



Science and Engineering Research Board

(A statutory body under DST, Govt. of INDIA)

sponsored

One day Workshop on



Advanced Multicarrier Waveforms for Next Generation Wireless Systems

Under Scientific Social Responsibility (SSR) Policy

18th November, 2022 (Friday)

Venue: Department of ECE, NIT Trichy – 620015.

About SERB Scientific Social Responsibility (SSR) Policy:

SERB has adopted Scientific Social Responsibility (SSR) Policy to imbibe a culture of social commitment among SERB Grantees. The policy intends to effectively utilize scientific infrastructure and expertise of SERB grantees to benefit other science and Technology stakeholders especially the less-endowed researchers and the society. SSR initiatives include infrastructure sharing, mentoring young faculty/researchers, fostering research culture among students and the academic community and public outreach and knowledge dissemination. SERB SSR policy ensures that the SSR activities are minimal and are aligned and integrated with the Grantees scientific research activities. It is expected that the combined efforts of all the SERB Grantees would lead to development of rich research culture of integrated scientific and social commitments in the country. *This workshop is organized as a part of SSR activity under the SERB funded project (File No: EEQ/2019/000224).*

About the Institute:

National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli is one among the premier Institutions of India and is well known for its high standards in teaching and research. It offers 10 undergraduate and 23 postgraduate programs in disciplines spanning engineering, science, architecture, and management. It has been declared as an Institute of National Importance by the Government of India under NIT Act. NIT Tiruchirappalli retained its No. 1 position among all NITs, 7th year in a row in the “NIRF Rankings 2022” released by NIRF. The Institute has signed MoUs with various Industries and Institutions both in India as well as in abroad to promote collaborative research and consultancy.

About Department of Electronics and Communication Engineering:

The Electronics and Communication Engineering (ECE) Department was established in the year 1968. The department offers Undergraduate (UG), Postgraduate (PG), M.S. (By Research) and Ph.D. degree programs that provide students with the knowledge and tools they need to succeed in the Electronics and Communication Engineering. Research in the department focuses on high-impact various disciplines: Communication systems, Wireless networks, Signal and Image Processing, RF MEMS and MIC, Microwave antennas, Optical communication and Photonics, VLSI technologies.

About Workshop:

Objective of this workshop is to disseminate the knowledge on advanced multicarrier waveforms such as OFDM, FBMC, f-OFDM, W-OFDM, UFMC, GFDM & OTFS which are prominent waveform candidates to support the QoS towards Beyond 5G wireless systems for faculty members, industrial delegates, research scholars and post graduate students.

Workshop Contents:

- Introduction to Multicarrier Communication
- Orthogonal Frequency Division Multiplexing
- OFDM Variants for 5G
- Generalized Frequency Division Multiplexing
- Orthogonal Time Frequency Space Modulation
- Simulation using Matlab

Organized by

Dr. V. Sudha,

Principal Investigator (EEQ/2019/000224),
Associate Professor, Department of ECE, NIT Trichy

Advisory Committee

Dr. P. Muthuchidambaramanathan,
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Dept. of ECE, NIT Trichy

Dr. D. Sriram Kumar,
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Dr. R. Pandeeswari,
Associate Professor, Dept. of ECE, NIT

Organizing Committee

Mr. I. Parthiban
Ms. V. Nivetha

Mr. R. Mahammad Rafi
Ms. P. Reshma

Research Scholars,
Communication & Signal Processing Lab, NIT Trichy

Important Guidelines:

- Faculty members of the AICTE/UGC approved institutions, Research scholars and PG students are eligible to apply for the workshop.
- Interested participants are required to register in the following link:
<https://forms.gle/Pji5pYuGk3XF5jgc8>
- **Number of participants limited to 25 only** (first come first serve basis).
- Last date for Registration is **15th November, 2022 (5.00 PM)**.
- **No Registration fee and Spot Registration is not allowed.**
- After verifying the credentials, final confirmation of participation will be communicated to the shortlisted participant's email-ids by **15th November, 2022**.
- **Stationeries and Lunch** will be provided to the participants.
- Certificate of Participation will be provided only after completion of workshop to the participants.
- For Queries- Contact Numbers 9791469733, 8508747867 and Email ID: ngws.nitt@gmail.com