

EFC WP ACTIVITY REPORT (SEPTEMBER 2019 - AUGUST 2021)

Working Party No. and Title: WP4 Nuclear Corrosion

Chair: Stefan Ritter (PSI, Switzerland), Vice-Chair: Laure Martinelli (CEA, France)

MAIN OBJECTIVES FOR THE NEXT THREE YEARS

- 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.

DETAILED MEASURES BY WHICH THE ABOVE OBJECTIVES WILL BE ACHIEVED

(Please complete, as appropriate, using continuation pages if necessary)

No.	Type of Activity	Target Date(s)
1	<p>WP Meetings (state expected attendance levels & business/technical split):</p> <ul style="list-style-type: none"> • Fall business meeting during EUROCORR 2019 (15-25 participants) • Fall business meeting during EUROCORR 2020 (15-25 participants) 	<p>09/2019 09/2020</p>
2	<p>Sessions at EUROCORR (identify special topics):</p> <ul style="list-style-type: none"> • Nuclear Corrosion session during EUROCORR 2019 (3 days); the start of the session has been dedicated to Lola Gomez-Briceno, CIEMAT, ES (who will retire this year) • Nuclear Corrosion session during EUROCORR 2020 (approx. 2.25 days) • Special topic WS on EAC initiation during EUROCORR 2020 (approx. 0.75 day), jointly organized with WP5 	
3	<p><u>Cooperation with other WPs e.g. Joint Sessions at EUROCORR (give details):</u></p> <p>Cooperation with the Young EFC is ongoing, e.g., concerning the WP4 poster prize or student grants for the summer school 2019. A joint session with WP9 & WP16 has been organised for EUROCORR 2019 (Management of Corrosion). A joint session with WP5 (on EAC initiation) will be organised during EUROCORR 2020.</p>	
4	<p><u>Maintenance of a WP page on the new www.EFCWEB.org website:</u></p> <p>Stefan Ritter is in charge of the WP page on EFC web (with WP4 news, minutes and announcements of WP4 meetings, announcement of WP4 related events, WP4 awards, publications, links, etc.).</p>	
5	<p>Contributions to the EFC Newsletter:</p> <p>Short report (incl. picture) on the Nuclear Corrosion Summer School, Nuclear Corrosion session 2019, 2019 Coriou Award winner and outlook on LTC 2019 WS (EFC event no. 443).</p>	<p>09/2019</p>

6	<p><u>Organisation of EFC Workshops/Courses/Meetings, etc.</u> (give details):</p> <ul style="list-style-type: none"> • Int. Winter School on 'Modelling of Corrosion' 2019, Jan 28 – Feb 1, 2019, Saclay, France, • Nuclear Corrosion Summer School – NuCoSS-19, July 7-12, 2019, Slovenia, EFC event no. 440. • 7th Int. WS on Long-Term Prediction of Corrosion Damage in Nuclear Waste Systems – LTC 2019, November 19-21, 2019, Nancy, France, EFC event no. 443. 	<p>01/2019</p> <p>07/2019</p> <p>11/2019</p>
7	<p><u>Organisation of Collaborative Research or Testing Programmes</u> (give details):</p> <p>Collaborative research (e.g., Round-Robin programmes) is taking place in the framework of E.U. projects (see below) and in some connected associations/groups (NUGENIA, ECG-COMON, ICG-EAC, etc.).</p>	
8	<p>E.U. Projects formulated in your Working Parties (give details):</p> <p>In the Nuclear field, the EU programmes are run in the framework of the EURATOM Agreement, based on national representative nuclear institutes. EU funded programs regarding materials and corrosion for reactors are also discussed inside the NUGENIA network. Nevertheless, WP4 supports members to get partners of these programmes and also tries to “lobby” for including the nuclear corrosion thematic inside EU calls for proposals. WP4 is also in close contact & cooperation with nuclear corrosion-related EU Horizon 2020 projects, e.g., INCEFA+, MEACTOS and SOTERIA.</p>	
9	<p>Participation in the Development of Standards (give details):</p> <p>--</p>	
10	<p><u>Preparation of Publications for the EFC Series of Books</u> (give details):</p> <p>An EFC Green Book based on the 50 years WP4 anniversary WS is under preparation. It will review the research on most of the nuclear corrosion disciplines, e.g., corrosion issues in nuclear waste disposal and reprocessing systems, environmentally-assisted cracking, Gen IV, etc. Publication is expected around early-2020.</p>	<p>01/2020</p>
11	<p><u>Other(s)</u> (please specify):</p> <ul style="list-style-type: none"> • The 2019 EFC WP4 “Henri Coriou Medal” will be awarded to Mr. Hans-Peter Seifert (Paul Scherrer Institut, Switzerland) during NuCoSS-19. Again in 2020 the medal will be awarded to an outstanding nuclear corrosion expert or Group. • WP4 best poster and oral presentation awards will also be given during EUROCORR 2019 (as well as in 2020). 	
<p><u>Brief Summary of Activity during the last year:</u></p> <ul style="list-style-type: none"> • 2.75 days Nuclear Corrosion session during EUROCORR 2018 • “Henri Coriou Medal” awarded to Dr. Gérard Pinard Legry (F) during the GA of CEFACOR • Best oral and poster presentation prizes awarded during EUROCORR 2018: Kamila Wilczynska, CEA & INP Grenoble (France) and Sato Tomonori, Japan Atomic Energy Agency (Japan) • Working on the new EFC Green Book on 50 Years of Nuclear Corrosion • Int. Winter School on 'Modelling of Corrosion' 2019 organized & held in Saclay, France • Preparation of the Nuclear Corrosion Summer School 2019 (Slovenia) • Planning of the Nuclear Corrosion & Management of Corrosion sessions for EUROCORR 2019 <p>(See WP4 website for more information.)</p>		