



Design and Fabrication of Hybrid/Flexible Antennas for 6G and beyond Applications

(Under the KARYASHALA Scheme - A SERB initiative)

12th -18th Sept. 2022

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. Focus on Recent Trends in Antenna for 6G Communication.
2. To provide a comprehensive overview of the fundamental concepts 6G MIMO Antennas.
3. Designing of Microstrip patch antenna for 6G and beyond communication.
4. To provide the latest challenges in designing of Dielectric Resonator Antennas (DRA) for 6G and beyond Communication with ML and Deep Learning optimization.
5. Combining both Microstrip patch antenna and DRA to make hybrid structure as an open problem for research in related areas.
6. Filter design and analysis for 6G and beyond application
7. Antenna optimization with Deep learning and Neural Network approach for future 6G and beyond Application.

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 Antenna for 6G communication, fundamental concept of 6G MIMO antennas, Microstrip patch antenna, DRA, ML and Deep Learning optimization for antenna optimization and HFSS Simulator Tutorials. **Total number of seats is limited to 25. The selected candidates will be Provided with support in the form of Travel (3AC), stationery, 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

Prof. K. V. Srivastava, IIT Kanpur
Dr. Raghvendra K Chaudhary, IIT Kanpur
Dr. Ravi K Gangwar, IIT(ISM) Dhanbad
Dr. Anand Sharma, MNNIT Allahabad
Dr. Vinal Patel, ABV-IIITM Gwalior
Dr. Binod Prasad, ABV-IIITM Gwalior
Dr. Somesh Kumar, ABV-IIITM Gwalior
Dr. Pinku Ranjan, ABV-IIITM Gwalior

Important Dates

Registration opens

July 15, 2022

Last date for application

Aug 31, 2022

Display of shortlisted candidates

Sept 1, 2022

Workshop dates

Sept 12-18, 2022

Event Organizer

Dr. Pinku Ranjan
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Event Co-Organizer

Dr. Somesh Kumar
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Venue: ABV- Indian Institute of Information Technology & Management Gwalior, Morena Link Road, Gwalior, M.P.-474015, India