



Computation Techniques in Optics and Photonics

August 20 - 25, 2018

Venue: Prabha Bhawan, MNIT Jaipur
<http://academymnit.wordpress.com>



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Preamble (Electronics & ICT Academy)
Government of India had announced a National Policy on Skill Development, which has set a target of skilling 500 million people by 2022 in the domain of Electronics & IT. Under the plan scheme of "Digital India Manpower Development". MeitY has set up seven (07) Electronics and ICT Academies as a unit in 03 IITs, 03 NITs and 01 IIIT with an objective of faculty/mentor development/up gradation in the areas related to Electronics & ICT leading ultimately to improved employability of graduates/diploma holders. MNIT Jaipur has set up such an academy for providing specialized training to faculty and industry persons in the states/UTs of Rajasthan, Gujarat, Daman & Diu, Dadra Nagar Haveli.

(A) Issues-

1. IT Hardware and Electronics Manufacturing industry- availability of properly trained, skilled and qualified manpower
2. Number of quality PhDs generated in IT / Computer Science is very low
3. In E & ICT domain- there is a very high degree of obsolescence of existing technologies and faster emergence of newer technologies

(B) Approach-

1. A focused faculty training/updation programme for IT, Electronics and related sectors
2. Spreading up and continuous updation regarding Emerging Technology
3. Training and consultancy services for Industry
4. Design, Develop and Deliver specialized modules for specific research areas and Industry
5. Providing advice and support for technical incubation and entrepreneurial activities

One-week training programme is being organized for faculty of engineering and technological institutions. It is also open to faculties, persons from industry and doctoral students of Indian organizations. The objective is to provide an exposure to the participants about various computational methods (like FEM, FDTD, TMM etc.) in the field of engineering with experts from IIT Delhi, CEERI Pilani and other academic CFTI institutions such as NITs/IIITs including host institution. The technical program will include mostly hands-on lab sessions, tool demonstrations, and discussion/presentation sessions with few lectures.

Programme Topics –

1. Slow Light in Photonic Crystal for Faster Photonic Devices, Recent trends in Photonics, Experimental study for Simulation of Solar cell.
2. Nitride devices their fabrication and applications, Characterization (XPS, AFM, SEM etc) of MOCVD grown and fabricated III-Nitride devices.
3. Graphene/GaN Nanowire based Photo-detectors and Nano LEDs, Modeling & Simulations of microwave components & devices, Optimization Techniques.
- A. 4. Si v/s III - IV group Integrated Photonics, MEMS in Photonics, Modeling and Simulations of Metamaterials

Invited Experts –

1. Prof Anurag Sharma, IIT Delhi
2. Dr. Rajendra Kumar, IIT Delhi
2. Dr. Manish Mathew, CEERI Pilani
3. Dr. Ayan Kumar Bandyopadhyay, CEERI Pilani

Programme coordinators:

Dr. Ashish K. Ghunawat	akghunawat.ece@mnit.ac.in	9549654490 (M)
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Prof. Vijay Janyani	vjanyani.ece@mnit.ac.in	9549654240 (M)

Registration:

Registration is open to faculty, industry persons, doctoral and postgraduate students of Engineering. Participants will be admitted on a first-come first-served basis on or before 20th August 2018.

Register on line at- http://www.mnit.ac.in/eict/acad_training_prg.php

Fee:

(A) The one-time registration fee of Rs. 500/- is to be paid by each participant attending first time, irrespective of affiliation. This fee is not applicable for those participants, who have attended any academy training programme earlier.

(B) (i) The participants from academia and research scholars are required to pay a further fee of Rs. 2000/- (faculty/research-scholars). Rest expenditure is sponsored by MeitY through Electronics & ICT Academy at MNIT Jaipur.

(ii) The participants from industries, UG/PG students are required to pay a further fee of Rs. 5000/-.

(iii) Applicable relaxation for SC/ST candidate is 50%.

(iv) Fee once paid will not be refunded back, however, it may be adjusted to another FDP.

(C) The fee covers the participation in the programme, registration material including tutorial notes, boarding (breakfast/lunch) on all the days of the workshop. The travel and other expenses would have to be borne by the participants or their parent-organizations.

(D) Complimentary lodging for a very limited number of participants is available in Guest rooms of Aurobindo hostel. Also, accommodation in Guest-house-2 can be arranged on first-come first-serve and additional payment basis.

(E) The organizers should receive the registration amount through online - <http://online.mnit.ac.in/eict/> or NEFT/RTGS.

Account Name- 'Electronics and ICT Academy MNIT Jaipur'	Account Number- 676801700483
Bank address- ICICI Bank, MNIT Campus Branch, Jaipur	IFSC Code- ICIC0006768

(F) Please pre-intimate your desire to participate and for accommodation to programme coordinator through e-mail, immediately after online registration.

→ For any other query else than this FDP, email us at academy@mnit.ac.in