

Two-days intensive training on “Basics of metallurgy for engineers”



Date: 4th & 5th October, 2019

Timing: 9:00 am to 6:00 pm

Venue: Evolve by TCR, 215 Pancham Icon, Nr. D-mart, Vasna Road, Vadodara, Gujarat.

“The triumphs of engineering skill rest on a metallurgical foundation”. It is a must to attain conventional knowledge and efficiency in the field of metallurgy if professionals are from the discipline of proposal, engineering, supply chain management, production/execution and quality. Metallurgy helps an individual make an informed decision to identify materials for construction, process optimization along with maintenance practices of the plant.

Course Objective:

- Understand the Importance of Metallurgy in process industry
- Develop systematic properties for material selection
- Gain knowledge on metallurgy in fabrication, operation, maintenance & condition along with plant equipment monitoring
- Acquire comprehension 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

Course Content:

- Introduction and Importance of Metallurgy
- Correlation of properties with composition and microstructure
- Manufacturing methods (Casting, Rolling, Extrusion and Fogging)
- Defects and Characterization
- Metallography and Interpretation of microstructure
- Heat treatment of steels and cast iron
- 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 Engineering/Managers
- QA/QC Engineers
- Reliability Engineers
- Metallurgical/Material Engineers
- HAZOP Engineers/Managers
- Other Technical consultants, Laboratory, Sales Personnel, Engineers from allied discipline, disciplines, management and administrative staff.

Registration:

Interested candidates can register by completing the application form. The course fee includes participation, course material and stationary. Tea/Coffee and working lunch will be served for both days. Accommodation and Local conveyance are not included in the package and participants will make their own arrangements for the same. Course fee is non-refundable however in the event of cancellation of the course by ‘Evolve by TCR’, the course fee will be refunded to the participants. Change in nomination is accepted by ‘Evolve by TCR’. The course is limited to 25 participants .

Course fee:

Single participant: Rs. 9,500.00 for Indian delegates & USD 230 for Foreign Delegates.
GST @ 18.00 % applicable on above fees.

Payment mode:

Mail/Email completed application form along with DD/at par cheque in favor of “TCR Advanced Engineering Pvt. Ltd.”

Faculty:

The course will be conducted by renowned experts with vast experience in Metallurgy. Course faculty are:



Mr. Paresh Haribhakti

Managing Director,
TCR Advanced Engineering Pvt. Ltd.

Authored the book titled as "Failure Investigation of Boiler Tubes".

With an experience of 29 years in metallography and microstructure, Paresh Haribhakti has solved more than 4000 industrial issues. Being the pioneer

in the field of in-situ metallography and Materials engineering, he has an expertise in petrochemical plants, oil and gas transmission pipelines, offshore structures, ships, pharmaceutical plants, food processing equipment, gas turbine engine components and weldments.



Mr. Ketan Upadhyay

General Manager: Reliability Engineering,
TCR Advanced Engineering Pvt. Ltd.

- With an experience of 26 years in correlation of properties with composition and microstructure, Ketan Upadhyay has become an expert in manufacturing methods like casting, rolling, extrusion and forging defects.

Mechanical behaviour of steel, failure analysis, Welding metallurgy as well as non-destructive technology is his passion. Ketan Upadhyay is a qualified level II for Acoustic Emission Testing (IISC, Bangalore), Vibration Analyst VT-II (Entec IRD) and Ultrasonic Flaw Detection (EEC, Mumbai).



Mr. M. N. Patel

Ex. Associate Professor, Metallurgy & Materials
Engineering Department
Consultant, TCR Advanced Engineering Pvt. Ltd

- M.N. Patel has 35 years of teaching experience in Plastic Deformation of Metals, Mechanical Metallurgy, NDT and Failure Analysis in Under Graduate as well as Post Graduate

levels. He also has an expertise in Mechanical behaviour of metals, selection of materials and failure analysis, physical metallurgy and welding metallurgy. He has written 16 research papers published by national journals in the field of weld ability of steels, corrosion of steels, sensitization of stainless steel and failure analysis.



Mr. Gopul Patel

General Manager,
TCR Advanced Engineering Pvt. Ltd

- Gopul Patel is an expert in Vacuum Technology and has extensive experience in Non-Destructive Testing.

He is qualified as NDT level II in M.T., P.T., U.T. and E.T. With a vast experience

in advanced methods of material characterization, he has worked extensively in the field of microscopy.

Forward your Registration forms to:

Mr. Rajesh Lakhnotra

HOD - Training

TCR Advanced Engineering Pvt. Ltd., 250/9 GIDC, Makarpura,
Vadodara, Gujarat. Ph: 0265-2657233, 7574805594-96

Email: evolve@tcradvanced.com

Mobile: +91 7574801050

Registration form can be downloaded from our website:

<http://tcradvanced.com/coursecalender.php>

For more course details, check our FB page: -

<https://www.facebook.com/EvolveTCR/>

Benefits of the course:

- ✓ Practical insight on the use of Metallurgy in engineering applications
- ✓ Understand the typical life-cycle of metals and an overview on the industry
- ✓ Learn about the Scientific Principles of Metallurgy and its use towards specific process metals in an industry
- ✓ Attain extensive knowledge on corrosion, welding and fabrication of metals
- ✓ Network with experts in the field of Metallurgy