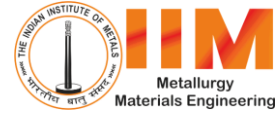




**Sandip Foundation's
Sandip Institute of Engineering & Management
Department of Mechanical Engineering
In Association With
Indian Institute of Metals, Pune Chapter**



Date : 11.02.2023

1. **Event Title** : One Day Workshop on “ **Surface Engineering** ” organized by Mechanical Engineering Department, SIEM in association with The Indian Institute of Metals, Pune Chapter.
2. **Event Date** : 10th February 2023
3. **Event Conduction Duration** : One Day [9.30 a.m. To 5.00 p.m.]
4. **Event Venue** : Seminar Hall, Mechanical Engineering Department, SIEM, Nashik.
5. **Event Resource Person Details (Title, Speaker name, Designation, company name)**
 - I. **Importance of Material Modification Techniques in Modern Industries by Dr. Umesh Mhatre Managing Director, Surface Modification Technologies, Mumbai**
 - II. **Advance Surface Modification solutions by Thermal Spray Processes by Dr. D. A. Karandikar, CEO / CTO Kinetic Surface Technologies, Pune**
 - III. **Enhancing Tool Life Using Cryogenic Treatment by Prof. Dr. N B Dhokey Professor, Department of Metallurgy, COEP T.U.**
 - IV. **Surface Engineering for Tools and Components -Dr Rajesh Bhide, Head of Customer Solutions Centre, India and Associated Countries Oerlikon Balzers Coating India Pvt. Ltd., Pune**
 - V. **Fatigue Failures due to Surface and Sub Surface Imperfections by Mr. Jaywant Nagrale Manager Metallography, Chemical and failure analysis lab Bosch India Ltd., Nashik**
6. **Name of Event Coordinator** : Prof. Sachin J. Chede, Asst. Prof.,
Mechanical Engineering Department
7. **Event Objective & Outcome** :

Surface engineering is the sub-discipline of materials science which deals with the surface of solid matter. It has applications to chemistry, mechanical engineering, and electrical engineering. The surface phase of a solid interacts with the surrounding environment. This interaction can degrade the surface phase over time. Environmental degradation of the surface phase over time can be caused by wear, corrosion, fatigue and creep. Surface engineering involves altering the properties of the surface phase in order to reduce the degradation over time. This is accomplished by making the surface robust to the environment in which it will be used. It provides a cost-effective material for robust design. A spectrum of topics that represent

the diverse nature of the field of surface engineering includes plating technologies, nano and emerging technologies and surface engineering, characterization and testing.

The workshop was very informative, knowledgeable and an eye opener for the industrial professionals, academicians and student participant. Around **60 participants** were present for the workshop. We received a very good response from various Industries like **MSL Driveline Systems, KOSO India Pvt Ltd., Indian Tools , Shareen Auto , Right Tight Fasterns Satpur & Sinnar Plant etc.** and from different Institute.

8. Total No. of Participants : 42 + 17 [Host Institute] , Total 59 Participants

9. Event photos which must include photos of Inauguration, felicitation, event conduction and valedictory ceremony. (If applicable)





