

Life Prediction of Corrodible Structures and Components

Registration Form

Photocopies of this form may be used for registrations.
You can also register online at www.corrosionclinic.com

Please register the following person(s) for the above course (please TYPE or PRINT clearly):

1. Dr/Mr/Ms _____
Designation _____

2. Dr/Mr/Ms _____
Designation _____

3. Dr/Mr/Ms _____
Designation _____

*delete where inappropriate

Enclosed is a cheque / bank draft No. _____
for S\$ _____ (payable to “**WebCorr Corrosion Consulting Services**”) being Registration Fee for the above person(s).

Organization _____
Contact Person _____
Contact Dept _____
Telephone _____ Fax _____
Email _____

Crossed cheques should be made payable to “**WebCorr Corrosion Consulting Services**” and mailed together with the registration form to:

WebCorr Corrosion Consulting Services

Toa Payoh Central,, PO Box 225,
Singapore 913108

Tel: (65) 64916456 Mobile: (65) 97110759

Fax: (65) 64916456

Email: webcorr@corrosionclinic.com

<http://www.corrosionclinic.com>

Course Details

Date: TBA
Time: 9:00 am to 5:00 pm
Venue: TBA
Course Fee: S\$795 (GST not applicable)
Closing Date: 2 weeks before course date
Discount:
Group: (3 or more people): 10%
Early-bird: N% **if paid** “N” months before the course commencing date

Withdrawal/Refund Policy:

Withdrawal or replacement should be conveyed to the organizer in writing (email or fax). An administration charge of 50% of the course fee will be levied if the withdrawal notice is received less than 7 working days before the course commencing date. No refund will be made for withdrawal notice received 3 working days and less.

Certificates:

Certificate of attendance will be given to participants with at least 75% attendance of the course.

Cancellation:

WebCorr reserves the right to cancel the course and fully refund the participants should unforeseen circumstances necessitate it.

Life Prediction of Corrodible Structures and Components

Conducted by

Dr. Qiu Jianhai *BEng PhD CEng MIM FICorr*
NACE Certified Corrosion Specialist

Date
TBA

Venue
TBA

Organized by:



Corrosion short Course Series: Life Prediction of Corrodible Structures and Components

Course Overview:

This corrosion short course aims to present to corrosion practitioners, researchers, designers, technical managers, inspection and maintenance engineers, and quality control personnel some important factors to consider when making life predictions for the various structures and components exposed to corrosive environments such as atmosphere, soil, waters and chemicals. The basic theory of extreme value statistics and its practical applications in corrosion inspection and testing will be presented. The merits of accelerate tests (for example ASTM B117 and other corrosion test standards) in life prediction will be discussed in depth. State-of-the-art techniques for corrosion testing and monitoring and its relevance in life prediction will also be discussed.

This corrosion short course can be taken as in-house training course, online course and distance learning course worldwide. It can also be customized to meet the specific needs of your organization.

Course Contents

Very few engineering structures can be designed as simple as a street lamppost, yet the apparently simple and straightforward structure can collapse in less than 20 years after it was erected. Corrosion life prediction can save structures and most importantly human lives. This course covers the following topics:

1. The need for life prediction
2. The impacts of corrosive environments
3. The complex nature of Structure-Environment interactions
4. The 10-steps in life prediction

5. From laboratory to field: can accelerated tests be used for life prediction?
6. The merits of some accelerated tests in ASTM Standards (incl. B117) for life prediction
7. Extreme value statistics: theory and practical applications in corrosion inspection, testing, and condition surveys
8. Life prediction of various metallic structures and components exposed to atmosphere, soil, and water
9. Life prediction of reinforced concrete structures
10. Bridging the gap between expectations and reality: the importance of on-site testing and monitoring

Who Should Attend

This course has been structured in such a way that it is particularly suited for the designers, architects, technologists and engineers who are interested in life prediction of structures and components exposed to corrosive environments.

Course Lecturer

Dr. Qiu Jianhai *BEng PhD CEng MIM FICorr*

Dr Qiu obtained his BEng and PhD degrees both in the field of corrosion. He has 29 years of industry, university teaching, research and consulting experience in areas of corrosion and its prevention. He has been working closely with both local and overseas companies and has been an active consultant to governmental agencies, multinational companies and private organizations on corrosion and materials related issues such as corrosion design review, materials selection and life prediction, corrosion inspection and condition assessment, plant process optimization, corrosion

training, corrosion testing and monitoring, troubleshooting and corrosion failure analysis. Dr Qiu has recently completed the design of a cathodic protection system for the upcoming Marina Coastal Expressway (MCE) Tunnels. Dr. Qiu is also experienced in providing expert witness and assistance in litigation and arbitration matters related to corrosion and materials. He has authored over 120 technical papers and reports. Dr. Qiu was an invited contributing author to the latest edition of the world renowned ASM Handbook Vol.13C Corrosion: Environments and Industries. His biographical profile was included in the 7th edition of Marquis Who's Who in Science and Engineering.

Dr. Qiu is a NACE certified Corrosion Specialist (USA), the only person in Singapore certified to the highest professional level by NACE (National Association of Corrosion Engineers, USA). He is a Chartered Engineer registered with the Engineering Council (UK), a Fellow of the Institute of Corrosion (UK) and a professional member of the Institute of Materials, Minerals and Mining (UK). Dr. Qiu is the Singapore representative in the International Corrosion Council (ICC).