

Effective Topside Corrosion Management

Be equipped with effective topside corrosion management thru practical knowledge of corrosion & corrosion control

Date: 15th October 2012– 17th October 2012
Location: Kuala Lumpur, Malaysia



Petrosync Distinguished Lecturer

Prof. Dr. Moustafa M. El-Gammal

Emeritus Professor, Faculty of Engineering, University of Alexandria, Egypt
Head & Manager of International Gammal Technical & Engineering Consultancy Group

Includes
Practical Exercises
and
Case Studies

Summary of Accomplishments

- Has over 45 years in industry, principally in corrosion of structural and industrial protection design systems.
- His vast experience has been extensively in various technical and practical fields as well as offering consultancy to several clients in fields as offshore corrosion protection system designs, marine and ship hull protection system and topside corrosion protection.
- Senior instructor for many in-house and international courses in Asset Integrity in Pipeline Industries with major international companies
- Principal Research Officer at B.S.R.A., Wallsend Research Station, U.K., from 1980 to 1982, main contribution was to share developing a design manual for marine and offshore structures

Testimonials

"Prof. Dr. El- Gammal has an excellent ability and well experienced in presentation of corrosion and means of protections. He also has distinguished band remarkable ability and skills."

"His contribution by delivering the Topside Corrosion Management training course is invaluable and enriches the technical corrosion library by the Course Notes which he has prepared."

"The presented examples and the practical case studies reflect his vast experience in dealing with the subject in deep."

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Masterclass Overview

Corrosion is one of the primary threats to the integrity of the topside of any offshore asset. Corrosion management is part of a system concerned in development, implementation, review and maintenance of corrosion policy. It may be defined as controlling corrosion by keeping corrosion within acceptable limits.

The course is designed in accordance to levels requirements as per NACE International. The main objectives and aims are to serve Engineer and Professionals that has experience and involvement with Corrosion Management. The information for this Course is mainly and strictly to apply techniques without carrying out any sophisticated calculations. Simply the calculations an envisaged within this course are devoted to only highlight the lifecycle estimations containing tolerable defects and serving within aggressive environment. The assumed defects are meant to be those inherited due to the different fabrication processes and went on without detection. Case studies are designed to make the flow of information between the trainer and the attendees, understandable and clearly applied in similar cases.

At the end of this course, the participants will be able to compete with the corrosion and how to control the resulted drastic effects in practical sense. The attendees will have tools of how to overcome corrosion accidents and understand handling problems in fields. Thus, will share in reducing the corrosion costs as well as will extend the lifetime and will have good impacts on increasing productivity leading to improving utilization of those very important and strategic projects.

Masterclass Objectives

- ▶ **Enable** solid understanding of corrosion, its forms and factors influencing corrosion.
- ▶ **Understand** corrosion in Oil and Gas and its topside facilities.
- ▶ **Learn** how to control the result of drastic effects of corrosion in practical sense.
- ▶ **Improve** participants' skills to develop tools to overcome corrosion.
- ▶ **Develop** understanding on innovative control techniques with focus on handling problematic areas.
- ▶ **Give** expert views on material application in the Oil & Gas Industry.
- ▶ **Gain** knowledge on material selection optimization.
- ▶ **Address** control, mitigation, monitoring and inspection obligations to ensure means of protection and service life extension measures.
- ▶ **Enhance** knowledge on good engineering practice and productivity
- ▶ **Be equipped** with effective topside corrosion management thru practical knowledge of corrosion and corrosion control

Specially Designed for

The course is designed for E&P professionals with knowledge and experience in corrosion and corrosion management. They include:

- ▶ Corrosion/Material Engineers
- ▶ Corrosion Managers/Technicians
- ▶ Asset Integrity Engineers
- ▶ Maintenance Manager/Engineer
- ▶ Metallurgist
- ▶ Inspection Engineer
- ▶ Reliability Engineers
- ▶ QA/QC Engineers
- ▶ Welding Engineers
- ▶ Chemist
- ▶ Facilities Engineers
- ▶ Operations Engineers
- ▶ Production Engineers
- ▶ Technology Engineers

Petrosync Quality

Limited Attendees

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

Certificate of Attendance

You will receive a Certificate of Attendance bearing the signatures of the Trainer upon successful completion of the course. This certificate is proof of your continuing professional development.

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.

High Quality Course Materials

Printed course manual will provide you with working materials throughout the course and will be an invaluable source of reference for you and your colleagues afterward. You can follow course progress on your laptop with soft copies provided.

Effective Topside Corrosion Management

15th October - 17th October 2012

DAY 1

Corrosion

- Definition of Corrosion
- Forms of Corrosion
- Causes & Factors Influencing Corrosion
 - O₂, CO₂, HPHT, H₂S, Microbial influenced corrosion

Corrosion in Oil & Gas Industry

Corrosion in Topside Facilities

- Platforms
- Piping
- Equipment

Internal & External Corrosion Management

- Cost Saving
- Corrosion Accidents
- Practical devised examples

Case Studies:

Highlights of several distinguished practical daily concerns in O&G industry client are facing and trouble-shooting long term solutions.

DAY 2

Material Selection

Metallic & Non-Metallic

- Fatigue & anti-corrosive inhibitors properties
- Risk based factors of material selection
 - Varieties
 - Alternative Application
 - Design
 - Properties or application
 - Manufacturing Processes

Sour Corrosion Application & Optimization

- Increased production through existing facilities
- Life Extension of ageing assets
- Suitable material and corrosion control guidelines to improve safety and economy
- Optimization and selection of appropriate materials

Corrosion Control and mitigation

- Coatings/Linings/Paintings
- Cathodic Protection
- Corrosion Inhibitors
- Microbial Control
- Good Engineering & Best Practices
- Service Life Extension Measure
- Report

Case Studies:

Practical cases of aged treatments topside facilities will be dealt with explanatory video films

DAY 3

Cost Corrosion

- Budgeting & Computations

Key Performance Indicators (KPI's)

- Matrix
- Indicators
 - Manufacturing
 - Material design
 - Training
 - Reports

General Computer Software Corrosion Management

Safety Alerts of

- Coatings, Paintings & Linings
- Chemical Treatment

Sand management/erosion with cases of accidental damages as:

- Dalian
- Deep Water Horizon Tensas Port Said Fire Explosion
- Hertfordshire terminal explosion

Corrosion Monitoring & Inspection

- Good Engineering practice in Corrosion Management
- Service Life Extension Measures
- Inspection Plans
- Routine & reports

Case Studies & Group Discussion:

Brief solutions submitted by attendees and will be investigated to close the course in practical as well as field coverages.



IN-HOUSE SOLUTIONS

SAVE COST • IMPROVE PERFORMANCE • REDUCE RISK

PetroSync understands that in current economic climate, getting an excellent return on your training investment is critical for all our clients. This excellent training can be conducted exclusively for your organization. The training can be tailored to meet your specific needs at your preferred location and time. We will meet you anywhere around the globe.

If you like to know more about this excellent program, please contact Jerry Tay (Conference Director) on +65 6415 4502 or email jerry.t@petrosync.com



Petrosync Distinguished Lecturer

Prof. Dr. Moustafa M. El-Gammal

Emeritus Professor, Faculty of Engineering, University of Alexandria, Egypt
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He is a Senior Instructor for many in-house and international courses in Asset Integrity in Pipeline Industries with major international companies.

Prof. Dr. El-Gammal was the Principal Research Officer at B.S.R.A., Wallsend Research Station, U.K., from 1980 to 1982, main contribution was to share in developing a design manual for marine and offshore structures.

He has developed and proposed a passive coating procedure for marine, ships and offshore structures published in the Royal Society of Chemistry, London, 1997 - Vol. III, Applications, Scheme of Coating and Surface Treatment, pp 315-324. The method has been patented by the Royal Chemistry in London by the ISBN 0-85404-757-3. Due to being very simple and adaptive, it is still applied by the interested industrialists in different fields and strategic projects in Egypt and elsewhere.

Prof. Dr. El-Gammal has promoted approach called by the same author as Fitness for performance maintenance, which is based on an estimated trouble free life which in turn is based on probabilistic fracture and stochastic approaches. The approach has been developed and investigated in different local and international conferences. The recent which was SIAM-2001 in Toronto, Canada, and OMAINTEC 2009 and 2010 respectively, Lebanon that dealt with recycling life of fractured components in marine and industrial cases. The author has been nominated in 2009 to have the Distinguished Maintenance Engineer from SAUDI Transportation Institute, Jeddah as well as the 2009 Arab Hariri, Hariri Foundation, Lebanon, Beirut Awards.

He has been interviewed by Oil & Gas International Online Journal on Stop Corrosion in pipelines with other numerous publications on topics including welding engineering, material technology, industrial maintenance engineering, asset integrity management and metal protection.

EXPERIENCED IN

- Corrosion Management
- Corrosion & Cracking Prevention
- Cathodic Protection
- Coating & Surface Treatment
- Corrosion with Marine Application & Offshore Structures
- Asset Integrity Management
- Pipeline Planning & Integrity
- Welding Engineering
- Material Technology
- Industrial Maintenance Engineering
- Training

Features of Merit

- Egyptian State Engineering Encouragement 1983 Award, 1st Golden Medal of Egyptian State for Sciences and Arts 1985
- Who's Who 2006 International Encyclopedia
- 21st Scientist of the World, IBC, International Biographic, Cambridge Center, U.K. 2007
- OMAINTEC Distinguished Maintenance Engineer, 2009
- Hariri Arab Award 2009

PROGRAM SCHEDULE

08:00 – 09:00	Registration (Day1)
09:00 – 11:00	Session I
11:00 – 11:15	Refreshment & Networking Session I
11:15 – 13:00	Session II
13:00 – 14:00	Lunch
14:00 – 15:30	Session III
15:30 – 15:45	Refreshment & Networking Session II
15:45 – 17:00	Session IV
17:00	End of Day

Course Details

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INVESTMENT PACKAGES

Please circle the package that you are attending!

