Detailed course content:

Module 1: An Introduction to Electronic Structure Theory and Their Applications in Nanomaterial

Module 2: Applications of nano-materials Ultra-violet based Communications

Module 3: Introduction to Porous Semiconductors and their Applications in Nanomaterials Science

Module 4: Applications of nano-materials/solar-cells in Visible Light Communications

Module 5: QWs and nano-dimensional materials for neuromorphic computing, biochemical sensors and power devices

Module 6: Peptide and DNA Nanotechnology

Module 7: Nano Devices for Integrated CMOS-Photonics

Overview of the proposed event

This short-term course will cover topics in nanosciences and nanomaterials for next-generation applications in opto-electronic devices, solar cells, gas sensors and biomedical area for the advancement of knowledge. This short-term course is designed for everyone to get experience on chemical synthesis and characterizations, thin film growth and device fabrication related to opto-electronics, energy, and sensor applications. This course brings together scientists, researchers and engineers through teaching and learning activities to enhance and expand on current knowledge and encourage in-depth discussions through tutorials to prepare for research-led activities.

QIP Online Faculty Development Programme on

Nanomaterials for Next Generation Applications

Organised by

Centre for Advanced Electronics (CAE)
Indian Institute of Technology Indore
March 22-27, 2021

The course lectures will be delivered by the faculty members of IIT Indore and other eminent speakers invited from premier institutions of India.

Registration Fee:

- *No registration fee for faculty participants from AICTE approved colleges and institutes (Limited).*
- *Rs 4000 for students.*
- *Rs 6000 for faculty/scientist from Non AICTE approved colleges.*
- *Rs 8000 for Industry Personnel.*

Mode of Payment

For Online Payment
http://www.iiti.ac.in/page/e-payments

For bank transfer

Beneficiary Name: Registrar IIT Indore
Bank Name: Canara bank
Branch: IIT Indore, Khandwa Road, Simrol, Indore
Account number: **1476101027440**
IFS Code: **CNRB0006223**
SWIFT Code/BIC: **CNRBINBBISG**

How will this STC going to benefit Teachers?

This course will help teachers to gain an understanding of the fundamental concepts in nanoscience and nanomaterials for next-generation applications including opto-electronic devices, solar cells and bio-chemical sensors. This activity will be vital in the development and future training of the next generation of young technologists within a high quality teaching and research active environment. This short-term course brings together expertise from scientists/engineers in the Indian Institute of Technology Indore, India. The core programme will include themed lectures and tutorials; gain experience on chemical synthesis and characterizations, thin film growth, and device fabrication related to opto-electronics, energy, and sensor applications. We have a strong track record of success in teaching, learning and research-led activities to help prepare attendees to gain new insights from basic science to translational research and the opportunity to expand on their transferable skills through knowledge transfer / future research collaboration.

Registration Process

Click on the link below for online registration:-

https://docs.google.com/forms/d

Interested participants need to submit online form.

Evidence of payment should be emailed in advance to confirm the participation.

Last Date of course registration is March 19, 2021.

For correspondence contact Course coordinator

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Dr. Apurba K. Das