NACE International Forum: An update of MIC research and developments for the onshore and offshore oil and gas industry

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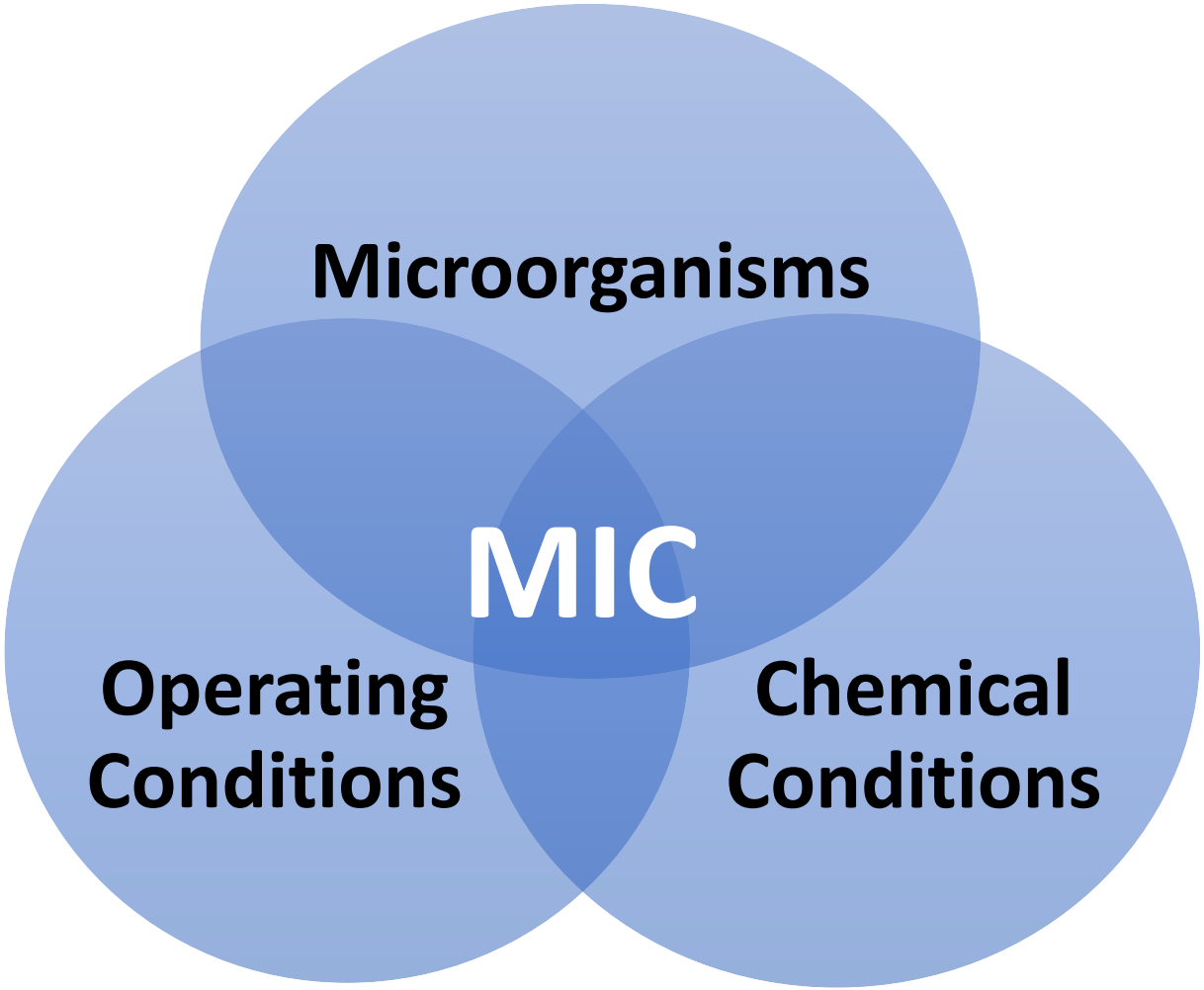
Purpose & Agenda

Presentations and discussions on:

- Latest developments in MIC assessment, mitigation, and monitoring – a holistic view
- Examples/case studies of how operators are addressing the threat of MIC and integrating MIC as part of a corrosion management system
- Most recent MIC models

Microbiologically *Influenced* Corrosion



Major Gaps in MIC Knowledge

- What operating conditions, chemical conditions, and microbial community combinations lead to MIC?
- How can research help to better monitor, mitigate, manage, and predict MIC?
- How do we effectively link research information with tools to take appropriate action?
- How can we effectively translate research findings to industry?

A MIC Project

"Managing Microbial Corrosion in Canada's Offshore & Onshore Oil Production Operations"

geno-MIC
microbiologically influenced corrosion

Key Project Goals:

- Improved monitoring & mitigation of MIC
- Integrate MIC as part of industry standards & corrosion management frameworks

Holistic Approach:

Integrate microbiology, genomics, chemistry, engineering, risk/predictive modeling

International, multi-stakeholder, multidisciplinary project

- 6 Universities, 2 Government Research Labs
- 18 Industry Partners (End-Users)

Genome Canada
Genome Alberta
Genome Atlantic
Alberta Innovates
InnoTech Alberta
Natural Resources Canada
Mitacs
Innovate NL

Baker Hughes - GE
BioClear
BP
Brenntag
DNV-GL
Dow Microbial Control
Enbridge
Husky Energy
Kinder Morgan

Luminultra
Nalco (Ecolab)
OSP
PeroxyChem
Promega
Shell
Schlumberger
Suez
Suncor

UNIVERSITY OF CALGARY
UNIVERSITY OF ALBERTA
MEMORIAL UNIVERSITY
DALHOUSIE UNIVERSITY
The UNIVERSITY of OKLAHOMA
VIA University College

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Project Activities