SHORT COURSE

27-28 December, 2017

Short Course Venue

National Centre for Remote Sensing and Geo-Informatics (NCRG) SUPARCO Headquarters, SUPARCO Road, Karachi -75270 Tel: 0320-8001267

For Registration and Queries

Failure Analysis Center, Institute of Space Technology 1, Islamabad Highway, Islamabad - 44000 Tel: (051)9075417/9075652, Fax: (051)9273310 Email: fac@ist.edu.pk



INTRODUCTION

purpose Failure The of • Analysis is to analyze the fracture features and to relate the fracture surface topography to the causes of failure. This short course intends to provide a practical understanding of failure analysis based upon conceptual knowledge of engineering material and structural failures in industry and their prevention.

Moreover, a pragmatic approach towards the ways of description and interpretation of fracture surface features, resulting from various stresses, would be addressed with the help of industrial failure case studies.

PRE-REQUISITE

Bachelors Degree in Mechanical/Materials/ Aerospace/Aviation and/or related disciplines. TOPICS

- Overview of Failure Analysis
- Fundamentals of Industrial Materials
- Preservation & preparation of samples for Failure Analysis
- High Temperature Fracture and Creep Deformation
- Mechanical Aspects and Macroscopic Fractographic Features of Fracture
- Fracture Modes and Macro -Fractographic Features
- Fracture Mechanisms and Micro-Fractographic Features
- Correlation of Micro and Macro-Fractographic Features
- Failure Prevention
- Case Studies

REGISTRATION

Nominations from public/ private organizations may be sent along with course registration form, which may be downloaded from our official webpage.

www.ist.edu.pk/fac

Self sponsored participants may send their nomination directly to FAC or may register on spot at the registration desk.

Professionals:

Rs. 15,000/- per person. **Post Grad. Students:** Rs. 10,000/- per student. Discount is available on registration of five or more participants. Course Fee includes cost

of Training Material, Lunch, Tea, Light Refreshment and Certificates.

Venue: NCRG Karachi NCRG Office - Sector 28, Gulzar-e-Hijri, SUPARCO Road, Off University Road, Karachi.

WHO SHOULD ATTEND

PARTNER IN PREVENTING FAILURES

• Engineering responsible for Maintenance, Inspection and Production in Industries.

• Engineers working in the fields encountering Quality Assurance and Failure Analysis.

• Investigators of Air/ Ground/ Sea Accidents.

• Researchers & Students working in the field of Engineering Structures, Design and safety.

RESOURCE PERSONS

Dr. Fahim Hashmi PhD (Materials Science & Eng.) Founding Director of FAC Specialization: Fracture Mechanics, Failure Analysis, Structural Integrity Assessment.

Prof. Dr. S. Wilayat Husain PhD (Metallurgy), UConn. Specialization: Alloy Development, Materials Characterization.