

Minutes

Fall Business Meeting of the EFC Working Party 4 ‘Nuclear Corrosion’

September 10, 2020, 14:05 – 15:05

‘Web/video’

Written by:

Laure Martinelli and Stefan Ritter

Diffusion:

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

Attendees (19):

R.-W. Bosch (SCK CEN), T. Cernousek (CVR), D. Engelberg (Univ. of Manchester), D. Féron (CEA), C. Guerre (CEA), J. Hesketh (Jacobs), I. Honndorf (EFC), D. Kumar (Univ. of Bristol), B. Kursten (SCK CEN), C. Lilja (SKB), M. Lowden (Rolls-Royce), L. Martinelli (CEA), Z. Que (VTT), R. Rebak (GE-GRC), S. Ritter (PSI), M. Schlegel (CEA), V. Tsisar (SCK CEN), K. Wilczynska (CEA), B. Zajec (ZAG)

Apologies for absence received from:

R. Kilian (Framatome GmbH), H.-P. Seifert (PSI)

Agenda:

- 1) Opening of the meeting, apologies for absences, approval of the agenda
- 2) EFC WP4 prize award ceremony (poster prize)
- 3) Approval of the minutes of the 2019 Fall Meeting (in Seville)
- 4) EFC WP4 internal matters
- 5) EFC WP4 publications
- 6) EFC WP4 past events
- 7) EFC WP4 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) 7th LTC 2019 slides presented by D. Féron*

Appendix 3) Special issue slides presented by S. Ritter*

**) Document available only on the private space of the EFC WP4 website, for WP4 members/friends only.*

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

S. Ritter opened the Fall Meeting and thanked the audience for joining in via Zoom. He underlined the particularity of this year marked by the Covid-19 virus that forced the WP4 meeting to be virtual. The agenda was presented and has been approved (see above).

2. EFC WP4 prize award ceremony

The ceremony began with some explanation of the special situation this year. Because this year no papers were submitted, (too) many young scientists (below 35 years) would have been eligible for the oral prize (24 candidates). This, together with the fact that all talks are taking place online and the quality might depend on the speed of the internet connection or quality of the microphone, it was decided not to award the oral prize in this year. Only the poster prize was given (all five nuclear corrosion posters were eligible).

This prize consisted of two excellent books on nuclear corrosion: One was kindly sponsored by CEA ('Nuclear corrosion science and engineering', Ed. D. Féron) and one by Elsevier ('Nuclear corrosion: research, progress and challenges', EFC No.69, Ed. S. Ritter). The best poster presentation award has been attributed to Ulrich Harm (Technische Universität Dresden, Germany) for his poster on the "Electrochemical corrosion studies on zinc in boric acid containing electrolytes". He apologized in advance that he is not able to join the WP4 meeting (the books will be shipped to him during the next weeks).

WP4's honorary award, the Henri Coriou Medal, that is given every year to an expert, recognized in the nuclear corrosion field, has also been awarded this year. A jury, composed of the Chairman, the Vice-Chairman of the EFC WP4 and three members nominated during the Fall Meeting of the EFC

WP4 (the year before the honorary medal is awarded), was selecting the recipient from the nominees. In 2020, Ulla Ehrnstén (VTT, Finland) has been awarded and the medal has been handed over to her (physically!) by S. Ritter during his vacations last July in Finland. A book (“Stress corrosion cracking of Ni-based alloys in water cooled reactors – the Coriou effects”) and the diploma are currently on their way to Finland. The sponsorship of the medal and book by CEA has been gratefully acknowledged.

3. Approval of the minutes of the 2019 Fall Meeting in Seville

No comments were received and no corrections have been asked for. Therefore, the 2019 minutes were approved by all.

4. EFC WP4 internal matters

S. Ritter showed the renewed website of the WP4 by sharing his computer screen.

Then he informed the participants of the objectives of the WP4 and that the members of the WP include the delegates nominated by the member societies of the EFC and individuals nominated by the Chairman. Those who are interested in the activities of the WP but not member of an EFC member society are called ‘Friends’. D. Féron recalled that people who currently have no national EFC member society (like our colleagues in Finland) can create a local branch (information about it can be found via the website of the EFC).

S. Ritter then came back to the suggested WP4 objectives for the 2021-2023 period, which need to be approved by the members now. These objectives are the same as those of the 2018-2020 period, that were approved in 2017:

- 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.

As no comments were received, these objectives were regarded as approved.

Then S. Ritter asked if any changes to the WP4 prize rules are needed, which was not the case.

He introduced the composition of the Juries of the poster prize and Coriou award for this year (see slide 9 in Annex 1) and proposed the Jury composition for next year's Coriou award: Chair, Vice-Chair, D. Féron (EFC past president, WCO president), the 2020 winner (U. Ehrnstén) and Ch. Lilja. The meeting attendees silently approved the proposed persons. S. Ritter recalled that all members and friends can nominate candidates (persons or groups) for the 2021 Henri Coriou Award until February 28.

