

## **Program completion Report**

### **3-Day Short Course on Advanced Surface Science and Engineering**

March 26th to 28th, 2018

**SPONSORED BY: TEQIP**

#### **Course Coordinators**

Dr. P. M. Shirage , Associate Professor	Dr. H. Borkar, Assistant Professor
Dr. S. S. Hosmani, Assistant Professor	Dr. J. Murugesan, Assistant Professor
Dr. R. S. Devan, Assistant Professor	

**Discipline of Metallurgy engineering and Materials Science  
INDIAN INSTITUTE OF TECHNOLOGY INDORE**

A 3-day TEQIP sponsored short course on ‘Advanced Surface Science and Engineering’ was successfully organized by Discipline of Metallurgy Engineering and Materials Science at IIT Indore. The course conducted on 26<sup>th</sup>-28<sup>th</sup> March witnessed the participation from around 40 participants including faculty members and students of TEQIP institutions, non –TEQIP institutions and host institute (IIT Indore). The course provided the participants an opportunity to learn useful and relevant information about interdisciplinary area of Surface Science and Engineering from expert faculty members of IIT Indore. The course covered various topics related to the topic ranging from basic surface science to recent advancements in surface engineering. In addition, practical and industrial applications of surface engineering were discussed.

The course facilitated the learning on Surface Science and Engineering through lectures on different topics such as surface modification techniques in different types of materials, surface characterization techniques along with tribology and fatigue. The lectures were delivered by five expert faculty members from IIT Indore. The different types of materials studied included energy materials, nano materials, electronic materials and structural engineering materials. Participants had the opportunity to learn experimental aspects and practical illustrations through laboratory sessions.

Participants were engaged in the lectures and lab sessions with great enthusiasm. The participants included people who travelled from different institutions from the state of Madhya Pradesh as well as from other states. Certificates were issued to the participants on the last day after successful completion of the course.

Keeping in view the focus of TEQIP to improve technical quality education, the course imparted useful knowledge to the participants so that they can promote research activities and studies related to the topic in their respective institutions. The participants with diverse background of Materials Science, Mechanical Engineering, Physics and Chemical Engineering were able to assimilate the interdisciplinary knowledge through this course. The course introduced the participants with wide research scope of the interdisciplinary area of Surface Science and Engineering. The students who attended the course can effectively utilize the knowledge they

gained through this course for their higher studies and future engineering career. The course illustrated the industrial relevance of the topic which will motivate the students to pursue a career in the related fields either in industries or in research and development.

The coordinators for the course were Dr. P. M. Shirage, Dr. S. S. Hosmani, Dr. R. S. Devan, Dr. H. Borkar and Dr. J. Murugesan from Discipline of Metallurgy Engineering and Materials Science. The coordinators express their sincere thanks to TEQIP for providing the financial support for the course.

Few photographs taken during the course are shown below.

**Opening lecture by Dr. P. M. Shirage**



**Lecture by Dr. S.S.,Hosmani**



**Lecture by Dr. R. S. Devan,**



**Lecture by Dr. H. Borkar**



**Lecture by Dr. J. Murugesan**



**Inauguration speech by Dr. I.A. Palani**



**Group photograph of 3-Day Short Course on Advanced Surface Science and Engineering**

