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## **INTERNATIONAL CONFERENCE ON SUSTAINABLE MATERIALS AND TECHNOLOGIES IN VLSI AND INFORMATION PROCESSING (SMTVIP 2024)**



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and Design Hub  
ECE KARE

CENTRE FOR VLSI TECHNOLOGY AND DESIGN  
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# ABOUT THE INSTITUTION

Kalasalingam Academy of Research and Education (Deemed to be University), formerly known as Arulmigu Kalasalingam College of Engineering, was founded in 1984 by the esteemed philanthropist "Kalvivallal" (Late) Thiru. T. Kalasalingam. In 2006, it achieved the status of Deemed to be University. The institution offers a wide range of undergraduate and postgraduate courses, along with doctoral programs across various disciplines. Located in Krishnankoil, 10 km north of Srivilliputtur, a town of historical religious significance, the university boasts several research centers, including the International Research Centre (IRC), TIFAC-CORE in Network Engineering, Centre for Biotechnology, Centre for Nanomaterials, Centre for Multifunctional Materials, and Centre for Composite Materials. Through strategic MoUs, the university has established collaborations with numerous universities and institutes worldwide, fostering research partnerships and facilitating faculty-student exchange programs. Notably, the institute recently earned the highest accreditation from the National Assessment and Accreditation Council (NAAC), attaining an A++ grade, reaffirming its commitment to excellence in education and research.

# ABOUT THE CONFERENCE

International Conference on Sustainable Materials and Technologies in VLSI and Information Processing (SMTVIP, 2024) will be organized by Department of Electronics and Communication Engineering, Kalasalingam Academy of Research and Education, on 13th - 14th December 2024. SMTVIP is an annual event that aims to bring Academia, researchers, engineers, students and industry professionals to share the latest developments and advancements in the field. The conference covers a wide range of topics related to VLSI design, signal processing, and information processing, including but not limited to: VLSI design, Embedded and IoT, Signal and Information Processing, Communication, Networking. The conference provides a platform to share their latest research findings and exchange ideas on emerging trends, technologies, and collaborate on new projects. Original, previously unpublished and high-quality research papers would be appreciated. All submitted articles must not be under consideration for publication elsewhere. All accepted, presented and registered papers under this conference will be published by CRC press (Taylor and Francis Group) and will be submitted to Scopus Indexing which depends on Quality checks established by Scopus guidelines.

# RESEARCH TOPICS

- Advanced Process / Materials in VLSI Devices
- VLSI design techniques and methodologies
- Analog and digital circuit design
- Low-power design
- FPGA design and implementation
- Analog/Mixed-Signal Design
- Synthesis and Optimization
- Design & Modelling
- Networking Technologies and Protocols
- Real Time Systems
- Human-Computer Interaction for IoT Devices
- Wireless sensor networks
- Signal processing algorithms and architectures
- Image and video processing
- Audio and speech processing
- Biomedical signal processing
- Machine learning and Deep Learning
- Pattern Recognition
- Sensor signal processing
- Cellular 5G/6GCommunication
- Digital Communication
- Photonics and Cloud computing
- Wireless Networking
- Social Networking
- Network Applications and Services

# ABOUT THE DEPARTMENT

Welcome to the Department of Electronics & Communication Engineering (ECE). The Department of ECE at Kalasalingam Academy of Research and Education (KARE) was established in the year 1994. It is our great pleasure to announce that the department has recently attained accreditation for 6 years by the National Board of Accreditation (NBA) in 2022 under Tier-I category.

The department is accredited by NBA for 6 years and accredited by ABET for 6 years. The Department offers industrial Oriented B.Tech ECE programme in the four streams including Embedded System and RTL Verification, Applied AI in VLSI, AI and Autonomous System, under industry-academia collaboration with Nanochip Solutions, P2F Semi, Mathworks. M.Tech. (VLSI Design) at PG level, and Ph.D. in the Doctoral degree Programme. The department has established branch, chapter, and societies of recognized professional bodies such as IEEE, IEEE-EDS, IETE and ISTE. The department has state-of-the-art laboratory facilities enriched with latest software viz. MATLAB, XILINX, Keil, TCAD, Synopsis, Optsim & LabVIEW and a team of experienced & well qualified faculty.

# IMPORTANT DATES

Submission of Full Paper	05/10/2024
Notification of Acceptance	07/10/2024
Author's Registration Deadline	28/10/2024
Submission of Camera Ready Paper	18/11/2024

Conference Dates: 13th- 14th December 2024

# REGISTRATION DETAILS

Type of Participant	Early Bid Registration	Regular Registration
Research Scholar /Students	₹8500	₹9000
Faculty Members	₹9000	₹10000
Industry Participants	₹10000	₹12000
Foreign Author	\$250	\$300
Attendees	₹3000	₹4000

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