

EFC WP ACTIVITY REPORT (SEPTEMBER 2020 - AUGUST 2022)

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 EUROCORN 2020 (virtual, 10-20 participants) • Fall business meeting during EUROCORN 2021 (15-25 participants) 	<p>09/2020</p> <p>09/2021</p>
2	<p>Sessions at EUROCORN (identify special topics):</p> <ul style="list-style-type: none"> • Nuclear corrosion session during EUROCORN 2020 (2.5 days); • Joint session on "EAC initiation" during EUROCORN 2020 (0.5 day), jointly organised with WP 5 & WP 22 • Nuclear corrosion session during EUROCORN 2021 (approx. 3 days) • Joint session on "Corrosion in molten salts and ionic liquids for energy applications", jointly organised with WP 3 (approx. 1 day) 	<p>09/2020</p> <p>09/2020</p> <p>09/2021</p> <p>09/2021</p>
3	<p><u>Cooperation with other WPs e.g. Joint Sessions at EUROCORN</u> (give details):</p> <p>Cooperation with the Young EFC is ongoing, e.g., concerning the WP 4 poster prize. A joint session with WP 5 & WP 22 has been organised for EUROCORN 2020 (EAC initiation). A joint session with WP 3 (on Corrosion in molten salts and ionic liquids for energy applications) will be organised during EROCORN 2021.</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 renewed WP 4 section on the new 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 or projects, etc.).</p>	
5	<p>Contributions to the EFC Newsletter:</p> <p>Contributions to the November 2019 and September 2020 Newsletters have been submitted (e.g., short report on the LTC 2019 workshop and on the nuclear corrosion session 2019, 2019 & 2020 Coriou Award winners, 2019 WP 4 poster/young</p>	<p>11/2019</p> <p>09/2020</p>

	presenter prize winners, preview on the new Green Book on Nuclear Corrosion, etc.).	
6	<u>Organisation of EFC Workshops/Courses/Meetings, etc.</u> (give details): --	
7	<u>Organisation of Collaborative Research or Testing Programmes</u> (give details): 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 (SNETP/NUGENIA, ECG-COMON, ICG-EAC, etc.).	
8	E.U. Projects formulated in your Working Parties (give details): In the Nuclear field, the E.U. programmes are run in the framework of the EURATOM Agreement, based on national representative nuclear institutes. E.U. funded programs regarding materials and corrosion for reactors are also discussed inside the SNETP/NUGENIA network. Nevertheless, WP 4 supports members to get partners of these programmes and also tries to “lobby” for including the nuclear corrosion thematic inside E.U. calls for proposals. WP 4 is also in close contact & cooperation with nuclear corrosion-related EU Horizon 2020 projects, e.g., INCEFA+, INCEFA-scale, MEACTOS, etc.	
9	Participation in the Development of Standards (give details): --	
10	<u>Preparation of Publications for the EFC Series of Books</u> (give details): An EFC Green Book based on the 50 years WP 4 anniversary WS has been prepared. It reviews 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 for August 14, 2020.	08/2020
11	<u>Other(s)</u> (please specify): <ul style="list-style-type: none"> • The 2020 EFC WP4 “Henri Coriou Medal” will be awarded to Ms. Ulla Ehrnstén (VTT, Finland). Also in 2021 the medal will be awarded to an outstanding nuclear corrosion expert or group. • WP 4 best poster and oral presentation prizes will maybe be awarded during EUROCORR 2020 (and for sure again in 2021). 	
<p><u>Brief Summary of Activity during the last year:</u></p> <ul style="list-style-type: none"> • 3 days nuclear corrosion session during EUROCORR 2019 • “Henri Coriou Medal” awarded to Hans-Peter Seifert (CH) during NuCoSS-19 (Slovenia) • Best oral and poster presentation prizes awarded during EUROCORR 2019: Annesha Das (Homi Bhabha National Institute, India) and Sriharitha Rowthu (Paul Scherrer Institute, Switzerland) • Working on the new EFC Green Book on nuclear corrosion • Nuclear Corrosion Summer School 2019 – NuCoSS-19 (Slovenia) has been organised and held • Planning of the nuclear corrosion & EAC initiation sessions for EUROCORR 2020 • A web-seminar on nuclear corrosion has been held (June 30, 2020) <p><i>(See WP 4 website for more information.)</i></p>		