5. EFC WP4 publications

The EFC “green book” based on the 50 years WP4 anniversary has finally been published: Woodhead Publishing, August 2020, 497 pages, ISBN: 978-0-12-823719-9.

Then S. Ritter explained that it was planned to publish the best papers from this year's joint session (EAC initiation) as a special issue in the CEST journal, but that now due to the virtual format only seven presentations without full papers were finally taking place. After some discussion, it was decided to proceed as planned and to ask the authors (plus some additional ones) if they would be able and willing to contribute papers to this special issue. If a sufficient number of good papers (>7) can be collected, the special issue would be realized.

S. Ritter, on behalf of B. Normand, informed on the creation of a special issue on 'Corrosion and Materials Degradation under Irradiation: From Understanding to Mitigation' in the 'Corrosion and Materials Degradation' open access journal. If people are interested to contribute, they can contact B. Normand.

The proceedings of the LTC 2019 WS will be published as a special issue in the Materials and Corrosion journal.

If anyone has ideas for other publications, the WP chairman is happy to support such actions.

6. EFC WP4 past events

Since the last EUROCORR, two WP4 co-organised events took place:

- D. Féron presented a report (see slides in Annex 2) about the 7th Int. WS on 'Long-Term Prediction of Corrosion Damage in Nuclear Waste Systems (LTC 2019)' that occurred on November 19 – 21, 2019, in Nancy, France. He also explained that Bruno Kursten (SCK CEN) was proposed as new Chairman of the International Scientific Committee of this workshops series and that this nomination needs the approval of the WP4. Thereafter, this nomination, as well as the location of the next edition in 2022 (Switzerland) has been approved by the WP4.
- S. Ritter spoke about the first Nuclear Corrosion Web-Seminar that occurred on June 30, 2020. Four interesting talks were given and it was a success, as approximately 80 participants attended this first virtual seminar of the WP.

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

S. Ritter listed some future events which are co-organized by the WP4:

- S. Ritter suggested to organize a second edition of the Web-Seminar (e.g., around the Corrosion Awareness Day 2021) and asked for topics or contributions. Some positive feedback was received.
- In 2022 the next int. WS on 'Long-Term Prediction of Corrosion Damage in Nuclear Waste Systems – LTC 2022' will be held in Switzerland.
- It was suggested that a third edition of the Nuclear Corrosion Summer School – NuCoSS-23, could be organized in July 2023.

8. EUROCORRs

S. Ritter gave a summary of some facts of the virtual EUROCORR 2020. He underlined the reasonable number of session attendees (22 – 37 persons) and the very good level of presentations constituted by 30 oral presentations, 5 posters and 3 nuclear corrosion-related joint session orals (= 38 presentations), although in the original EUROCORR 2020 in Brussels it would have been an even higher number of presentations (54 orals + 7 posters + 3 nucl. JS orals = 64 presentations). The sessions were running mostly well and it was concluded that it was the right decision to hold a virtual conference instead of waiting one more year without any large European corrosion meeting

(update: the total number of attendees was approx. 650 and the total number of presentations was approx. 400).

Then S. Ritter recalled the future EUROCORRs:

- EUROCORR 2021, September 19 – 23, 2021, Budapest, Hungary: regular nuclear corrosion session and a joint session on 'Corrosion in molten salts and ionic liquids for energy applications' together with WP3.
- EUROCORR 2022, August 28 – September 1, 2022, Berlin, Germany: Regular nuclear corrosion session and eventually a special session on corrosion issues during decommissioning (suggested by T. Yonezawa) and/or a repetition of the joint session on 'EAC initiation'.
- EUROCORR 2023, August 27 – 31, 2023, Brussels, Belgium: Regular nuclear corrosion session; proposals for special sessions are welcome.

9. Any other business

S. Ritter reminded people to check out the new WP4 website: www.efcweb.org/WP4 and the WP4-related EU projects.

He announced that the next WP Fall Meeting will be held during EUROCORR 2021 in Budapest (hopefully 'physically').

Finally he reminded that there is a possibility of requesting some money from the EFC (up to approx. 2000 €) to support WP4 activities (e.g., WP 'extra' meetings, grants, support of young colleagues/students, etc.). Any ideas are very welcome and for 2021 they should be submitted to the Chairman by September 18!

10. Closure

As no other point was raised, the meeting was closed. S. Ritter thanked the participants for attending the meeting even in those difficult 'virtual' times and for their support of the WP4 activities. As always, he emphasised that an active participation in the activities of the WP4 is essential to be able to fulfil its objectives and that any wishes, suggestions or ideas are always welcome.