Corrosion Management in Oil and Gas Upstream (Offshore)

PRINCIPLE COURSE FACILITATOR:

Dr. M.S. Parvizi
PhD, FiCorr, FIM3, CEng.
Fellow Member of the Institute Corrosion and Material &NACE Corrosion Specialist

TESTIMONIALS OF COMPETENCE:

- 38 years of Materials Selection & Corrosion experience in the E&P and Downstream Sectors
- Authorized International NACE Instructor
- Lead Material Engineer Technology in CB&I
- Regions of project experience: Europe, Asia, Middle East, Africa and Russia

A Unique Opportunity For:

- Corrosion and inspection engineers
- Process, Mechanical and Metallurgical Engineers,
- Integrity Managers
- Project Managers and Project Engineers
- All technologists who are involved with hydrocarbon production, processing, Safety and commissioning

CAPITALIZE ON DR.PARVIZI’s LEADING EXPERTIZE TO:

- UPDATE on the latest research and development of upstream material & corrosion
- UNDERSTAND and LEARN best practices developed and implemented by leading companies
- IDENTIFY and MONITOR the causes of corrosion and material failure
- MITIGATE internal and external corrosion
- SPECIFY cost effective materials for safe operation
- LEARN the latest subsea recommendations of EEMUA 194

GAIN INSIGHTS to new technologies like Tube

TEHRAN-IRAN
22-26 July, 2017

Limited Attendees
The course has limited seats to ensure maximum learning and experience for all delegates.

Interactive Training
You will be attending training designed to share both the latest knowledge and Practical experience through interactive sessions. This will provide you with a deeper and more long-term understanding of your current issues.
COURSE OVERVIEW:

The purpose of this course is to provide the attendees with an overview of corrosion concerns in offshore upstream production of Oil & Gas industries. It aims to identify and examine corrosion, metallurgical and materials failures that can occur in any process and utility units within this industry. The attendees will have an opportunity to examine techniques and practices that can be used to control corrosion and enhance the integrity of the production plant.

This course is designed for all disciplines engaged in the day to day operation of the plant. It includes, but not limited to, Corrosion and inspection engineers, Equipment, Process, Mechanical, Metallurgical Engineers, integrity managers, project engineers and all technologists who are involved with hydrocarbon production, processing, safety and commissioning. Management will also benefit by increasing their awareness of corrosion monitoring to maintain the plant in a safe mode. In addition, manufacturers of equipment, suppliers of materials to this industry and the procurement team engaged in the project will also benefit in attending this course.

COURSE OUTLINES:

Day 1 (22nd July 2017):
- Assessment test of the attendees’ knowledge of basic corrosion and materials engineering.
- Overview of exploration and production
- Fundamental of corrosion
- Types of oilfield equipment
- Types of oilfield corrosion mechanisms
- The impact of corrosion on oil & gas industry
- Sour service corrosion; mechanisms, types, the implications and means of design
- Sweet (CO2) corrosion; mechanism, types, parameters and the implications.
- Materials Classification and Materials of Construction used in Oil and gas plants.

Day 2 (23rd July 2017):
- Corrosion Prevention Techniques
- Seawater corrosion; mechanism, the implications and means of design
- Erosion damage and interaction with corrosion and means of design.
- Oilfield materials; principal types of metallic and non-metallic materials, oilfield metallurgy
- Main oilfield standards and guidance: API, ISO, EEMUA, CEN, ASTM &DNV

Day 3 (24th July 2017):
- Corrosivity evaluation, system corrosivity and predictive models
- Water chemistry (gas production and oil production), production conditions, and principal parameters affecting performance
- Key challenges in oilfield materials and corrosion
- Whole life cost analyses, net present value and expected value technique Inhibitor performance consideration
- Corrosion Control Concerns on Oil, Gas, Water Transmission Pipelines
- Corrosion concern and protection techniques on oilfield jackets(platforms)

Day 4 (25th July 2017):
- Corrosion inhibition, principles, key parameters affecting performance
- Corrosion monitoring and inspection, principle types, considerations in using them and practical deployment methods
- Oilfield corrosion design; drilling, production, transportation
- Water injection (seawater, produced water, commingled water), water and gas (WAG) injection key parameters and design considerations.

Day 5 (26th July 2017):
- Some case studies review on Concrete weight coating and Subsea CP system issues
- Corrosion testing, materials evaluation, inhibitor evaluation techniques.
- Workshop, case studies (wells, seawater injection, pipelines), review and use of modelling.
- Role of Materials & Corrosion Engineer in phased of Project
- Discussion and exchange of ideas
- Final examination covering the main course contents taught
WHY YOU SHOULD ATTEND

This course is designed for all disciplines engaged in the day to day operation of the plant. It includes, but not limited to:

- Corrosion and Inspection Engineers
- Equipment, Process, Mechanical, Metallurgical Engineers
- Integrity Managers
- Petroleum Engineers
- Project Managers and Project Engineers
- All technologists who are involved with hydrocarbon production, processing, safety and commissioning.
- Manufacturers and suppliers of equipment and materials

WHAT YOU WILL LEARN:

