

Importance and scope

Photonic is an interdisciplinary area that studies the interaction between microwave and optical signals, for applications such as broadband wireless access networks, sensor networks, radar, satellite communications, instrumentation, and warfare systems. In the past few years, there has been an increasing effort in researching new microwave photonics techniques for different applications. The major functions of photonics systems include photonic generation, processing, control and distribution of microwave and millimeter-wave (mm-wave) signals. Many research findings have been reported in the last few years. In general, the topics covered in three days workshop by microwave photonics include photonic generation of microwave and mm-wave signals, photonic processing of microwave and mm-wave signals, photonics radio-over-fiber systems, and microwave photonics for remote sensing application.

Topic to be Covered

- ❖ Recent advancement on Microwave photonics
- ❖ Photonic generation of microwave chirp signal used in remote sensing application
- ❖ Radio over fiber (ROF) for remote sensing techniques
- ❖ Advancement of Microwave Photonics on Remote Sensing Applications
- ❖ Photonics lab tools: FBG, Light Runner, E/O Spectrum analyzer
- ❖ Analog intensity modulator, FBG, OSA,

ESA, MZM etc

- ❖ Microwave photonic Measurement
- ❖ Live demonstration of advanced microwave photonics equipment's

Software Demonstration.

Photonics Area:

Opti-Grating, Opti-system, Opti-BPM, Opti-Fiber, Opti-Spice, COMSOL Multi-physics Modeling Software, R-Soft Full wave software.

Microwave Area:

Design and Analysis of Microwave and photonic link for remote sensing.

About the institution

The Indian Institute of Technology (ISM) was formally opened on 9th December 1926, by Lord Irwin, the then Viceroy of India to address the need for trained manpower related to mining activities in the country with disciplines of Mining and Applied Geology. In 1967 it was granted the status of a deemed to be university under Section 3 of UGC Act, 1956. Situated in the heart of the country's prime coking coal belt, 260 kms from Kolkata with a campus spread over an area of 393 acres, (with 218 acres of existing campus and 175 acres under acquisition and development) the fully residential ISM has all the facilities of world class academic institute. What started as an institution to

impart mining education has graduated into a full-fledged B. Tech., M. Tech., M. Sc. Tech., and MBA. In addition the School offers M. technical institution of international acclaim offering a host of programs like Phil. and full as well as part time Ph. D. programs, while also awarding D.Sc. as the highest degree of academic Achievement.

Accommodation

Accommodation will be provided on payment basis subject to availability

Eligibility Criteria

Participants from R&D Organizations / Faculties, Research Scholars and Technical staffs Members of Universities, Institutes and AICTE approved engineering colleges

Registration

*Participants from R&D Organizations / Faculties and Technical staffs Members of Universities, Institutes and AICTE approved engineering colleges: **The registration fees may be waived and duly filled registration form should be sent to any of the coordinators on or before 31th Jan 2017 by COURIER /SPEED POST. Scanned copy of the filled-in registration form should be sent by email. Certificates will be issued only after the completion of the program.*** However the participants have to wear their boarding and lodging charges except the working day launch and snacks.

Chief Patron

Prof. D.D. Mishra,
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Patron

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**TEQIP-II Sponsored
Two Days workshop on
Emerging trends in
photonics technologies**

**Emerging trends in photonics
technologies**

3 to 4 Feb 2017



ORGANIZED BY

**Department of Electronics
Engineering**

**Indian Institute of
Technology(ISM),
Dhanbad
Jharkhand, India**

**Two Days workshop
on**

**Emerging trends in photonics
technologies**

3 to 4 Feb 2017

REGISTRATION FORM

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