






## Two-Day Training Programme on Metallurgy Simplified for Engineering Professionals

-  **14th & 15th May, 2026**
-  **Evolve by TCR**  
215, Pancham Icon,  
Vasna Road, near D-Mart,  
Vadodara, Gujarat 390007
-  **Fees: INR 12,000/-**  
for single person +  
GST 18% extra.
-  **10% Discount** on total  
amount of invoice for 03  
or more nominations from  
the same organization.

### Course Content

- Introduction and Importance of Metallurgy
- Correlation of properties with composition and microstructure
- Manufacturing methods (Casting, Rolling, Extrusion and Forging)
- Defects and Characterization
- Metallography and Interpretation of microstructure
- Heat treatment of steels and cast iron Non-fer
- Non-ferrous alloys and heat treatment
- Mechanical behavior of steels
- Welding Metallurgy
- Failure analysis
- Corrosion and Preventions
- Non-Destructive Techniques
- Lab visit and Practical Demonstration

### Who Should Attend

- Engineers (Management level)
- Maintenance / Inspection Engineers
- Process Engineers
- NDT Engineers/ Inspectors
- Plant Engineers / Managers QA / QC Engineers
- Reliability Engineers
- Metallurgical / Materials Engineers
- HAZOP Engineers / Managers
- Other Technical consultants, Laboratory, Sales Personnel, Engineers from allied discipline, disciplines, management and administrative staff

### Objectives of the Training Programme:

- The Importance of Metallurgy in industry.
- Develop systematic properties for material selection.
- Understanding on metallurgy in fabrication, operation, maintenance and condition along with plant equipment monitoring.
- Acquire knowledge to conduct or supervise failure investigation and communicate effectively with metallurgical experts.
- Ensure reduction in expenses, increase in profitability, safety and reliability using metallurgical knowledge.
- Material Selection based on Corrosion behavior.

# Meet The Faculty

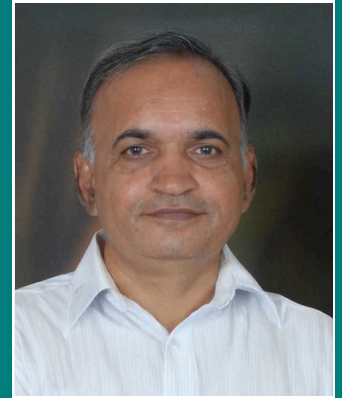


**Mr. Paresh Haribhakti, MD**

- He holds a post-graduate degree in Materials Technology from M.S. University, providing him with a solid academic foundation in metallurgy and materials science. With a leadership role at TCR Advanced Engineering Services, he has accumulated extensive experience in metallurgical engineering, and has solved over 9,500+ industrial challenges. He is expert in risk mitigation and management.
- Paresh has authored 'Failure Investigation of Boiler Tubes: A Comprehensive Approach', published by ASM International, USA. He passionately advocates for eliminating failures across industries and working towards predicative approach. His commitment to advancing knowledge and expertise is evident through his active participation in global conferences and contributions to leading metallurgical journals. He is an acclaimed expert for damage mechanism of oil & gas, refinery, petrochemicals, power, fertilizers. With his deep metallurgical knowledge and field experience, he provides advanced insights into boiler tube damage mechanisms and failure analysis, making him central to the course on boiler failure mitigation.

**Mr. M.N. Patel**

- BE & ME in Metallurgical Engineering from Maharaja Sayajirao University of Baroda. Brings over 33 years of teaching experience at undergraduate and postgraduate levels in subjects such as Mechanical Metallurgy, Plastic Deformation of Metals, Welding Metallurgy, Physical Metallurgy, Non-Destructive Testing (NDT), and Failure Analysis.
- He has guided 20+ postgraduate dissertations and published 16 technical papers focusing on weldability of steels, corrosion, stainless steel sensitization, and failure investigations.
- His expertise includes microstructural analysis, material characterization, welding metallurgy, SEM/EDS techniques, and metallurgical failure analysis, with strong application in correlating microstructure to material performance.



**Mr Gopul Patel**

- RBI Specialist and Advanced Materials Characterization Expert at TCR Advanced Engineering Pvt. Ltd., with over 15 years of experience in risk-based inspection, asset integrity management, and advanced analytical techniques. An API 580 certified professional, he contributes to digital solutions integrating FFS, API 581 risk analysis, IOW, and predictive maintenance.
- With a postgraduate background in Electronics, his expertise includes SEM/EDS, TEM, XRD, ICP-OES, and thermal analysis (DSC, TGA). Trained internationally in the Netherlands and Korea, he has played a key role in advanced microscopy applications, including Environmental SEM-based investigations.
- He also holds NDT Level II certifications (MT, PT, UT, Leak Testing) and specializes in failure analysis, microstructural diagnostics, and bridging lab-scale insights with real-world engineering applications.



**Mr. Ketan Upadhyaya**

- BE in Metallurgical engineering, PGD in computer science. He has experience of 35+ years in the field of NDE, Acoustic emission techniques, Vibration measurement and signature analysis, Failure Investigations, microstructure interpretation, Scanning electron microscopy and digital imaging system.
- He is a qualified level II for Acoustic Emission testing (IISC Bangalore), Vibration Analyst VT-II (Entec IRD) and Ultrasonic Flaw Detection (EEC Mumbai) techniques. He has expertise in Engineering Critical Analysis, high-temperature degradation of materials, Remaining Life Assessment (RLA), and Fitness-for-Service (FFS) evaluations. He has investigated over 1,000 failure cases related to petrochemical and oil & gas plants. His cross-functional diagnostic skills contribute significantly to identifying boiler degradation trends.



## For NFET/ RTGS/ Bank transfer:

**Account No:** 05730400000034  
**IFSC:** BARB0INDMAK (5th letter is zero)  
**Bank:** BOB, Makarpura Branch  
**Merchant Name:** TCR ADVANCED ENGINEERING PVT LTD  
**UPI ID :** tcrad93762@barodampay



QR code for payment