- Develop a comprehensive understanding of Introduction to hydrocarbon production, Basic Corrosion, Types and Control measures, applicable to this industry
- Impact of corrosion and type of corrosion damage in oil and gas production
- Materials selection strategy and the types of materials used in petroleum industry by analysing the life cost approach.
- Types of standards used in oil and gas production industry
- Main types of corrosion and their perdition in petroleum industry covering
- Understand the failure mechanism imposed by sour service and the methods to tackle the failure by understanding NACE MR0175/ISO 15156
- Sweet and Atmospheric corrosion
- Water injection corrosion
- Materials selection and optimization in drilling, well completion, surface/topside facilities and pipelines
- Whole life cost analysis
- Corrosion mitigation methods i.e. Chemical injection, Coating, Cathodic Protection and design concerns
- Qualification methods of corrosion inhibition, biocide injection, scale inhibitor.
- Case histories and hands on exercises
- Describe techniques that can be utilised for mitigation of each mechanism of corrosion
- Identify and define the dominating categories of process and environmental related corrosion.
- Identify areas susceptible to failure.
- Identify and explain mechanical failure that may occur in equipment and utilise appropriate techniques for prevention.
- Identify the influential parameters in corrosion processes of each unit.
- Understand the most advanced Corrosion Monitoring Techniques

INSTRUCTOR’S PROFILE

Sadegh Parvizi has over 38 years’ experience in Oil, Gas, Refineries, Petrochemical, Power industries and Manufacturing Plants. His particular expertise includes materials evaluation as well as integrity management, remnant life assessment and implementation of corrosion control techniques in these industries. He has been actively engaged in investigating and advising on various technical problems, such as selection of materials, optimization of their use, plant failure investigation, Welding/NDT review, CP design review, and technical advice on repair procedure, auditing, writing materials specification. He has been involved in technical clarification activities with the manufacturers on a numbers of projects. He has been involved in a large number of projects world-wide ranging from the conceptual stage to commissioning and production. He has played an important part in troubleshooting of some major production plants.

Sadegh Parvizi graduated from department of the Metallurgy and Materials Engineering at Sharif (ex-Aryamehr) University of Technology in Tehran in 1976. He has an MSC in Materials Engineering and a PhD and Postdoctoral degree in Materials Science and Technology from the University of Surrey, UK. His professional career has been sectioned into three distinctive areas as follows:

- Research and Development: Working in International Copper Research Association (INCRA), USA on alloy development projects, Electrical Research Association (ERA), UK on metallurgical behaviour of materials at high temperature. In British gas on the effect of natural gas contaminants on the material performance and leading the department of R&D in National Petrochemical Complexes (NPC) of Iran.
- Oil & Gas Operating Companies: British Gas, UK, ADMA-OPCO, UAE, Occidental Petroleum of Qatar and Consultant to Exxon Mobil for Chemical plants in Singapore.
- Engineering Companies: Working with major international Engineering companies such as Technip, Bechtel, and Foster-Wheeler and, at present, working for CB&I (Chicago Bridge and Iron) as a head of Materials Technology Group.

Sadegh Parvizi is an active fellow member of the Institute of Materials, NACE International and Chartered Engineer. He is an approved instructor of NACE in Refining Industries. Dr.Parvizi has lectured on a number of occasions for researchers, engineers and operators. He has developed a dynamic mechanism on the interaction of different disciplines in projects set-up. He has published and presented a number of papers internationally and has been a key speaker at several Corrosion Conferences.
MAT Group Ltd. is proud to present “Corrosion Management in Oil and Gas Upstream (Offshore)” for improving knowledge, scientific and professional level of engineers. This course will be held in 5 days starting on Saturday, 22nd July, 2017 from 8:30 to 17:15 in Tehran/Iran.

TERMS FOR ATTENDING THE COURSE:

- University Engineering Degree is highly recommended.
- Sending the completed “Registration Form” To MAT Group Ltd. by 22 June, 2017
- Knowledge or background in the field of “Materials and Corrosion” is highly recommended.
- Formal language of the course is English.

COURSE FEE:

- Payment of Rials 37,000,000.00 to MAT Persian Group, Account Number 810-652-6, Code 1080, Parsian Bank, Iran, Tehran by 22 June, 2017.
- The above price does not include 8%VAT.

IMPORTANT NOTICE:

- Payments are required with registration and must be received prior to the course to guarantee your place.
- The regular registration period ends on 22nd June, 2017. Afterward, late “Registration Fee” of Rials 2,000,000.00 will be charged.
- A certificate of successful completion of the course will be awarded to participants who attend and complete all course sessions and successfully pass the final exam of the course.
- The registration payment includes: Course Materials, Coffee Break & Lunch.

PAYMENT, CANCELLATION & REFUND POLICIES:

All payments must be received prior to course commencement. Payments are accepted in the form of bank cheque or bank transfer. Cancellation requests by applicants should be in writing and received 30 days before the commencement of course, for the course fee to be refunded minus registration/administration cost of Rials 3,000,000. Cancellations must be made in writing. No refunds will be made for cancellations received less than 30 days before the start of the course. Enrollment is not automatically cancelled if participant does not show up. A substitute participant may be nominated upon approval of MAT Group. MAT Group reserves the right to withdraw or postpone a course if the number of participants is not sufficient, up to three weeks prior to the course starting date. If a course is cancelled by MAT Group, you will receive notice by email or fax. A full refund of paid registration fees will be given or can be transferred to another MAT Group public course within 12 months (date of registration) of equal cost. Please keep our registration and cancellation policies in mind when arranging your travel as MAT Group does not accept liability for any costs incurred for cancellation or change of travel or hotel reservations.

3 Easy Ways to register:

Online: www.matgroup.org
Email: training@matgroup.org
Fax: +9821-88552734