



Microbiologically Influenced Corrosion in Oil and Gas Operations

STAKEHOLDER WORKSHOP & RESEARCH SYMPOSIUM

June 26 - 27, 2018

Holiday Inn, St. John's, NL, Canada



Tuesday, June 26 - Wednesday, June 27

The 2018 workshop and symposium is a collaboration between C-RISE (Memorial University), University of Calgary, University of Alberta, Dalhousie University, Via University College, the University of Oklahoma, InnoTech Alberta, Genome Canada and industry partners. The goal is to better understand the challenges posed by Microbiologically Influenced Corrosion (MIC) and explore methods of mitigation, early detection, threat assessment and management. The complexity of MIC-phenomenon present significant technical challenges in engineering design, construction and the integrity of its operation of oil and gas infrastructure.

STAKEHOLDER WORKSHOP - JUNE 26

8:15-9:00AM	Continental Breakfast	Conception Bay
9:00-9:15AM	Welcome & Introductions Mark Abrahams, Associate VP-Research Greg Naterer, Dean Faculty of Engineering & Applied Science Faisal Khan, Faculty of Engineering & Applied Science, MUN	Salon B/C/D
9:15-9:45AM	Introduction to MIC Rick Eckert, DNV GL	Salon B/C/D
9:45-10:15AM	Genomics 101 – How Genomics can assist in MIC Management Lisa Gieg, University of Calgary	Salon B/C/D
10:15-10:45AM	Coffee/Networking	Conception Bay
10:45-11:30AM	Managing Microbial Corrosion in Canadian Offshore & Onshore Oil Production Operations - Project Overview John Wolodko, University of Alberta	Salon B/C/D
11:30-12:00PM	Current and Future Standards for MIC Management Torben Skovhus, Via University College (Denmark)	Salon B/C/D
12:00-1:00PM	Lunch	Conception Bay
1:00-2:30PM	Break-out Session: <ul style="list-style-type: none">• Field Sampling/MIC Detection• MIC Mitigation• MIC Prediction• Failure Analysis	Four corners of Salon B/C/D
2:30-3:00PM	Coffee/Networking	Conception Bay
3:00-4:00PM	Outcomes of Break-out Session/Next Steps Group Leads	Salon B/C/D
4:00-7:00PM	Poster Session and Networking Reception <i>hors d'oeuvres and cash bar</i>	Conception Bay

RESEARCH SYMPOSIUM - JUNE 27

7:45-8:30AM	Continental Breakfast	Conception Bay
8:30-8:50AM	Welcome and Introductions Faisal Khan and Lisa Gieg	Salon B/C/D
8:50-9:20AM	Reimagining Energy: How Imagery and Emotion Have Shifted Energy Conversations Lianne Lefsrud, University of Alberta	
9:20-9:50AM	Design Features of Offshore Oil Production Platforms Influence Their Susceptibility to Biocorrosion Kathleen E. Duncan, University of Oklahoma (USA)	
9:50-10:10AM	Microbiological, Chemical and Corrosion Analyses of Solids Samples Collected from a Leakage Site of a Heavy Oil Transporting Pipeline Mohita Sharma, University of Calgary	
10:10-10:30AM	Sampling and Chemical Analysis of Petroleum Products Ali Modir-Rousta, Memorial University	
10:30-10:50AM	Coffee/Networking	Conception Bay
10:50-11:10AM	Genetic Prevalence of Multidrug Resistance Efflux Pumps in a Model Microbiologically Influenced Corrosion Community Damon Brown, University of Calgary	Salon B/C/D
11:10-11:30AM	Measurement of Microbial Activity as a Diagnostic Tool for the Detection and Mitigation of Biocorrosion in the Energy Sector Irene Davidova, University of Oklahoma (USA)	
11:30-11:50AM	Isothermal PCR for Rapid MIC Diagnosis Natalie M. Rachel, University of Calgary	
11:50-12:10PM	A Carbon Nanotube Based Electrochemical Sensor for Sulfide Detection Xin Pang, Natural Resources Canada	
12:10-12:30PM	An Online Bio-Probe for Monitoring Microbial Growth for Application in Oil and Gas Systems Tesfa Haile, Innotech Alberta	
12:30-1:30PM	Lunch	Conception Bay
1:30-2:00PM	MIC Issues – An Industry End-User Point of View Tony Semerad, VAWS Consulting	Salon B/C/D
2:00-2:30PM	Reliability and Integrity Management of Offshore Structures Rouzbeh Abbassi, Macquarie University (Australia)	
2:30-2:50PM	Development of MIC Risk Index for Process Operations Mohammed Taleb-Berrouane, Memorial University	
2:50-3:10PM	Mechanistic Modelling of MIC in Oil and Gas Production Operations Abdul-Waris Dauda, Memorial University	
3:10-3:30PM	Coffee/Networking	Conception Bay
3:30-3:50PM	Impact of FeS in the Mechanistic Modelling of MIC Rate Nonso Ezenwa, Memorial University	Salon B/C/D
3:50-4:10PM	The Microbiologically Influenced Corrosion Ontology (MICON) Elvira Mitrika, Dalhousie University	
4:10-4:30PM	Assessing Interaction Channels for Knowledge Transfer Between Academia and Industry – Preliminary Results for the MIC Community Nicholas Bak, University of Alberta	
4:30-5:00PM	Discussions & Wrap-up	

A special thank you to the sponsors and organizers
of the workshop and symposium

Sponsors



Organizers



For more information on our research see our websites:

<http://wcm.ucalgary.ca/microbial-corrosion/>

<https://www.mun.ca/engineering/crise/>