EFC Corrosion Summer School 2022: Program

(August 25-27, 2022)

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!)*

Website: **https://ecg-comon.org/meetings/efcoss/**

EFC EUROPEAN FEDERATION OF CORROSION

Follow us on LinkedIn

EUROCORR The European Corrosion Congress

WP7 Corrosion Education

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)*

young EFC EUROPEAN FEDERATION OF CORROSION

kks Corrosion and Corrosion Protection | RWTH AACHEN UNIVERSITY | OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG | TU Delft | GfKORR

PAUL SCHERRER INSTITUT PSI | VIA University College | UNIVERSIDAD COMPLUTENSE MADRID | BAM | WP4 Nuclear Corrosion