## **Zagreb Corrosion Summer School**

## **Online, June-July 2022**

Organized by Faculty of Chemical Engineering and Technology and Faculty of Mechanical Engineering and Naval Architecture University of Zagreb and Croatian Society for Materials Protection

**Purpose:** Corrosion summer school is intended for both PhD students and practitioners from industry who want to learn more about corrosion and corrosion protection. Lecturers will present theoretical background and practical experience on selected corrosion issues.

Lecturers: Prof. dr. Helena Otmačić Ćurković, Prof. dr. Sanja Martinez, Prof. dr. Vesna Alar, Assist. Prof. dr.Ivan Stojanović, Prof. dr. Vinko Šimunović, Prof. dr. Ivan Juraga, Ivana Šoić, Ines Šoljić, Angela Kapitanović, Lana Brkić, Marin Kurtela

<u>Place</u>: Online

Date: 13<sup>th</sup>, 20<sup>th</sup>, 27<sup>th</sup> June ,4<sup>th</sup> and 11<sup>th</sup> July 2022.

Participants can choose between attending only selected one day courses or complete summer school program. **For PhD students:** 1 day participation fee is 100€ (tax included), while for each additional day fee is reduced by 5%. Complete summer school attendance fee is 400€ (tax included) **For other participants:** 1 day participation fee is 200€ (tax included), while for each additional day fee is reduced by 5%. Complete summer school attendance fee is 800€ (tax included)

## Important dates:

Course dates: 13/06/2022 – 11/07/2022 Deadline for application: 31/05/2022 Payment due by: 06/06/2022 Contact:

e-mail: <u>recorr@fkit.hr</u> web page: <u>www.recorr.eu/zagcorr</u>

Ph. D. students can obtain certificate with awarded 2.5 ECTS points. After each lecture day students will receive daily assessments, activities or knowledge checks. The tasks for all topics should be successfully completed within the week in order to gain ECTS points.

9:00-	Corrosion Basics	CORROSION INHIBITORS Corrosion Inhibitor Basics	CATHODIC PROTECTION Cathodic Protection General Principles	ORGANIC COATINGS Organic Coating Basics	STAINLESS STEEL Stainless Steel Basics Introduction to Grades, Properties and Corrosion Resistance, Forms of Corrosion on Stainless
10:30	Corrosion Basics			Organic Coating Basics	Introduction to Grades, Properties and Corrosion Resistance, Forms of
10:30-11:00					Steels
			Break		
11:00-12:00	<b>Case Studies</b> Failure Analyses Examples	<b>Case Studies</b> Examples of Corrosion Inhibitor Applications	<b>Case Studies</b> CP Measurement Techniques and Equipment, Field Experience	<b>Case Studies</b> Test Methods for Organic Coating Systems	Case Study Failure Analysis – Various Examples of Stainless Steel Corrosion Failures from Practice
<b>12:00-12:30</b>	ractical Calculations Corrosion Rate Calculations deference Electrode otential Calculations	Practical Calculations Calculation of Inhibitor Efficiency, Calculation of Inhibitor Consumption, Calculation of Inhibitor Synergy Factor	<b>Practical Calculations</b> Design of a Simple Galvanic and ICCP Systems Calculations Including Attenuation Equation		Selection and Application of Stainless Steels
12:30-13:30		· · · ·	Break		
13:30 -15:00 Pola LPR	Workshop Polarization Measurements (Tafel Method larization Resistance R Monitoring Probe, Cyclic polarization)	Workshop Polarization Measurement and EIS Applied to Inhibitors, Analysis of the Results and Inhibitor Mechanism	Workshop	Workshop Assessment of protective properties of organic coatings by EIS	Workshop Standardized Laboratory and Industrial Test Methods of Passivation and Corrosion resistance of Stainless Steels
15:00-15:30			Discussion		