

EFC WP ACTIVITY REPORT (September 2022 - August 2024)

Working Party No. and Title: WP 4 Nuclear Corrosion

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

MAIN OBJECTIVES FOR THE NEXT THREE YEARS		
<ul style="list-style-type: none"> • 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. 		
<p>DETAILED MEASURES BY WHICH THE ABOVE OBJECTIVES WILL BE ACHIEVED (Please complete, as appropriate, using continuation pages if necessary)</p>		
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 2022 (10-20 participants) • Fall business meeting during EUROCORR 2023 (15-25 participants) 	08/2022 08/2023
2	<p>Sessions at EUROCORR (identify special topics):</p> <ul style="list-style-type: none"> • Nuclear corrosion session during EUROCORR 2022 (2 days) • Nuclear corrosion session during EUROCORR 2023 (approx. 2.5 days) • Joint session on “EAC initiation”, jointly organised with WP 5 & 22 (approx. 0.5 day) 	08/2022 08/2023 08/2023
3	<p><u>Cooperation with other WPs e.g. Joint Sessions at EUROCORR</u> (give details):</p> <ul style="list-style-type: none"> • Cooperation with the Young EFC is ongoing, e.g., concerning the WP 4 poster prize or summer schools. • WP 4 is strongly involved in the organisation of WP 7’s EFC Corrosion Summer School preceding EUROCORR 2022 (probably also in 2023). • A joint session with WP 5 & 22 will probably be organised for EUROCORR 2023 (on “EAC initiation”). 	
4	<p><u>Maintenance of a WP page on the www.EFCWEB.org website:</u></p> <p>Stefan Ritter is in charge of the WP 4 section on the EFC website (it is always kept up-to-date with plenty of information on past, current and future activities and with links to related groups, projects, publications, etc.). WP 4 also has a feed on the EFC Hub.</p>	
5	<p>Contributions to the EFC Newsletter:</p> <p>Contributions to the December 2021, April 2022 and August 2022 Newsletters have been submitted (e.g., advertisement on the 3rd WP 4 webinar, the nuclear corrosion session 2022, 2022 Coriou Award winner, preview/report on the LTC 2022 workshop & NuCoSS-23, etc.). It is intended to submit contributions to all future EFC Newsletters.</p>	12/2021 04/2022 08/2022 12/2022 etc.

6	<p><u>Organisation of EFC Workshops/Courses/Meetings, etc.</u> (give details):</p> <ul style="list-style-type: none"> • WP 4 supports the organisation of the EFC Corrosion Summer School preceding EUROCORR 2022. • A nuclear corrosion webinar is planned to be held also in 2023 around the Corrosion Awareness Day (4th edition). • The 3rd edition of the Nuclear Corrosion Summer School (NuCoSS-23) will be organised in Slovenia from July 2 to 7, 2023 (EFC Event No. 488). • Probably, WP 4 will again support the organisation of the EFC Corrosion Summer School preceding EUROCORR 2023. 	<p>08/2022 04/2023 07/2023 08/2023</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 EU projects (see below) and in some connected associations/groups (LTC, SNETP/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 SNETP/NUGENIA association. Nevertheless, WP 4 supports members to get partners of these programmes and also tries to “lobby” for including the nuclear corrosion thematic inside EU calls for proposals. WP 4 also supports the preparation of project proposals (e.g., the EU Horizon Europe proposal “POEAM”: rejected in 2022, but will be re-submitted in 2023; a Round-Robin is planned in the meantime) and is in close contact & cooperation with nuclear corrosion-related EU Horizon 2020 projects, e.g., INCEFA-scale, etc.</p>	
9	<p>Participation in the Development of Standards (give details):</p> <p>None.</p>	
10	<p><u>Preparation of Publications for the EFC Series of Books</u> (give details):</p> <p>New book in preparation (status in 07/2022: chapters are written and reviewed, proposal under review @ Elsevier): Corrosion modelling with cellular automata, edited by D. Féron & D. Di Caprio</p>	<p>12/2022</p>
11	<p><u>Other(s)</u> (please specify):</p> <ul style="list-style-type: none"> • The 2022 EFC WP 4 “Henri Coriou Medal” has been awarded to Dr. Pål Efsing (Ringhals AB, Sweden). Also in 2023 the medal will be awarded to an outstanding nuclear corrosion expert or group. • WP 4 best young presenter and poster prize will be awarded during EUROCORR 2022 (and again in 2023). • WP 4 (under the lead of S. Ritter) is one of the administrators of the EFC Hub. 	<p>04/2022 04/2023 08/2022 08/2023</p>
<p><u>Brief Summary of Activity during the last year:</u></p> <ul style="list-style-type: none"> • 2.5 days nuclear corrosion session during virtual EUROCORR 2021 • 0.5 day joint session (WP 3 & 4) during EUROCORR 2021 • Best young presenter & poster presentation prizes awarded during EUROCORR 2021: Rachma Azihari (France) & Adrianna Mackiewicz (Switzerland) • “Henri Coriou Medal” awarded to Pål Efsing (Sweden) • A European-Chinese corrosion online seminar on nuclear corrosion has been co-organised (March 15, 2022) • A webinar on nuclear corrosion (3rd edition) has been held (April 25, 2022) • A nuclear corrosion session has been co-organised at the ICCPA 2022 (May 27-30, 2022) • The LTC 2022 workshop has been co-organised (June 21-24, 2022, Baden, Switzerland) • Contributed to the ‘EFC/WCO White Paper on Corrosion’ • Planning of the nuclear corrosion session for EUROCORR 2022 <p>(See WP 4 website for more information.)</p>		