

Minutes

Fall Business Meeting of the EFC Working Party 4 'Nuclear Corrosion'

September 12, 2019

Seville, Spain

Written by:

Laure Martinelli and Stefan Ritter

Diffusion:

Attendees and apologies
WP4 members & friends
Roman Bender (EFC Scientific Secretary)
Hélène Illaire (EFC Managing Officer)
Ines Honndorf (EFC website)
Wolfram Fürbeth (EFC STAC Chairman)
J.M.C. Arjan Mol (EFC President)

Attendees (21):

Sophie Bosonnet (CEA), Damien Féron (CEA), Reuben Holmes (NNL), David Kumar (Univ. of Bristol), Pierre Laghoutaris (CEA), Marion Le Flem (CEA), Estelle Marc (ORANO), Laure Martinelli (CEA), Stacy Moore (Univ. of Bristol), Aaron Penders (SCK•CEN), Juha Piippo (Cormet), Raul Rebak (GE Research), Stefan Ritter (PSI), Sriharitha Rowthu (PSI), Michel Schlegel (CEA), Dana Tonarova (UJV Rez), Aleksandra Treichel (PSI), Jan Wielant (LABORELEC), Xingiang Wu (IMR), Toshio Yonezawa (Tohoku Univ.), Bojan Zajec (ZAG)

Apologies for absence received from:

Catherine Guerre (CEA), Stuart Lyon (Univ. of Manchester), Christina Lilja (SKB)
Jan Macak (UCT Prague), Hans-Peter Seifert (PSI)

Agenda:

- 1) Opening of the meeting, apologies for absences, approval of the agenda
- 2) EFC WP 4 prize award ceremony
- 3) Approval of the minutes of the 2018 Fall Meeting (in Krakow)
- 4) EFC WP 4 internal matters
- 5) EFC WP 4 publications
- 6) EFC WP 4 past events
- 7) EFC WP 4 future events
- 8) EUROCORR's
- 9) Any other business (website, next meeting, EU-projects, etc.)
- 10) Closure

Appendix:

Appendix 1) Meeting slides presented by S. Ritter*

Appendix 2) Winter school slides presented by L. Martinelli*

Appendix 3) NuCoSS-19 slides presented by B. Zajec*

Appendix 4) 7th LTC WS slides presented by D. Féron*

**) Document available only on the private space of the EFC WP 4 website, for WP 4 members only.*

1. Opening of the meeting, apologies for absences, approval of the agenda

S. Ritter opened the Fall Meeting and thanked the audience for coming. The agenda was presented and has been approved (see above and Appendix 1).

2. EFC WP 4 prize award ceremony

The ceremony began with the two prizes that are given during each EUROCORR: a poster prize (all posters are candidates for the prize) and an oral prize given for a young researcher (below 35 years) who submitted a full paper for the proceedings of the conference. This year 13 posters and 5 orals were in competition for the poster and the oral prizes, respectively. S. Ritter proposed to enlarge the oral prize eligibility criterion to young scientists who submit either an extended abstract (new option from next year on) or a full paper to the proceedings. This proposal has been accepted by the audience.

Each prize included a diploma, a box of Swiss chocolate, a book sponsored by CEA and a knife-set sponsored by Cormet. The juries for these two prizes are composed of WP 4 members and the WP 4 leadership.

The best oral presentation award has been attributed to Annesha Das (Homi Bhabha National Institute, Mumbai, India) for her presentation on the “Effect of surface preparation on oxidation of austenitic SS 304L in high temperature water”.

The best poster presentation award has been attributed to Sriharitha Rowthu (Paul Scherrer Institute, Switzerland) for her poster on the “Assessment of the Pt nanoparticle distribution on oxidized stainless steel surfaces by electrochemical techniques”.

WP4's honorary award, the Henri Coriou Medal, that is given every year to an expert, recognized in the nuclear corrosion field, has already been handed over earlier this year at the occasion of the Nuclear Corrosion Summer School in Slovenia. The jury, composed of the Chairman and the Vice-Chairman of the EFC WP4 and three members nominated during the Fall Meeting of the EFC WP4 (the year before the prize is awarded), has selected Hans-Peter Seifert (Paul Scherrer Institute, Switzerland). Together with the medal, also a diploma and a book ("Stress corrosion cracking of Ni-based alloys in water cooled reactors – the Coriou effects"), all sponsored by CEA, were given to Hans-Peter Seifert.

3. Approval of the minutes of the 2018 Fall Meeting in Krakow

No comments were received and no corrections have been asked for. Therefore, the 2018 minutes were approved by all.

4. EFC WP 4 internal matters

S. Ritter explained the rules for being WP 4 member (= delegates nominated by the EFC member societies and individuals nominated by the Chairman) or "friend" (= those who are interested in the WP but not member of an EFC member society and not nominated by the Chairman). He also asked all attendees to check the attendee and membership list, which circulated in the meeting room.

S. Ritter reminded the WP 4 objectives for the 2018-2020 period, which are the following:

- To provide links between European teams and EU-funded programs in the nuclear corrosion field, with an opening on to the world.
- To initiate and stimulate opportunities of exchange of scientific and technical subjects related to nuclear corrosion, particularly on today's main nuclear research areas (waste systems, water reactors, generation IV and fusion reactors).
- To promote corrosion science and technical developments through events such as seminars, workshops, publications, etc.

