

**Residential Certificate Course on
“Advanced Surface Engineering for Corrosion Prevention”
19th –20th January 2026, IIT Kharagpur**

Day 1: Advanced Surface Engineering for Corrosion Prevention (19-01-2026)

| Time | Session Title | Mode | Faculty Assigned |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------|
| 08:30 – 09:00 | Registration and Inaugural Session | | |
| 09:00 – 9:55 | Surface Engineering for Corrosion Resistance Applications | Lecture | Prof. Jyotsna Dutta Majumdar, IIT Kharagpur |
| 10:00 –10:55 | Introduction to Thermal Spraying | Lecture | Prof. Tapas Laha, IIT Kharagpur |
| 11:00 – 11:15 | High Tea | | |
| 11:20 - 13:15 | Processing of advanced high-strength steels (AHSS) in continuous galvanizing lines (CGLs)- An Industrial Perspective | Lecture | Dr. Anindita Chakraborty, Tata Steel |
| 13:15 – 14:25 | Working Lunch | | |
| 14:30– 16:30 | Failure analysis & welding | Lecture | Dr. Goutam Mukhopadhyay, Tata Steel & Prof. Siddhartha Roy, IIT Kharagpur |
| 16:35 – 18:30 | Characterization techniques | Lecture/Lab | Dr. Subhranshu Chatterjee, Carl Zeiss India |

| Day 2: Advanced Surface Engineering for Corrosion Prevention (20-01-2026) | | | |
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| Time | Session Title | Mode | Faculty Assigned |
| 09:00 – 9:55 | Additive Manufacturing Technologies | Lecture | Prof. Vladimir Popov, Ariel University, Israel |
| 10:00 – 11:00 | Oxidation and thermal protection coatings for high-temperature materials for space applications | Lecture | Prof. S C Sharma, IIT Roorkee |
| 11:00 – 11:15 | Tea Break | | |
| 11:20 – 12:15 | Surface Characterization by TEM | Lecture | Dr. Sandeep Bysakh, CSIR-CGCRI |
| 12:20-13:20 | Corrosion Control by Grain Boundary Engineering | Lecture | Prof. Sumantra Mandal, IIT Kharagpur |
| 13:20 – 14:25 | Working Lunch | | |
| 14:30 – 15:30 | Structural Details of Surface by Advanced Characterization Tool | Lecture | Prof. Indranil Manna, BIT Mesra |
| 15:30 – 16:30 | Valedictory Session and Certificate Distribution | | |