The Training Team

Dr Mike Robinson (MJR) is a Corrosion Specialist at Cranfield University. Mike has over twenty years experience of organising and presenting corrosion courses for the oil and gas industry, both in this country and overseas. His research interests include microbial corrosion, stress corrosion cracking, hydrogen embrittlement and cathodic protection.

Professor John Nicolls (JRN) Professor of Coatings Technology and Director of the National High Temperature Surface Engineering Research Centre (NHTSEC) at Cranfield University.

Professor John Sharp (JVS) is Visiting Professor to the Offshore Technology Group at Cranfield University. John formerly worked for the Health & Safety Executive, where he was Head of Research in the Offshore Safety Division (OSSD). His main expertise is in the field of materials and structural integrity related to the offshore industry.

Dr Clare Watt (CW) is currently a Senior Integrity Engineer with DNV International a global oil and gas operator. Clare has previously worked for ExxonMobil as the UK Corrosion Integrity Advisor and as a consultant specialists in projects for the oil and gas, defence and nuclear industries.

Research and Consultancy

Cranfield University has considerable expertise in the area of corrosion. We are able to undertake research and consultancy programmes for clients. Cranfield is also able to offer bespoke training programmes. For further details about how we can assist your organisation please contact:

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www.cranfield.ac.uk/courses/training/corrosion-training-programme.html
Cranfield University offers a series of one-day specialist training courses that can be linked to form a 5-day short course covering various aspects of corrosion, its monitoring and prevention.

Courses are delivered through lectures and group exercises by a combination of subject specialists from the academic community at Cranfield, and industrial practitioners. Delegates receive full course notes which complement the lectures and provide an invaluable reference tool in the workplace.

Who should attend
This postgraduate level training programme is aimed at design and maintenance engineers, and technical staff from a wide range of industries including the offshore, water and aeronautical sectors. Days 1, 2 and 5 will provide an understanding of the principles of corrosion and its control. The full 5-day course will meet the training needs of individuals in the offshore sector.

Corrosion Training Programme
Day 1 Fundamentals of Corrosion 1
- Principles of aqueous corrosion
- Corrosion kinetics
Day 2 Fundamentals of Corrosion 2
- Corrosion in aerated environments
- Pitting corrosion
- Crevice corrosion
- High temperature oxidation
- Stress corrosion cracking
Day 3 Offshore Corrosion
- HS corrosion
- Microbial corrosion
- Hydrogen embrittlement
- Corrosion fatigue
- CD-corrosion
Day 4 Corrosion Control Offshore
- Stainless steels
- Inhibitors
- Cathodic protection
- Cathodic protection exercises
- Overview of offshore corrosion
Day 5 Corrosion Monitoring
- Corrosion monitoring
- Service failures
- Industrial case studies

Monday 24 November 2014
9.00 - 10.00 Principles of Aqueous Corrosion
10.00 - 11.00 High Temperature Oxidation
11.30 - 12.30 Corrosion Kinetics
14.00 - 15.00 Corrosion Kinetics
15.00 - 16.00 Passivity
16.30 - 17.30 Videos

Tuesday 25 November 2014
9.00 - 10.00 High Temperature Oxidation
10.00 - 11.00 High Temperature Corrosion
11.30 - 12.30 Pitting Corrosion
14.00 - 15.00 Crevice Corrosion
15.00 - 16.00 Stress Corrosion Cracking
16.30 - 17.30 Corrosion Exercises and Presentations

Wednesday 26 November 2014
9.00 - 10.00 Microbial Corrosion
10.00 - 11.00 HS Corrosion
11.30 - 12.30 Hydrogen Embrittlement
14.00 - 15.00 Corrosion Fatigue
15.00 - 16.00 CO2 Corrosion
16.30 - 17.30 Videos

Thursday 27 December 2014
9.00 - 10.00 Stainless Steels
10.00 - 11.00 Inhibitors
11.30 - 12.30 Cathodic Protection
14.00 - 15.00 Overview of Corrosion Offshore
15.00 - 16.00 Cathodic Protection Exercise
16.30 - 17.30 Cathodic Protection Exercise

Friday 28 December 2014
9.00 - 10.00 Service Failures
10.00 - 11.00 Service Failures
11.30 - 12.30 Case Studies
14.00 - 15.00 Case Studies

Programme Dinner

Note: Cranfield University reserves the right to change the programme without prior notification.

(MJR) Dr Mike Robinson
(JRN) Professor John Nicolls
(JVS) Professor John Sharp
(CW) Dr Clive Wall