

EFC WP ACTIVITY REPORT (SEPTEMBER 2017 - AUGUST 2019)

Working Party No. 1: Corrosion and Scale Inhibition

MAIN OBJECTIVES FOR THE NEXT THREE YEARS		
<p>Focus on industrially interesting topics in workshops, seminars, courses, WP meetings with defined main themes, invited presentations specifically from related industries; close cooperation with initiatives in other WPs.</p> <ul style="list-style-type: none"> - Monitoring systems for performance of corrosion and scale inhibitors in important fields of application (oil & gas industry, cooling water, hydraulic fluids, metal treatment fluids) - Influencing the standardisation of inhibitor testing by cooperation with active groups in different organisations (e.g. ASTM, NACE, DIN, CEN, ISO) - critical survey on present day knowledge in corrosion and scale inhibition: defining fields for future research, fostering research networks 		
DETAILED MEASURES BY WHICH THE ABOVE OBJECTIVES WILL BE ACHIEVED		
No.	Type of Activity	Target Date(s)
1	<p>WP Meetings Annual WP business meeting regularly in connection with WP1 session at EUROCORR (ca. 20-25 experts)</p>	2017-2019
2	<p>Sessions at EUROCORR:</p> <ul style="list-style-type: none"> - Can technical application profit from basic research in scale and corrosion inhibition? - Predictive modelling of inhibitor structure - efficiency relationships - Predictive modelling of antiscalant structures - efficiency relationships - Antiscalants in geothermal energy production – environmental problems - Corrosion inhibitors from natural products - how much sense makes it? - Corrosion inhibitors for stainless steel in high saline media (crevice, pitting, SSC) - Corrosion inhibition and drag reduction - smart corrosion protection in flowing media - Corrosion inhibition in the oil & gas industry and in CCS technology - Corrosion inhibition in functional fluids (potable waters, cooling waters, Hydraulic fluids, metal machining fluids, etc.), - Corrosion inhibition in oil and gas production and transportation (cooperation with WP13) - REACH and its consequences for inhibitor research and application - Antiscalants in geothermal energy production – environmental problems - Vapor Phase Corrosion Inhibitors – What's new? 	2017-2019
3	<p>Cooperation with other WPs e.g. Joint Sessions at EUROCORR:</p> <p>WP6 , Surface Science and Mechanisms of Corrosion Protection' (Mechanisms in scale and corrosion inhibition; theory and practical experience with predictive models on inhibitor and scale efficiencies)</p> <p>WP 10 ,MIC' (Micro-organisms as corrosion inhibitors)</p> <p>WP 11 ,Corrosion of Reinforcement in Concrete' (Critical survey on inhibitor efficiencies in reinforced concrete)</p> <p>WP 13 ,Oil&Gas', (Status of online performance monitoring of corrosion inhibitors in oil and gas industry)</p> <p>WP 14 ,Coatings', (special features of the use of 'real' corrosion inhibitors in coatings)</p> <p>WP 15 ,Corrosion in Refinery Industry'; (Corrosion inhibitors in refinery industry, e.g. inhibition of naphthenic acid corrosion)</p> <p>WP 21 "Cultural Heritage", (Corrosion Inhibitors protecting cultural heritage)</p>	2017-2019

4	<p>Maintenance of a WP page on the new www.EFCWEB.org website: WP1 uses the EFC website for communication and exchange of information. WP1 made The International Journal of Corrosion and Scale Inhibition (<i>Int. J. Corros. Scale Inhib.</i>)(<i>www.ijcsi.pro</i>) its official publication journal for scientific and technical papers and international information exchange related to corrosion and scale inhibition. This journal was founded in 2012. It is an open electronic periodical journal created to:</p> <ul style="list-style-type: none"> - consolidate publications dealing with the theory and practice of inhibition; - provide the option of fast information publishing in the field of metal protection by inhibitors; - provide free access to information on protection by inhibitors. <p>There is no subscription to the journal. All materials published in this journal are freely accessible. The <i>International Journal of Corrosion and Scale Inhibition</i> is indexed and abstracted by the Russian scientific citation index, Abstracts journal "Corrosion and corrosion protection" (VINITI), and Chemical Abstracts.</p>	2017-2019
5	<p>Contributions to the EFC Newsletter: Report on technical meetings</p>	2017-2019
6	<p>Organisation of EFC Workshops/Courses/Meetings, etc.: International Course on Corrosion Inhibition (Basics, application, legal aspects) (2019)</p>	2017-2019
7	<p>Organisation of Collaborative Research or Testing Programmes: No projects planned so far</p>	2017-2019
8	<p>E.U. Projects for E.U. Project formulated in your Working Parties: No projects planned so far</p>	2017-2019
9	<p>Participation in the Development of Standards: No projects planned so far</p>	2017-2019
10	<p>Preparation of Publications for the EFC Series of Books: No projects planned so far</p>	2017-2019
11	<p>Other(s) : Cooperation with NACE committees on corrosion inhibitors. Workshops at NACE and EUROCORR conferences on status of the art: From fundamental aspects to industrial applications.</p>	Since 2012
<p><u>Brief Summary of Activity during the last year:</u> EUROCORR 2016, Montpellier, France <u>Technical Session:</u> 2 days WP1 session. Attendance during sessions: 40-60, <u>Business Meeting:</u> Discussion: Corrosion inhibition – Hot research items. (New inhibitors: Do we need them? Synergisms: Do we understand them? Inhibitor combinations: Innovation or Alchemy? Methodology of testing: Do we use the right ones? Surface analysis: Which question answers which method? Theoretical approaches: How far did we come and what practical use can be drawn from it? Industrial applications: Where are improvements needed?) Very lively discussion; will be continued on business meeting at EUROCORR 2017.</p>		