

Course Duration : 5 Days Training
Daily Schedule : 7:30am - 3:30pm
Training Date : Upon Request
Training Venue : Doha
Traning Fees : TBI



COURSE DETAILS

Day 1

- Forms of corrosion, Basics of corrosion control
- Corrosion Principles
- Impact of Corrosion- An Overview
- Corrosion Prevention Techniques

Day 2

- Corrosion in Oil & Gas Industry
- Crude Unit Corrosion Prevention
- Naphthenic Acid Corrosion & Method of Determining the Corrosiveness in Crude Oil refining Streams
- Prevention of Internal Corrosion of Pipelines - A Systematic Approach

Day 3

- Improving Plant reliability through Corrosion Monitoring
- Corrosion Resistant Materials
- Corrosion Failure and Analysis
- Forms of Corrosion
- Corrosion Problems in Petroleum Production

Day 4

- Corrosion Testing
- Factors Affecting Cathodic Protection Design
- Cathodic Protection Surveys
- Principles of Cathodic Protection
- Cathodic Protection & Environmental Resistivity

Day 5

- Corrosion Protection for Offshore Pipelines
- Assessment of Refinery Crude Oil Corrosivity
- Dynamic Corrosion Appraisal to Correlate Corrosion excursion
- Corrosion Control Management



QATAR TECHNICAL PETROLEUM CENTER

Corrosion in Oil & Gas Industries and Controls

QTPC - AN ISO 9001:2008 Regd.



Course Description

Corrosion problems have always presented a severe challenge to oil and gas producing operations. Operators plan for long periods of continuous production with maintenance scheduled for the prescribed shutdown periods. Unfortunately, corrosion does not always respect these schedules, resulting in severe economic penalties due to loss of product. In addition, the risk of pollution and hazards to safety are other important reasons for adequate corrosion engineering. Governmental legislation concerning oil and gas extraction is becoming more stringent in order to minimize these risks. Furthermore, corrosion hazards have intensified with extraction in deeper waters and in more hostile environments. Innovations aimed at reducing offshore field development costs involving reductions in platform weight, increasing use of satellite wells and subsea manifolds require specific attention to corrosion prevention.

Learning Objectives

This training program will initiate engineers to understand, the corrosion process, its role in failures, the selection of engineering materials, types of candidate materials for oil & gas services, their performance, service failures, and remedial actions for reliable performance. Corrosion monitoring and controls will be covered in details. At the end of the training, participants will be able to understand characteristics of corrosion in oil & gas installations and identify its driving force, ways in which corrosion occurs and finally incurs a cost in operation, methods to minimize and prevent corrosion, appropriate monitoring techniques to establish if there is a potentially corrosive situation, important material and environmental factors that influence the corrosion process, describe the various methods available for corrosion control, regulatory and safety matters and to identify the contribution of an integrated monitoring and inspection program for operations and the diagnosis of problems.

Who Should Attend?

The course is designed essentially for those professionals employed by companies engaged in oil and gas production, as well as those with specialist functions such as: Process Engineers, Inspection Personnel, Mechanical Engineers, Material Selection Personnel, Research and Development Personnel, Corrosion Control Personnel and Plant Contractors



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About the Instructor



Dr. G.H Thanki

Educational Qualifications:

M.Sc. Chemistry with 'Corrosion Science' as specialization (1967)

Ph.D.: 'Corrosion and Corrosion Inhibition' (1972)

WORK EXPERIENCE

• Above 35 years of experience in the field of Corrosion Technology in the capacity as Corrosion Technologist to Deputy General Manager and Division Head (Research and Corrosion Technology, GSFC) and selected as The Member Secretary to GSFC Science Foundation and consultant.

Served in the following capacity after leaving GSFC:

- **Vice President:** Corrosion Control Management
- **Technical Advisor:** Industrial cooling water operators, corrosion control products manufacturers, corrosion testing and evaluation set-up / facilities
- **Education Course Director:** Series of lectures (quarterly) on corrosion control awareness for more than 60 industries with 180 participants so far.
- Course co-ordinator to National Association of Corrosion Engineers (USA) International India Section for Corrosion-Control Awareness & Educational Programmes (CAEP)
- Freelance Consultant to chemical industries for corrosion survey and audit, online corrosion monitoring implementation, Senior Corrosion Consultant to ERDA- Vadodara
- **Nation- wide lecture series:** Corrosion Education and Training to create the corrosion awareness in the corporate world for a safe operation of plants and common man to save the earth from the depletion of natural resources and control of pollution.

Life Member: Indian Institute of Metals and Executive Member to IIM Baroda Chapter,

Fellow Member: Society for Advancement of Electrochemical Science and technology and Ex Co-Chairman – 'Corrosion' (SAEST),

Executive Member: National Corrosion Council of India (NCCI),

Founder Member: NACE International Gateway India Section (NIGIS)

Member: Indian Society for Non-Destructive Testing (ISNT).

Technical Advisor: Global Energy Talent Pvt. Ltd. (Talent Networking platform)