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Dr. Anil D. Sahasrabudhe Director, College of Engineering, Pune

### Patron:

Dr. Bharatkumar B. Ahuja Deputy Director, College of Engineering, Pune

### Advisor:

Dr. Shweta N. Chaure Head, Department of Physics, COEP, Pune

### Coordinator:

Dr. Jagdish W. Dadge Department of Physics, COEP, Pune

### Co-coordinators:

Mrs. Neelima A. Patil Mr. Yatin J. Pitkar Department of Physics, COEP, Pune

## Lectures will be delivered by the eminent faculty/scientists:

Dr. D. P. Amalnerkar (Executive Director, C-MET, Pune), Dr. Tapanendu Kundu (Professor, IIT Bombay), Dr. Aliasgar Q. Contractor (Professor, IIT Bombay), Dr. S. K. Kulkarni (Professor, IISER, Pune), Dr. R. C. Aiyer (Retired Professor, University of Pune), Dr. S. V. Bhoraskar (Retired Professor, University of Pune), Dr. B. B. Kale (Scientist-F, C-MET Pune), Dr. Girish J. Phatak (Scientist-E, C-MET Pune), Dr. Anjali Kshirasagar (Professor, University of Pune), Dr. Shailaja Mahamuni (Professor, University of Pune),

Dr. Pankaj Poddar (Scientist-E, NCL Pune), Dr. Aditya Dharmadhikari (TIFR Mumbai), Dr. Millind Kulkarni (Scientist, C-MET Pune), Dr. Shweta N. Chaure (COEP Pune), Dr. Jagdish W. Dadge (COEP Pune), Dr. P. S. Alegaonkar (DIAT, Pune), Dr. R. K. Goyal (Professor, COEP Pune), Dr. A. K Bogle (SRTM University Nanded)

### About the College of Engineering, Pune

College of Engineering, Pune (COEP), chartered in 1854 is a nationally respected leader in technical education. The institute has a rich history and dedication to the pursuit of excellence. COEP offers a unique learning experience across a spectrum of academic and social experiences. The curriculum is designed to enhance your academic experience through opportunities like internships, study abroad programmes and research facilities. It is the lead centre under the Technical Education Quality Improvement Program (TEQIP) assisted by the World Bank. The institute is consistently ranked amongst the top 20 technical colleges in India.

### **About the Department**

The department of Physics is one of the basic science departments of College of Engineering Pune. The Department has well-educated, motivated and dedicated faculty members. The faculty members have experience of working with international universities and have produced high quality research with national and international publications in peer reviewed journals. The subjects taught by the department are of leading significance for strengthening the fundamental understanding and development of budding engineers so as to make them well equipped for the present and future scenario.

### **TEQIP Sponsored**

One-Week Faculty Development Program on

# "Nanomaterials Characterization and Applications in Devices"

(7<sup>th</sup> April 2014—11<sup>th</sup> April 2014)



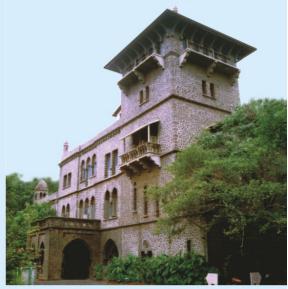
Organized By

Dept. of Physics,

College of Engineering, Pune (COEP)

(An Autonomous Institute of the Govt. of Maharashtra)

Website: www.coep.org.in



Coordinator

Dr. Jagdish W. Dadge

### **About the Faculty Development Program**

'The more we learn about materials the more it helps us, and better we understand our place in the universe".

Nanomaterials underpins many of today's technologies. It is a key enabler of the rapid advances that are vital for industry to be competitive. Keeping the importance and relevance of the Nanomaterials, a need was felt to make the teachers aware of the advances in the field of Nanomaterials and their applications in devices, and hence this course is being organized.

### Objectives of the Program

- To realize the relevance of the course.
- To provide the knowledge about emerging nanomaterials for various device applications in the field of Electronic devices, Sensors, Optoelectronic devices, Electronics, Nonlinear optics, Biomedical etc.
- Advances in the field of Characterization techniques.

### Course Content/Coverage

- Advances in physics of semiconductor materials.
- Quantum dots, nanowires, nanorods and nanotubes synthesis techniques.
- Characterization techniques for nanomaterials by XRD, TEM, AFM, SEM, STM, XPS, UV-Vis spectroscopy, FTIR, Raman Spectroscopy etc.
- Optical, Magnetic, Catalytic, Electrical,
- Electronic and Mechanical properties of nanomaterials.
- Applications of nanomaterials in Sensors, Optoelectronic Devices, Electronics and Optical Switching

**Eligibility:** The workshop is open to faculty members from Engineering and Science colleges. Since the workshop is interdisciplinary in nature, research scholars and industry personnel who are working in various engineering and science disciplines are also eligible to attend the workshop.

### Registration:

The registration fee for participation is:
Academic Institutions : Rs 3500/Industries : Rs 5000/-

The fees may be paid by cash/D.D. in favour of "Director College of Engineering, Pune" payable at Pune.

### **Important Dates:**

Receipt of registration form in the prescribed format duly signed by competent authority with fees :10<sup>th</sup> March. 2014

Confirmation of selection: 20th March 2014.

### Note:

Only **30** participants will be selected on a first come first served basis. Intimation of selection will be only through E-mail. Registration fee includes workshop kit. tea/snacks and lunch.

In order to participate, please fill the registration form and send an E-mail to

**Dr. J. W. Dadge**, with subject as "Registration for the course on Nanomaterials Characterization and Applications in Devices-Apr.2014". Address for the correspondence to submit hard copy of the registration form is as follows:

Dr. J. W. Dadge, Coordinator

Department of Physics,

College of Engineering, Pune (COEP)

Shivajinagar, Pune-411005.

Phone:020-25507502(O), Mobile:09763192104

Email: jwd.physics@coep.ac.in,

jagdish dadge@yahoo.co.in

The brochure and application form can also be

downloaded from our website

Website: www.coep.org.in

### One-Week Faculty Development Program on "Nanomaterials Characterization and Applications in Devices"

### REGISTRATION FORM

Name :
Qualification:
Designation :
Department :
Institute :
Contact Details :
Postal Address :
Telephone and Cell No.:
E-mail :
Payment Details:
D.D. Amount :
In favor of : "Director College of Engineering, Pune"
Payable at : Pune
D.D. No. :
Bank :
Whether accommodation neededYes/No
Signature of Applicant :
Official Seal & Signature of the Competent/Sponsoring Authority
Date :
Place: