



By :

**Ir. Rusman Abu Samah**

**CORROSION MANAGEMENT IN  
OIL AND GAS INDUSTRY  
(Material Selection & Applications)**

BEM Approved CPD Hour : 8  
Reference No. : IEM17/PP/011/S

DATE / TIME :

**27th October 2021  
8.30 am – 5.30 pm**

VENUE :

**TBA**

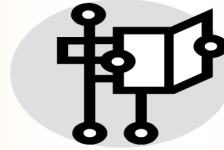
**Registration Fees**

Normal	RM 850
ANSARA / MOGEC Members	RM 800



**HRDF - SBL CLAIMABLE**

## Training Summary

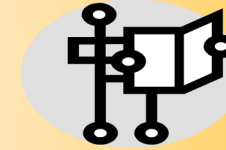


**PROGRAMME  
SYNOPSIS**

This course will cover the main causes of corrosion in upstream oil and gas operations, as well as monitoring and mitigation methods. The various corrosion mechanisms give rise to a number of different forms of corrosion damage, which will all be considered. Participants will estimate the corrosivity of a given environment through analysis of the chemical and physical characteristics of the system; review approaches to selecting materials and coatings for corrosion resistance for different conditions and applications; and be introduced to cathodic protection (CP) surveys, selecting the CP system type, estimating current requirements, and the design principles of simple cathodic protection systems. The course content is based on a field facilities engineering point of view, as opposed to a more narrowly-specialized corrosion engineering or chemistry viewpoint. It provides an appropriate balance of necessary theory and practical applications to solve/mitigate corrosion-related problems.



## Training Summary



**LEARNING  
OUTCOMES**

The course is meant to provide both instruction and workshop sessions so that the participants should learn:

- The basics of corrosion chemistry
- The main corrosion mechanisms occurring in oil and gas production/processing systems
- The different types of damage caused by corrosion
- Materials selection for corrosion prevention
- Some methods for conducting cathodic protection (CP) surveys
- Items to consider in corrosion inhibitor selection
- Key advantages and disadvantages of the various corrosion monitoring methods
- Where the main locations of corrosion concern occur within oil production systems, gas processing facilities (including amine units), and water injection systems.

At the end of the session, the participants should:

- Learn how to select and utilize corrosion inhibitors for different systems
- Learn how to select and apply corrosion monitoring techniques to create an integrated monitoring program.

## Trainer Profile



Ir Rusman Abu Samah has over twenty five (25) years of experience in oil and gas industry. Expert and wide experience in computer simulation and Thermodynamic Package, include PRO-II/PROVISION by SimSci, HYSYS/HYSIM by Hyprotech Ltd. and PIPESIM Pipeline Simulation. He is well verse with material selection and corrosion management study and NACE MR

0175 sour service environment.

Expert and handy in relief valve sizing based on API RP 520, DIERS method, omega two phase flow method and relief under transient and critical phase. He has wide experience in refinery system, biodiesel plant, product tankage and jetty system. He has wide knowledge on HTFS and HTRI for simulating and designing the thermal design and rating for the Shell and Tube Heat Exchangers and Air Coolers. Simulate the Gas dehydration system with TEG using HYSYS process simulation, to determine the rigorous parameters inside the regeneration package. Well verse in Blowdown and Low Temperature study calculation.

He has wide experience on pre feasibility study and concept selection including cost estimation for the facilities. He has performed and facilitate various HAZOP, HAZID and SIL study for different clients on different projects. He has modeled the Gas Processing Unit for recovery of LPG, Propane, Butane and NGL using HYSYS process simulation and LNG process including LNG regasification system and LNG terminal facilities.

## Schedule

TENTATIVE PROGRAMME	
Time	Details
7.45 a.m. – 8.30 a.m.	Registration
8.30 a.m. – 11.00 a.m.	- Materials of Construction - Corrosion Type and Mechanisms
11.00 a.m. – 11.15 a.m.	Mid-morning break
11.15 a.m.– 1.00 p.m.	- Materials Selection - Corrosion Control
1.00 p.m. – 2.00 p.m.	Lunch Break
2.00 p.m. – 3.00 p.m.	- Corrosion Monitoring - Welding & Manufacturing - NDE & Specifications
3.00 p.m. – 3.15 p.m.	Afternoon coffee break
3.15 p.m. – 4.30 p.m.	- Painting & Coatings - Insulations - Refractory & Fireproofing
4.30 p.m. – 5.30 p.m.	Summary and feedback
5.30 p.m.	Session end

## REGISTRATION FORM

Tel : 603-80624671 Fax : 603-21611489

Email : training@igl.com.my

Website: <http://www.igl.com.my>

Name of Organisation:

Address:

Email:

Phone number :

Tel (Office) :

Tel (Fax) :

Contact Person :

Designation :

ANSARA / MOGEC Member:

YES / NO

NAME	Reg. Fee (RM)
<b>TOTAL PAYABLE</b>	

Enclosed herewith a crossed cheque No. .... for the sum of RM ..... issued in favour of "IGL Process Solutions (Hong Leong Bank/04500309458) and crossed 'A/C payee only'. I/We understand that the fee is not refundable if I/we withdraw after my/our application is/are accepted by the Organizing Committee but substitution of participant will be allowed. If I/we fail to attend the workshop, I/we will still pay the registration fee in full.

(See next page : Terms & Conditions)



## Terms & Conditions

- FULL PAYMENT must be settled before commencement of the course, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full.
- Fee paid is not refundable. Registration fee includes lecture notes, refreshment.
- The Organizing Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances. Every effort will be made to inform the registered participants of any changes. In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment.

## IGL PROCESS SOLUTIONS

NO. 32, JALAN PRIMA 3/3  
TAMAN PUCHONG PRIMA  
47150 SELANGOR DARUL EHSAN