



**Date:** 22<sup>nd</sup> & 23<sup>rd</sup> November, 2019

**Timing:** 9:00 am to 6:00 pm

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

### Course Objective:

- Understanding will be developed for PAUT & TOFD techniques with practical demonstration.
- In-depth working understanding for use of non-destructive technique with respect to the flaw anticipated.
- Recognize the requirement of training and certification of NDT personnel and requirements of Nondestructive testing laboratory.
- Achieve the knowledge required to conduct or supervise basic Nondestructive testing and effectively communicate with metallurgists & other experts on more complicated cases. Invention to improve reliability of company operations, cost savings, increase profitability, and enhance competence.

### Course Content:

- Introduction of conventional ultrasonic testing and Process discontinuities.
- Introduction to PAUT and TOFD, difference between conventional UT and Advance UT, Advantages and drawbacks.
- Introduction of Omni scan MX2, PAUT Probes and wedges, TOFD probes and wedges.
- Introduction to Omni PC.
- Significance of scan plan preparation for PAUT and TOFD.
- Introduction of Omni scan MX2.
- Demonstration of Calibration steps.
  - ◆ Wedge delay
  - ◆ Sensitivity
  - ◆ TCG
  - ◆ Encoder
- Demonstration on known defective sample.
- Interpretation.

### Registration:

The course is limited to 15 candidates only and participation will be decided on first come first served basis. Interested candidates can register by filling attached registration form. The course fee includes participation, course material and stationery. Tea / coffee & working lunch will be served. Candidates have to make their own arrangements for accommodation and local conveyance. The course fee is non-refundable; however, in the event of cancellation of training program by TCR for some unavoidable reasons, it will be refunded. TCR accepts the change in nomination.

### Course fee:

Single candidate:

Rs. 10,000.00 for Indian delegates &

USD 220 for Foreign Delegates.

GST @ 18.00 % applicable on above fees.

### Payment mode:

Interested candidates should post/ E-mail the registration form along with DD/at par cheque in favour of "TCR ADVANCED ENGINEERING PVT. LTD." at the address mentioned below.

### 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](mailto:evolve@tcradvanced.com)

Mobile: +91 7574801050

Registration form:

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

More details:

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

### Who should attend?

- NDT Technicians
- Engineers of junior management level
- Fresh /Junior Inspection Engineers
- Trainee process engineers/
- Trainee Plant Engineers / Managers
- QA / QC Engineers
- Metallurgical / Materials Engineers

## Faculty:



### Mr. Sandeep Singh

NDT Manager Level III  
TCR Advanced

He is qualified as NDT Level III in M.T., P.T., U.T., R.T. and E.T. and also fully Conversant with various codes such as ASME (Sec V, Sec VIII, Sec IX, ASME B31.1, B313.3, code case 2235), API 653, structural BS codes etc.

Having more than 5 Years of experience in NDT and Quality Control at various Power projects, Petrochemicals, Refineries, Structural and Automobile Industries



### Mr. Gopul Patel

GM, TCR Advanced

He has an extensive knowledge of vacuum Technology and has worked as scientific officer at Department of science and technology sponsored research centre.

He is qualified as NDT level II in M.T., P.T., U.T. and E.T. and has experience of various advanced methods of material characterization and has worked extensively in the field of microscopy.

He is actively involved in establishing new testing facilities at lab as well as on site.



### Mr. Kamlesh Rana

Technical Manager  
TCR Advanced

He has vast experience of fabrication and forging fields. Having more than 20 years of experience.

He is qualified internal auditor for ISO 9001 and has handled API audits and headed quality and assurance department of various forge-shops.

### Key Benefits:

- ✓ Working Understanding of use of PAUT & TOFD NDT techniques.
- ✓ Gain the knowledge required to conduct or supervise PAUT & TOFD NDT testing.
- ✓ Understanding the conventional NDT techniques.
- ✓ Understanding the Omni Scan MX2.

### Training Sessions

#### Topics

Introduction of conventional ultrasonic testing and Process discontinuities

Introduction to PAUT and TOFD, difference between conventional UT and Advance UT, Advantages and drawbacks

Introduction of Omni scan MX2, PAUT Probes and wedges, TOFD probes and wedges.

Introduction to Omni PC & Omni Scan MX2

Demonstration of Calibration steps & on known defective sample