Then S. Ritter proposed to extend the eligible candidates for the Coriou prize to EFC Board of Administrator members. D. Féron preferred not to change the rules in order to avoid the possibility of being judge and judged. Therefore it has been decided not to change the rules. The jury for the next Coriou award, proposed by S. Ritter, will be the Chair, Vice-Chair, D. Féron (EFC past president, WCO president), the 2019 winner (H.P. Seifert) and Ch. Lilja. The assembly approved the proposed persons. Everyone can nominate candidates (persons or groups) for the 2020 Henri Coriou Award until February 28.

The proposal made by D. Féron during the 2018 Fall Meeting to give two Coriou Medals in 2020, one "regular" and one for an active member of the ICG-EAC (as the meeting takes place in Europe in 2020), was approved.

5. EFC WP 4 publications

An EFC "green book" based on the 50 years WP4 anniversary workshop (held during EUROCORR 2017) is still under preparation. Only few chapters are missing and it is expected that the book will be published before EUROCORR 2020. Because the author of the Zircaloy chapter failed to deliver, L.

Martinelli will ask one person at CEA if he can “jump in”. In case this would not be possible, R. Rebak proposed to ask someone at GE. (*Update: Marc Tupin (CEA) has submitted this chapter.*)

Then S. Ritter suggested to publish the best papers from next year’s special session (EAC initiation) as a special issue in a journal and asked for volunteers to take the lead and for other suggestions for any publications. Unfortunately no comments or ideas were received.

6. EFC WP 4 past events

S. Ritter mentioned two great events, which were co-organised by WP 4 in 2019:

- Winter School on “Modelling of Corrosion”, January 28 – February 1, 2019, at CEA Saclay, France. L. Martinelli summarized: This winter school focused on multi-scale modelling of corrosion and was a combination between courses in the morning and demonstrations or computer tutorials in the afternoon. It has been organised by D. Féron (CEA Saclay), L. Martinelli (CEA Saclay) and C. Meis (INSTN) and was a great success with many attendees (see Appendix 2).
- The 2nd edition of the Nuclear Corrosion Summer School “NuCoSS-19”, July 7 – 12, 2019, Gozd Martuljek, Slovenia. B. Zajec summarized: This summer school has been organised by the European H2020 research project MEACTOS (Mitigating Environmentally-Assisted Cracking Through Optimization of Surface Condition, <https://meactos.eu/>) and the WP 4. Fifty participants attended these lectures including teachers. The EFC sponsored 3 grants for students waiving the full registration fee for them. All participants enjoyed the excellent lectures and social activities (see Appendix 3).

7. EFC WP 4 future events (other than EUROCORRs)

S. Ritter listed a future event which is co-organized by WP 4 and D. Féron showed some slides: 7th Int. WS on Long-Term Prediction of Corrosion Damage in Nuclear Waste Systems (LTC 2019), November 19 – 21, 2019, in Nancy, France. The proceedings will probably be published in the CEST journal or in a green book. D. Féron also presented some new regulations for the series of LTC WSs which also involves the WP 4 (by approving the chairman of LTC’s int. scientific committee and the location and organiser of the LTC WS). Those rules were approved by the WP 4 and will be decided during the 7th LTC WS (see Appendix 4).

8. EUROCORRs

S. Ritter presented some facts for EUROCORR 2019. He underlined the very reasonable attendance during the nuclear corrosion (sub-)sessions (36 – 60 persons) and the large number of presentations: 46 oral presentations and 13 posters! The only negative point was that we had two “no-shows” during one sub-session.

Then S. Ritter reminded on the future EUROCORRs:

- EUROCORR 2020, September 6 – 10, 2020, Brussels, Belgium: There will be the regular nuclear corrosion session and a special joint session on EAC initiation in co-operation with the MEACTOS H2020 project, WP 5 (Environment Sensitive Fracture) and WP 22 (Aerospace).
- EUROCORR 2021, September 19 – 23, 2021, Budapest, Hungary: Regular nuclear corrosion session and special joint session on corrosion in molten salts and ionic liquids for energy applications in co-operation with WP 3 (Corrosion by Hot Gases and Combustion Products).

- EUROCORR 2022, September 9 – 13, 2022, Berlin, Germany: Regular nuclear corrosion session and eventually a special session on corrosion issues during decommissioning (suggested by T. Yonezawa).

9. Any other business

S. Ritter presented the WP4 website: www.efcweb.org/WP4 and reminded people to pass by there from time to time to get the latest information and news on WP 4 activities.

S. Ritter announced that the next WP meeting will be the Fall Meeting in Brussels during EUROCORR 2020.

Finally he reminded that there is a possibility of asking for some money from the EFC to support WP 4 activities (e.g., WP meetings, grants, support of the young colleagues, etc.). Any ideas are always very welcome!

10. Closure

As no other point was raised, the meeting was closed. S. Ritter thanked the assembly for attending the meeting and for their support of the WP 4 activities. Again he animated the audience to further participate in the WP4 activities and to send any wishes, suggestions or ideas to the Chair or Vice-Chair.