Investment Package	Deadline	FULL MASTERCLASS
Standard Price	12th Oct 2012	SGD \$ 3,995
Early Bird Offer	14th Sep 2012	SGD \$ 3,795
Group Discount (3 or more Delegates)	12th Oct 2012	10% discount for groups of 3 registering from the same organization at the same time

* To enjoy the promotion & discount offer, payment must be made before deadline

* For 5 or more delegates, please inquire for more attractive package.

* Prices include lunches, refreshments and materials. Promotion & discount cannot be combined with other promotional offers.

* Important: Please note that registration without payment will incur a SGD 200 administration fee.

* Lunch voucher will be provided to participants observing ramadhan

DELEGATES DETAILS

1st Delegate Name _____ Mr Mrs Ms Dr Others

Direct Line Number: _____ Email: _____

Job Title: _____ Department: _____

Head of Department: _____

2nd Delegate Name _____ Mr Mrs Ms Dr Others

Direct Line Number: _____ Email: _____

Job Title: _____ Department: _____

Head of Department: _____

3rd Delegate Name _____ Mr Mrs Ms Dr Others

Direct Line Number: _____ Email: _____

Job Title: _____ Department: _____

Head of Department: _____

INVOICE DETAILS

Attention Invoice to: _____

Direct Line Number: _____ Fax: _____

Company: _____ Industry: _____

Address: _____ Postcode: _____

Country: _____ Email: _____

Please note:

- Indicate if you have already registered by Phone Fax Email Web

- If you have not received an acknowledgement before the training, please call us to confirm your booking.

PAYMENT METHODS

By Credit Card :

Please debit my credit card: Visa MasterCard AMEX Security Code:

Card Number: --- Expiry Date:

Name printed on card: _____

By Direct Transfer : Please quote invoice number(s) on remittance advice

PetroSync LLP Bank details:

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Name of Correspondent Bank : Standard Chartered Bank, 6 Battery Road,
Singapore 049909

SWIFT Code of Correspondent Bank: SCBLSGSGXXX

All bank charges to be borne by payer. Please ensure that PetroSync LLP receives the full invoiced amount.

Confirmation

I agree to PetroSync's terms & conditions, payment terms and cancellation policy.

Authorized Signature : _____

PAYMENT TERMS : Payment is due in full at the time of registration. Full payment is mandatory for event attendance.

PROGRAMME CONSULTANT

Name : Gopi Krishnan
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Phone : +65 6415 4500 Ext. 110
Fax : +65 6826 4322

TERMS AND CONDITIONS

DISCLAIMER

Please note that trainers and topics were confirmed at the time of publishing; however, PetroSync may necessitate substitutions, alterations or cancellations of the trainers or topics. As such, PetroSync reserves the right to change or cancel any part of its published programme due to unforeseen circumstances. Any substitutions or alterations will be updated on our web page as soon as possible.

DATA PROTECTION

The information you provide will be safeguarded by PetroSync that may be used to keep you informed of relevant products and services. As an international group we may transfer your data on a global basis for the purpose indicated above. If you do not want us to share your information with other reputable companies, please tick this box

CANCELLATION POLICY

You may substitute delegates at any time as long as reasonable advance notice is given to PetroSync. For any cancellation received in writing not less than fourteen (14) working days prior to the training course, you will receive **credit voucher** less a SGD \$200 administration fee and any related bank or credit card charges.

Delegates who cancel less than fourteen (14) working days of the training course, or who do not attend the course, are liable to pay the full course fee and no refunds will be granted.

In the event that PetroSync cancels or postpones an event for any reason and that the delegate is unable or unwilling to attend in on the rescheduled date, you will receive a credit voucher for 100% of the contract fee paid. You may use this credit voucher for another PetroSync to be mutually agreed with PetroSync, which must occur within a year from the date of postponement.

PetroSync is not responsible for any loss or damage as a result of the cancellation policy. PetroSync will assume no liability whatsoever in the event this event is cancelled, rescheduled or postponed due to any Act of God, fire, act of government or state, war, civil commotion, insurrection, embargo, industrial action, or any other reason beyond management control.

DETAILS

Please accept our apologies for mail or email that is incorrectly addressed.

Please email us at registration@petrosync.com and inform us of any incorrect details. We will amend them accordingly.

CHARGES & FEE(s)

- For Payment by Direct Telegraphic Transfer, client has to bear both local and oversea bank charges.

- For credit card payment, there is additional 4% credit card processing fee.