

# A Two days Workshop on Applications and Advances in Eddy Current Testing Technologies

on  
4th & 5th October 2024

at  
Anna University  
Sardar Patel Road, Chennai 600 025

Organized by  
ISNT Chennai Chapter

in Association with  
Department of Mechanical Engg, CEG, Anna University

Supported by  
Program Formulation Management Board - ISNT



## About ISNT

The Indian Society for Non-destructive Testing (ISNT) is the society for NDT professionals and practitioners which offers invaluable resources, information and linkages for industrial quality development and professional development to its members.

The objective of the Society is to promote the awareness of NDT Science and Technology through education, research and exchange of technical information within the country and internationally to its members and other professionals using NDT. The family of ISNT has more than 5000 strong members. It is a diverse and dynamic family of professionals representing NDT technicians, scientists, engineers, researchers, manufacturers and academicians – all dedicated to improve product safety and reliability. These specialists represent virtually every industry and discipline that may benefit from NDT technology.

## About the Workshop

The objective of workshop is to introduce the recent trends in eddy current NDE method and certain application areas such as oil and gas, aerospace, nuclear etc., under the following broader topics:

- Current trends in eddy current testing
- Variants of eddy current techniques such as Remote field eddy current, Pulsed and Sweep frequency techniques
- Eddy current imaging and state of the art techniques
- Role of artificial intelligence and machine learning in electromagnetic NDE
- NDE 4.0 related topics
- Application Areas (Nuclear, Aerospace, Oil and Gas Industry etc.,)

Eminent and highly qualified professionals having extensive domain knowledge are drawn from Academia, R&D Institutes and Strategic Industries, to deliver lectures in this workshop. Attending this workshop is beneficial for NDT professionals, Practicing Engineers, Researcher Scholars, Students, Academics, Materials and Manufacturing Engineers etc. The participants will be immensely benefitted by attending this workshop by way of extensive interactions with experts and peers in the domain of eddy current NDE. There will be practical demonstrations from industrial partners who would display their state of the art eddy current products which would definitely be beneficial for the participants. The workshop will be conducted in offline mode (in person) for enhanced interaction among the participants.

## Eddy Current Testing

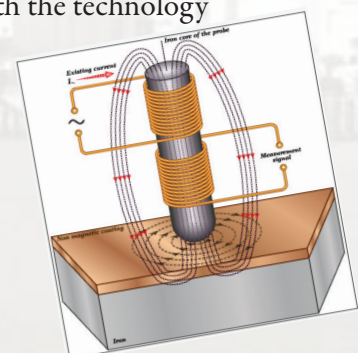
Eddy current testing is a widely used NDT method for detection of defects in metallic materials and components. This is the most preferred method for in-service inspection of heat exchanger tubes in power, petrochemical, and process industries. This method finds application in aerospace and aircraft industries for detection of fatigue cracks and corrosion damage in multilayer structures. This method is popular for measurement of coating thickness, sorting of materials, detection & sizing of cracks and characterisation of microstructures. This is a fast and reliable method for ensuring quality during manufacture and for structural integrity assessment and in-service inspection of operating engineering components.

## Objectives of the Workshop

- Unique workshop covering the basics and advancements of the eddy current NDE method

## Who Can attend and What for?

- Students & Faculties of academic Institutions aspiring to know about the field and to make a career in this field
- Service providers for updating regarding current trends for rendering better services
- Scientists from R&D institutions for knowing current trends, and future perspective
- Welding and corrosion inspectors for understanding the better inspection capabilities
- QA and NDE managers for acquiring knowledge to manage better
- Personnel in engineering, process, aerospace, automobile industries for various applications
- Inspection and regulatory authorities to keep in pace with the technology



## Course Outline

The workshop is intended to provide participants an overall scope of the technologies along with the insight to the industrial applications along with Automatic defect recognition will be introduced. This workshop will also cover the topic of the standards of EDDY CURRENT TESTING. Case study presentations by expert users from various sectors will give the participants an insight about use of these technologies in their applications. Also there will be practical demonstrations during this program.

## Salient features of the workshop

- Well known speakers from R & D institution/ Laboratories
- Speakers from reputed academic Institutions & Industries
- Industry specific talks on Applications of ECT
- Standards of Eddy Current Testing
- Practical demonstration of Eddy Current Testing

## Advisory Committee

<b>Prof. Krishnan Balasubramaniam</b> President - ISNT	<b>Shri. R. Balakrishnan</b> Chairman - ISNT Chennai Chapter
<b>Shri. R. Vivek</b> Hon. Gen. Secretary - ISNT	<b>Shri. V. Pari</b> Secretary - QUNEST Fdn.
<b>Dr. Paritosh Nanekar</b> Chairman, NCB	<b>Prof. Kavitha Arunachalam</b> Dept. of Engineering Design, IIT Madras
<b>Shri. V. Manoharan</b> Chief Controller of Examinations, NCB	<b>Dr. M.T. Shyamsunder</b> Vice President - ISNT
<b>Dr. Balasivananda Prabhu</b> HOD - Mechanical Dept., Anna University	<b>Prof. Prabhu Rajagopal</b> Chairman- Elect - ISNT CC

- Program Director : **Dr. S. Thirunavukkarasu**  
Head, EMSI Section, NDE Division, Kalpakkam
- Convenor : **Shri. M. Dharmaraj**  
Director-Technical, Aruntech Industrial Services
- Coordinators : 1. **Prof. Sudha**  
Mechanical Department, Anna University, Guindy, Chennai
2. **Mr. P. Anandan**  
NDT Level-III  
Scaanray Metallurgical Services, Chennai

## Faculty of the Program

Mix of Academic, R&D Institutes and Industry

## VENUE

Anna University, Sardar Patel Road, Chennai

Dates: 4-5th October 2024

Time : 9.00 to 17.30 hrs



QR-CODE SCAN  
FOR VENUE



## Fees

Sl. No.	Category	Fees	No of seats
1.	ISNT Member	Rs 6000 +GST	30
2.	Non ISNT Member	Rs 7500 + GST	10
3.	Corporate Members (Max. - 5 Nos)	Rs 6000 Per participant + GST	20
4.	Student Members	Rs 3000 + GST	10

Registration on the basis first comes first serve Early bird Registration offer: Rs 500 will be waived off those who register on or before 20th September 2024.

## Registration

Participants who desire to attend the workshop are requested to send the duly filled in form.

The last date for registration is 30th September 2024



QR-CODE SCAN  
FOR REGISTRATION

## Payment

The payment for the workshop can be done to the following methods and to following Account.

Through Online Banking or Demand draft payable at Chennai.

Name of the Bank : State Bank of India

Branch Name : Guindy

Branch Address : No. 66, GST Road, Industrial Estate, Guindy, Chennai – 600032

Account Name : ISNT Chennai Chapter

Account No. : 35328621100

MICR Code : 600002072

IFSC CODE : SBIN0000956

SWIFT CODE : SBININBB227

Or

In case of Demand draft payment, the draft shall be in favour of ' ISNT Chennai Chapter ' payable at Chennai.

## Address For Correspondence

Anandan Pari

Secretary

Indian Society for Non-Destructive Testing, Chennai Chapter  
Modules 60 & 61, 3rd Floor, Readymade Garment Complex,  
SIDCO Industrial Estate, Guindy, Chennai - 600 032. TamilNadu, India

Tel: 044- 45532115 /9884036985,

Email: isntchennaichapter@gmail.com