

One-day MIC Awareness Course Syllabus & Learning Outcomes

This course provides an overview of MIC phenomenon including corrosion influencing microorganism groups, monitoring techniques, control methodologies, affected materials and identification and managing MIC. The presentation also discusses some of the MIC high profile failures.

Awareness Presentations

- Introduction to MIC, definition and consequences
- Examples of MIC failures
- Relevant microorganisms, biofilm development and effect on corrosion
- Value of microbial monitoring
- Sampling and analytical techniques
- qPCR vs MPN techniques
- Treatment strategies
- Pitting and affected materials
- Identification and management
- Best prevention strategies
- Summary and Q&A

Control Techniques

- Types of MIC control
- Chemical treatment
 - Types and classification
 - Selection criteria and process
 - Health and safety
- Biological treatment
- Nutritional control
- Barrier coating
- Cathodic protection
- Mechanical treatment
- New technologies
- Best prevention strategy
- Summary and Q&A