

About SENSE:

SENSE at VIT was established for imparting state-of-the-art knowledge in Electronics and Communication Engineering and allied areas. The school has set up laboratories with excellent infrastructure in the areas of Electronics, Communication, VLSI, Embedded, Sensors and Nanotechnology. Faculties are actively involved in R&D activities and are working on research projects funded by government organizations like DRDO, ISRO (RESPOND), and DST.

About the event:

The objective of the training program is to provide recent advancements and research outcomes pertaining to Memristor and its applications in Neuromorphic circuits. The FDP includes sessions focused on technologies, techniques and applications with intent to foster the exchange of knowledge and ideas between experts. It will be a good platform for those who started their research in the field of VLSI, semiconductor devices, neuromorphic devices, bio-inspired electronics.

Course Content:

- Neuromorphic Synaptic Transistors
- Memristor Bridge Synapse
- Application of Memristor in Neuromorphic Circuits
- Xilinx IP Core Applications
- Applications of Organic Semiconductors
- Advanced MOSFET structures
- Bio-inspired Electronics

Resource Persons:

Dr. Sankar Prasad Bag, Dongguk University, South Korea

Dr. Avatar Singh, Adama Science and Technology University, Ethiopia

Dr. Ram Kaji Budhathoki, Kathmandu University, Nepal

Dr. Zubaer Ibna Mannan, Kyungdong University Global Campus (Gosung), South Korea

Dr. B. Khaleelu Rehman, Chaitanya Bharathi Institute of Technology, Hyderabad

Dr. Upendra Kumar Verma, Dev Bhoomi University, Dehradun

Payment Link:

Internal Participants (Vellore) :

<https://tinyurl.com/yujsumnv>

External Participants: <https://events.vit.ac.in/>

Advisory Committee:

Dr. Sivanantham S

Professor and Dean,

School of Electronics Engineering (SENSE),

Vellore Institute of Technology, Vellore, India.

Dr. Jagannadha Naidu K

Assistant Professor & Head,

Department of Micro & Nanoelectronics,

School of Electronics Engineering (SENSE),

Vellore Institute of Technology, Vellore, India.

Dr. Noor Mohammed V

Professor & Head,

Department of Communication Engineering,

School of Electronics Engineering (SENSE),

Vellore Institute of Technology, Vellore, India.

Coordinators

Dr. Vetriveeran Rajamani

Department of Micro & Nanoelectronics

Dr. Sultan Mahmood Chowdhury

Department of Communication Engineering,

School of Electronics Engineering (SENSE),

Vellore Institute of Technology,

Vellore – 632 014.

Contact Numbers: +91-7530055178

+91-8471830362

E-Mail: vetriveeran.r@vit.ac.in

sultan.mahmood@vit.ac.in

Eligibility: The training program is open to Industry personnel, Engineering Faculties, Research Scholars and UG/PG students.

Registration Fee :

Rs.400 +18% GST (For Faculty/Industry Persons),

Rs.200 +18%GST (For Students and Research scholars).

Last Date for Registration:

December 5, 2023



Three Day Faculty Development Program (FDP)

on

Recent Trends and Research Challenges of VLSI in Memristor Based Neuromorphic Circuits (Online mode)

7th – 9th December 2023

Organized by

Department of Micro & Nano Electronics and Communication Engineering

School of Electronics

Engineering (SENSE)

Vellore Institute of

Technology

Vellore-632014

School of Electronics Engineering (SENSE)

3 - Day FDP on “Recent Trends and Research Challenges of VLSI in Memristor Based Neuromorphic Circuits”

Events Schedule

| Date | Session | |
|------------|--|---|
| | 10.00 AM to 12.00 PM | 2.00 PM to 4.00 PM |
| 07-12-2023 | <p>Dr Sankar Prasad Bag Dongguk University South Korea</p> <p>Topic: Exploring Hydrogel-Based Neuromorphic Synaptic Transistors: A Revolution in Bio-Inspired Electronics</p> | <p>Dr Ram Kaji Budhathoki Kathmandu University Nepal</p> <p>Topic: Memristor Bridge Synapse Based Learning in Multilayer Neural Networks</p> |
| 08-12-2023 | <p>Dr B. Khaleelu Rehman Chaitanya Bhartathi Institute of Technology Hyderabad, India.</p> <p>Topic: Xilinx IP Cores Application</p> | <p>Dr Zubaer Ibna Mannan Kyungdong University Global Campus (Gosung) South Korea.</p> <p>Topic: Memristor and its Applications in Neuromorphic Circuits.</p> |
| 09-12-2023 | <p>Dr Upendra Kumar Verma Dev Bhoomi University Dehradun, India</p> <p>Topic: Novel Applications of Organic Semiconductors in Solid State Devices</p> | <p>Dr Avatar Singh Adama Science and Technology University Ethiopia</p> <p>Topic: Challenges and Research Opportunities in VLSI Devices</p> |