE
Chief Guest/Resource Person/Keynote Speaker	<ul style="list-style-type: none"> <li>• Dr. M. Manickavasagam — Distinguished Scientist &amp; Director, DRDO, New Delhi</li> <li>• Dr. S. Loganathan — Scientist 'G', Head – Battery Strategic Division, DRDO, Hyderabad</li> <li>• Dr. Jayaraj U Kidav — Executive Director, Scientist 'G', NIELIT Aurangabad</li> <li>• Dr Murali Krishna – NIT Trichy</li> <li>• Dr. Srinivasan Aruchamy — Principal Scientist, CSIR-CMERI</li> <li>• Dr. M. Sabarimalai Manikandan — Associate Professor, Electrical Engineering, IIT Palakkad</li> <li>• Dr. A. Babu Karuppiah — Professor, Department of ECE, Sri Eshwar College of Engineering, Coimbatore</li> <li>• Dr. S. K. Noor Mahammad — Associate Professor, IIITDM Kancheepuram</li> <li>• Dr. K. Paldurai — Assistant Professor, Department of ECE, PSG Institute of Technology and Applied Research</li> </ul>
Co-ordinators	<ul style="list-style-type: none"> <li>• Ms. M. Deepa, Assistant Professor, ECE</li> <li>• Mr. R. RajaRaja, Assistant Professor, ECE</li> <li>• Dr. K. Paldurai, assistant Professor, ECE</li> </ul>
No. of participants	40

- The seminar provided a platform for experts and researchers to share advancements in VLSI design, with applications in defence and biomedical domains. Eminent speakers from DRDO, premier academic institutions, and industry addressed the participants.
- Distinguished Scientist Dr. M. Manickavasagam, Director, DRDO, New Delhi, and Dr. S. Loganathan, Scientist G, DRDO, Hyderabad, shared perspectives on indigenous VLSI development for defence. Dr. Jayaraj U. Kidav, Executive Director and Scientist 'G', NIELIT, Aurangabad, delivered an insightful session on FPGA-based SONAR and medical ultrasound imaging systems.
- Dr. Murali Krishna from NIT Trichy gave insights on VLSI technology and its applications. The second day included sessions by Dr. Srinivasan Aruchamy, CSIR-CMERI, and Dr. M. Sabarimalai Manikandan, IIT Palakkad, highlighting VLSI trends for biomedical applications.
- Dr. A. Babu Karuppiah, Sri Eshwar College of Engineering, spoke on ICT tools for effective engineering education. On the final day, Dr. S. K. Noor Mahammad, IIITDM Kancheepuram, discussed fault-tolerant reconfigurable computing for defence, and Dr. K. Paldurai, PSG iTech, contributed technical insights.
- The seminar facilitated valuable knowledge exchange and inspired participants to pursue research in VLSI for critical applications. The department expressed gratitude to DRDO and all the speakers for their contributions.



**Keynote speakers addressing the participants during the session**