



AICTE Sponsored Short Term Course
On

“Thin film devices for sensor applications”

Jan 25-29, 2021

School of Materials Science and Technology



Course Coordinator(s)

Dr. Shrawan Mishra (SMST), Convener, QIP
Dr. B.N. Pal (SMST), (Co-Convener)
Dr. P. K. Roy (Ceramic Eng.) (Co-Convener)

Quality Improvement Program Center
Indian Institute of Technology (IIT) Varanasi
Varanasi – 221005, (U.P.)



About the Course

Indian Institute of Technology, (Banaras Hindu University) is organizing an online course on “**Thin film devices for sensor applications**” from 25.01.2021 to 29.01.2021. The course is open to teachers from AICTE recognized management and engineering colleges. The complete application should reach to the given address latest by 15.01.2021. The candidate will be informed of his selection in advance. If your candidacy is being sponsored by the institution, a formal letter will be required.

The main focus of the course is making the engineers get familiarize with the thin films, growth procedure and sensors and applications. The hand on demonstration of some of the sensing methods will also be done. A likely beneficiary is a person working in associated materials research and teaching.

Course Content

The emerging thin films-based devices are advancing our society, economy, science and technology in many ways. These technologies rely upon the discovery, synthesis/fabrication of advanced materials, their thorough characterization to understand their properties and potential for various sensor applications. There are multiple categories or groups of such advanced thin films materials. However, within the scope of this school, we would like to focus on thin films devices for sensor applications that include but limited to magnetic materials, magnetic multilayers, oxide semiconductors, perovskites and organic semiconductors, which are in prominence during the last decade or so. We will limit the discussion to the above materials at nano and atomic scale when

the properties change dramatically enabling a variety of potential applications. This school will bring PhD scholars (3rd year onward), post-doctoral fellows, young scientist, early-career faculty members, and expert researchers from different expertise on a single platform, which will help to further enhance the quality of the research activities and the future thin films technologies and its applications as sensor. There will be no registration fee.

List of expert speakers

- Prof. Gertjan Koster, University Twente, The Netherlands (Special lecture on pulse laser deposition)
- Dr. Mukul Gupta, IUC Indore (special lecture on magnetron sputtering)
- Prof. S. Ram, IIT Kharagpur (Special lecture on thin films and growth phenomenology)
- Dr. Avanish Singh Parmar, Department of Physics (special lecture on biological thin films and crystals)

Other Key Speakers

- Prof. D. Pandey (SMST)
- Prof. Rajiv Prakash (SMST)
- Prod. P. Maiti (SMST)
- Dr. C. Rath (SMST)
- Dr. A. K. Singh (SMST)
- Dr. Chandan Upadhyay (SMST)
- Dr. B. N. Pal (SMST)
- Br. A. K. Mishra (SMST)
- Dr. Sanjay Singh (SMST)
- Dr. Nikhil Kumar (SMST)
- Dr. P. K. Roy (Ceramic Eng.)
- Dr. Shivam Verma, (Department of Electronics Eng.)
- Dr. Shrawan Mishra (SMST)

**Application Form for
QIP SHORT TERM COURSE
On
Thin film devices for sensor applications
Jan 25-29, 2021.**

1. Name (block letters):
2. Designation & pay scale:
3. Organization:
4. Address for communication:

Pin code:
Ph. No.:
Fax No.
E-mail:

5. Highest Academic Qualification:
6. Specialization:
7. Experience (in years):
 - (a) Teaching:
 - (b) Industrial:

Please register me for the course on "Course Title" to be held at IIT (BHU) Varanasi.

Place:

Date: Signature of the applicant

SPONSORSHIP

Prof./Dr./Mr./Ms./Mrs./_____ is an employee of our institute and his/her application is hereby sponsored. The applicant will be permitted to attend the short-term course on "**Thin film devices for sensor applications**" at IIT (BHU) Varanasi during Jan 25-29, 2021, if selected.

Date: Signature of Sponsoring Authority
Designation: Official Seal:

Signature of the Applicant

Important Dates

Last date for receiving applications: Jan 15, 2021

Intimation to selected applicants: Jan 20, 2021

Commencement of the course: Jan 25, 2021

Contact Details

Address for sending application & contact

Dr. Shrawan Mishra (SMST), Convener, QIP
Dr. B.N. Pal (SMST), (Co-Convener)
Dr. P. K. Roy (Ceramic Eng.) (Co-Convener)

Email: shrawan.mst@iitbhu.ac.in
bnpal.mst@iitbhu.ac.in
pkroy.cer@itbhu.ac.in

Google meet link: <https://meet.google.com/zqk-qjtc-hse>

About Varanasi

Varanasi, also known as Kashi or Benares or Banaras, is one of world's oldest living cities. It is regarded as the religious capital of India. The city is located on the left bank of the holy river Ganga (Ganges), and is one of the seven sacred pilgrimage cities for Hindus. To be in Varanasi is an experience in itself. The majestic ghats on the banks of Ganga, morning sunrise, visit to famous temples and evening Ganga Aarati are some of the special attractions. Varanasi is also renowned for its rich tradition of music, arts, crafts and education. For more details, visit <http://varanasi.nic.in/>