





High End Workshop on Recent Trends in VLSI Devices, Circuits and Applications

(Under the KARYASHALA Scheme - A SERB initiative)

Feb. 21-27th 2022

Website: https://sites.google.com/iiitm.ac.in/vlsikaryashala

Funded by: Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India, under the Accelerate Vigyan Scheme Organized by: ABV- Indian Institute of Information Technology & Management Gwalior, India



About ABV-IIITM Gwalior

ABV-Indian Institute of Information Technology and Management (IIITM) in Gwalior, Madhya Pradesh is an autonomous institute set up by Ministry of Human Resource Development (MHRD), Govt. of India in 1997. It is an effort by MHRD towards creating professionals in areas of management and information technology from the same institute. This institute was created for facilitating higher education, research, and consultancy in areas of information technology (IT) and business management. The institute is located on a 150-acre campus. The campus boasts of a huge biodiversity including variety of plants with medicinal properties. The Institute has established research collaborations with various Universities in USA, France, and Japan. The Institute has also developed industrial linkages with various research labs and industries. The students of the Institute are publishing their research work in various national/international conferences and journals of repute. For all round development of students, various technical, cultural and sports related events are organized throughout the year. Institute is ISO 9001:2008 and NAAC 'A' certified. It has also been declared as Institute of National Importance by the Government of India. Institute secured 164th ranked in the World and 1st rank in India in 2017 UI Green Metric World University Rankings evaluated by Universitas Indonesia in 2017. For more information, please visit https://www.iiitm.ac.in/

About the Workshop

'KARYASHALA' is aimed to provide hands-on experience to the students primarily from universities, colleges, private academic institutions and newly established institutes in handling / troubleshooting of high-end scientific instruments, softwares and such skill development on themes required for research work. The program is meant to support motivated PG and Ph.D. level students, who are having a strong willingness to get excellence in their scientific and engineering research pursuits. Following are the objectives of this high end workshop:

- 1. To impart the knowledge of design of experiments and thus enable the scholars to understand it with real life examples.
- 2. Participants will be able to understand the fundamentals of VLSI and applications of VLSI in IoT, Artificial Intelligence, DSP, Wireless Communications etc.
- 3. Understand the application of machine learning in the VLSI area.
- 4. Participants will be able to simulate circuits and Layout design on CAD tools.
- 5. Participate will able to understand the basics and modelling of Interconnects at nanoscale.
- 6. Recognize research problems in the field of VLSI.
- 7. To develop programming skills among researchers to deal with customized coding problems related with their research work.

Who can attend: Karyashala is open to postgraduate students/research scholars from all Institutes, Colleges and Universities. Preference will be given to the students having interest towards VLSI, Spintronics, Machine Learning, Interconnects, Memory Design, Antenna Design, CAD Tools, PSPICE/HSPICE, and HFSS Simulator. Total numbers of seats are limited to 25. The selected candidates will be Provided with support in the form of Travel (3AC), stationary, consumables, accommodation, food etc, as per institute norms. The applicants have to submit the NOC (Download Format Link) from the supervisor/HoD/Head of the institute. There is no registration fees.

How to Apply? https://forms.gle/gdSey9EMJW6XBtbT8

Tentative Resource Persons

- Dr. Rajeevan Chandel, NIT Hamirpur
- Dr. Rohit Sharma, IIT Ropar
- Dr. Pankaj Sharma, IIITDM Jabalpur
- Dr. R. P. Shukla, University of Twente, Netherland
- Dr. Gaurav Kaushal, ABV-IIITM Gwalior
- Dr. Manisha Pattanaik, ABV-IIITM Gwalior
- Dr. Balwinder Raj, NITTTR, Chandigarh
- Dr. Brajesh Kumar Kaushik, IIT Roorkee
- Dr. Rahul Kumar, IIT Roorkee
- Dr. Pinku Ranjan, ABV-IIITM Gwalior
- Dr. Manoj Kumar Majumder, IIIT Naya Raipur
- Dr. Sunil Kumar, ABV-IIITM Gwalior

Important Dates

Registration opens
January 05, 2022
Last date for application
February 05, 2022

Display of shortlisted candidates

February 07, 2022
Workshop dates

February 21-27, 2022

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Event Organizer

Dr. Somesh Kumar Assistant Professor somesh@iiitm.ac.in (7009594389)

Event Co-Organizer

Dr. Pinku Ranjan

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Dr. Minakshi Assistant Professor,

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