

*WebCorr Corrosion Consulting Services Presents*

# Materials Selection and Corrosion Control for Oil and Gas Production Systems

Date: As published on website    Venue: As published on website

## Course Overview

Oil and gas production projects benefit from a structured evaluation of materials used for the different fluids being handled. Therefore, the main objective of this 3-day advanced training course is to provide guidelines for the selection of materials for systems and components, with due consideration to the transported fluids and the external environment.

Guidance is given for the following:

- corrosion evaluations;
- materials selection for specific applications, or systems, or both;
- performance limitations for specific materials;
- corrosion control.

## Who Should Attend

Design engineers from oil and gas companies and engineering contractors.

## Course Outline

1. Introduction
2. Overview of Corrosion Threats in Oil and Gas Production Systems
- 3 Terms, definitions and abbreviated terms
- 4 Design information for materials selection
- 5 Materials selection report
- 6 General guidelines for corrosion evaluations and materials selection
  - 6.1 General
  - 6.2 Internal corrosion in oil and gas production and processing
  - 6.3 Internal corrosion in injection systems
  - 6.4 Internal corrosion in utility systems
  - 6.5 Sand erosion
  - 6.6 External corrosion
  - 6.7 Polymeric material



6.9 Mechanical properties and material usage limitations

7 Materials selection for specific applications and systems

7.1 General

7.2 Oil and gas production and processing systems

7.3 Injection systems

7.4 Utility systems

7.5 Pipelines and flowlines

8 Corrosion Control

8.1 Chemical treatment

8.2 Internal corrosion allowance

8.3 Selection of internal and external coatings

8.4 External splash zone protection

8.5 Cathodic protection

8.6 Corrosion protection of closed compartments

8.7 Connection of dissimilar materials

8.8 Sealing materials

8.9 Fasteners

8.10 Weld overlay

8.11 Preferential weld corrosion

9 Design basis for hydrocarbon systems

10 Corrosion modelling and corrosion prediction

11 Corrosion monitoring

12 Chemical composition of oilfield alloys

13 End-of-course examination

### Course Registration

Please register online at [www.corrosionclinic.com](http://www.corrosionclinic.com)  
Or use the form below (photocopies of this form may be used for multiple bookings).

Dr/Mr/Ms \_\_\_\_\_

Organization \_\_\_\_\_

Contact Person \_\_\_\_\_

Contact Dept \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Payment should be made by TT or online banking. Currencies in Australian Dollar, Canadian Dollar, US dollar, Euro and Sterling Pound can be transferred directly without conversion. Our bank details:

<https://www.corrosionclinic.com/payment.html>

### Course Fee and Discount

**Standard:** \$4,950      **Discount:** \$4,455

The fee includes a hardcopy of course note, certificate, light lunch, coffee breaks each day during the course.

Discount applies to a group of 3 or more persons from the same organization registering at the same time, or early-bird making payment at least 8 weeks before the course commencing date.

### Cancellation and Refunds

Cancellation or replacement should be conveyed to WebCorr in writing (email or fax). An administration charge of 50% of the course fee will be levied if the cancellation notice is received from 14 to 7 days before the course commencing date. No refund will be made for cancellation notice received 6 days and less. No refunds will be given for no-shows. Should WebCorr find it necessary to cancel a course, paid registrants will receive full refund. Refund of fees is the full extent of WebCorr's liability in these circumstances.



WebCorr has NACE certified Corrosion Specialist (#5047) providing customized in-house training, online and distance learning corrosion courses, corrosion seminars and workshops on corrosion, materials, metallurgy, paints and metallic coatings. Our corrosion courses are developed and taught by NACE certified Corrosion Specialist with over 30 years of practical experience in the field. Our training success is measured by your learning outcome.