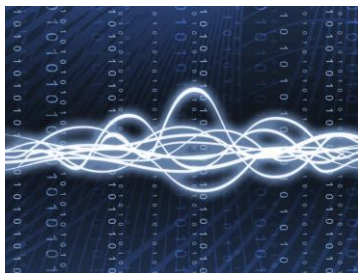


Faculty Development Programme

Research Trends in Multimedia and Multirate Signal Processing

(RTMMSP 19)

June 24 - 29, 2019



Organized by



तमसो मा ज्योतिर्गमय

Department of Electronics and
Communication Engineering
National Institute of Technology Calicut

Under TWINNING WITH



Govt. Engineering College Bharatpur

Bharatpur, Rajasthan -321303

About the Department

The UG programme in Electronics & Communication Engineering started in 1980 in the Department of Electrical Engineering. The rapid development in Electronics and Communications initiated the inception of a separate Department of Electronics Engineering in 1997, after the trifurcation of the Department of Electrical Engineering. Along with one B. Tech degree programme in Electronics and Communication Engineering, the department also offers four regular M. Tech programmes, viz., Electronic Design Technology, Microelectronics & VLSI, Signal Processing and Telecommunication. In addition to the above, there are a number of students pursuing research at the Department in various fields of Electronics & Communication Engineering leading to Ph.D. The Department is a recognized QIP Centre of the AICTE for both MTech and PhD programs. The Department is also actively engaged in R&D activities. Sponsored research programmes funded by various agencies are undertaken by the faculty of the department. For details see our website: www.ece.nitc.ac.in.

About NIT Calicut

National Institute of Technology Calicut (NITC), is fully centrally funded by MHRD and is governed by the NIT Act 2007. Institute has ten departments, three schools and nine research centers. It offers ten UG, and thirty PG programmes along with the Ph.D programme in various fields of Science, Technology and Engineering. Faculties in the various Departments have active collaborations with universities and elite institutions within and outside India for research and have active consultancy for industries. For details see the website: www.nitc.ac.in

About GEC, Bharatpur

Government Engineering College (GEC) Bharatpur is an autonomous institute under Bharatpur Society, Rajasthan, India. GECB was established in the year 2007. The college has six departments namely Mechanical Engineering, Civil Engineering, Electronics & Communication Engineering, Electrical Engineering, Computer Science & IT and Applied Science & Humanities and for details see the website <http://www.ecbharatpur.ac.in>

About TEQIP III

Technical Education Quality Improvement Programme (TEQIP) was launched in December, 2002 by the Ministry of Human Resource Development, India with the World Bank assistance. The programme was conceived and designed as a long term project to be implemented in 10-12 years in 3 phases to support excellence and transformation in Technical Education in the country. Third phase of the programme namely TEQIP III was started in the year 2017 and will be ending in 2020. The main objective of TEQIP III is to improve the quality of Engineering Education in existing government institutions in the educationally backward states and also arrange for twinning them with other institutions like NITs and a few affiliating technical Universities(ATU).

About Calicut

NITC is located about 22 kilometers north-east of Calicut City. Calicut, also known as Kozhikode, is known as the city of spices. Calicut is a major knowledge hub of Kerala and is the hometown of institutions of national importance including NITC, IIMK, NIELIT etc. Calicut is connected by direct trains/road/air to all major cities in India. Kozhikode beach, Kappad beach where Vasco De Gama landed first, Kadalundy bird sanctuary, Tusharagiri Waterfalls, Pazhassiraja Museum, Tali Temple and Kuttichira Masjid are some of the local attractions.

Preamble

The field of Multimedia and Multirate Signal Processing has seen explosive growth during the past few decades, as phenomenal advances both in research and applications have been made. It is used in numerous applications such as data compression, digital set-top box, portable video systems/computers, and digital audio, multimedia and wireless communications. Advances in VLSI technologies opened-up promising methodologies to design, develop and implement a variety of signal processing algorithms for real world applications. This helped to mobilize the growth in DSP applications through fast and efficient implementations of DSP systems. This course looks in depth at fundamental principles and research trends in multimedia and multirate signal processing together with system design and implementation considerations.

Topics to be covered

The programme will cover the following topics:

- Multirate Signal Processing
- Linear Algebra in Signal Processing
- Statistical Signal Analysis
- Adaptive Filtering
- Spectral Estimation
- Wavelets and its applications in Signal Processing
- Privacy-Preserving Machine Learning
- Image and Video Compression
- Sparse Signal Processing
- VLSI Signal Processing.

Resource Persons

Dr. Rajbabu Velmurugan, IIT Bombay
Dr. Kumar Appaiah, IIT Bombay
Dr. Sathidevi P S, NIT Calicut
Dr. Deepthi P P, NIT Calicut
Dr. Sreelekha G, NIT Calicut
Dr. V. Sakthivel, NIT Calicut
Dr. Sudhish N George, NIT Calicut
Dr. M. Surya Prakash, NIT Calicut

Eligibility

Faculty members from various AICTE approved Engineering Colleges/Institutions can apply.

Working professionals and practicing engineers from various Research Organizations and Industries, and Research scholars can also apply. **Maximum seats: 30**

Registration Fee

TEQIP Institutions:

Faculty: Rs 5000/+18%GST, Technical staff & Scholars: Rs 3000/+18%GST- Students Rs 2000/+18%GST.

Non-TEQIP Institutions:

Faculty: Rs 3000/+18%GST, Technical staff & Scholars: Rs 1000/+18%GST- Students Rs 500/+18%GST.

Industries/R & D/other organizations:

Rs 8000/+18%GST

For registration, fill the online form at <https://forms.gle/TdrYMysvGEfKDJpd7> and mail the scanned copy of the signed endorsement form to rtmmisp19fdp@gmail.com. The registration fee has to be paid through online transfer. The registration fee is non-refundable. The bank details are given below for online transfer.

Acc. Name: Director NIT Calicut, Continuing education programme, **Account No: 37618269594**; Branch: SBI NIT Calicut, IFSC code: SBIN0002207

Last date for registration is 17 June 2019.

Travel Expenses

No TA/DA will be paid for any participant. Institutions are expected to provide the support.

Boarding & Lodging

Food and accommodation will be provided to all the participants. The accommodation will be provided in NITC hostels.

Endorsement of the Head of the Institution/Department

Certified that Mr./ Ms./ Dr.

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is an employee of this institution and is hereby sponsored for the training programme on **Research Trends in Multimedia and Multirate Signal Processing (RTMMSP 19)** at NIT Calicut during 24th - 29th June 2019. He / she will be permitted to attend the course, if selected.

Place: Name & Signature of the Sponsoring Authority
Date: (seal of the institution)



Scan the QR Code for online registration and upload the signed endorsement form. Last date for registration is 17 June 2019.

Co-ordinator

Dr. V. Sakthivel

Department of Electronics and Communication Engineering

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NIT Campus P.O. - 673601, Kozhikode,

Contact: 9995335962

Email: rtmmisp19fdp@gmail.com

Co-Coordinator

Mr. Vipin Sharma

Department of Electronics and Communication Engineering

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