

# EFC Corrosion Summer School 2022: Program

August 25-27, 2022

Berlin, BAM (Unter den Eichen 87), house 60, room 112

## Thursday, August 25, 2022

*08:30-09:00 Arrival, check-in*

*09:00-09:10 Welcome & practical information, D. Zander, RWTH Aachen University*

### 09:10-13:20 Part 1 – Fundamentals from a materials and corrosion perspective

1) Corrosion basics and the roles of material, environment and design, A. Erbe, NTNU Trondheim

2) Corrosion investigation, testing and monitoring methods, A. Heyn, OvGU Magdeburg

*10:30-11:00 Coffee/tea break*

3) Designed experiments in corrosion research and industrial applications, A. Heyn, OvGU Magdeburg

4) Getting knowledge from corrosion data, A. Heyn, OvGU Magdeburg

*12:20-13:20 Lunch*

### 13:20-17:30 Part 2 – Introduction to state-of-the-art MIC management

5) Introduction to corrosion management and MIC mechanisms, R. Eckert, Microbial Corrosion Consulting LLC

6) Main MIC problems in the energy sector and current mitigation strategies, D. Enning, Berlin University of Applied Science & Technology

*15:10-15:40 Coffee/tea break*

7) MIC in water utility systems and bridge constructions - failure investigation cases studies, A. Rasmussen, Corrosion Advice ApS

8) European MIC Network: New paths for science, sustainability and standards executed via the new COST Action CA20130, T.L. Skovhus, VIA University College

*17:20-17:30 Wrap-up of the day, D. Zander, RWTH Aachen University & T.L. Skovhus, VIA University College*

### 19:00 Social networking event

*19:00-23:00 Dinner at Restaurant Sombrero (only if you have booked it via the COST Workshop!)*

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Website: <https://ecq-comon.org/meetings/efcoss/>

## Friday, August 26, 2022

### 08:30-14:45 Part 3 – Keynotes on MIC from the COST Workshop (no handouts)

*08:30-08:40 Welcome & introduction*, A. Koerdt & T.L. Skovhus

- Oil field microorganisms cause highly localized corrosion on inhibited carbon steel, D. Enning
- Reflections on a large-scale MIC project – key outcomes, lessons learned, and ways forward, L. Gieg
- What is so special about microbially-influenced corrosion, A. Erbe
- Best practices for MIC diagnosis and current gaps, R. Eckert

*10:20-10:45 Coffee/tea break*

- Molecular microbiological methods for detection of MIC, E. Croese
- Biofouling in marine industrial systems and MIC, M. Salta
- MIC in equinor-monitoring, diagnosis and treatment, T. Liengen

*12:00-13:00 Lunch*

- Corrosion of biogas plants caused by microorganisms, J. Kuever
- Control of souring and SRB biofilm formation on steel, J.R. de Rezende
- Preliminary results of a new expert system to screen MIC in internal pipeline failures, A. de A. Abilio
- MIC on the hull of a motor yacht: a case study, G. Potters

*13:50-14:30 “Poster pitch”*

*14:30-14:45 Break for changing lecture room*

### 14:45-16:30 Part 4 – Corrosion challenges for the transition to net zero energy

9) Corrosion challenges for the energy transition, S. Paterson, Arbeadie Consultants

10) What MIC can do to your infrastructure and how to avoid it with an increased knowledge level in corrosion failure analysis investigations, R. Eckert, Microbial Corrosion Consulting LLC

*16:00-16:30 Coffee/tea break*

### 16:30-17:40 Part 5 – Career planing and conclusions

11) What should you focus on when starting a career in materials and corrosion? P. Keil, BASF & A. Erbe, NTNU Trondheim

*17:05-17:20 Discussion with the teachers / Q&A*, moderator: T.L. Skovhus

*17:20-17:40 Wrap-up of the school and quiz*

## Saturday, August 27, 2022

### 11:30 / 18:00 Social networking events

*Approx. 11:30-12:30 Escape room event (only if you have reserved for it)*

*18:00 Brewery tour/tasting @ BRLO (only if you booked it via the COST Workshop) & dinner (at own expenses)*

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