



Announcement on the awards of the 12th International Conference on Electrochemical Impedance Spectroscopy

With the approval of the Ministry of Education, the 12th International Conference on Electrochemical Impedance Spectroscopy, jointly organized by Beijing University of Chemical Technology and Tsinghua University, was opened in Yanqing, Beijing on July 2, 2023 and successfully concluded on July 7. More than 210 experts and scholars from 12 countries including France, Germany, Belgium, Brazil, Japan, South Korea, Serbia and Slovenia participated in the conference. Eight sub-thematic venues were set up for the conference, namely, Commemorating Professor Cao Chunan, Measurements & analysis and Sensors, Tribo-corrosion, Metallic Corrosion, Coatings & films, Inhibitors, Batteries and Electro-catalysis. At the same time, the conference also organized Three Minute Thesis (3MT), electrochemical impedance spectroscopy training course and electrochemical instrument technology demonstration and other academic exchange activities. At the opening ceremony of the conference, Professor Zhang Jianqing from Zhejiang University and Professor Annick Hubin from VRIJE Universiteit Brussel were awarded the Claude Award by the International Technical Committee for Electrochemical Impedance Spectroscopy to recognize the contributions of the two professors in the research and application of electrochemical impedance spectroscopy. This is the first time that the Claude Award has been awarded to a Chinese corrosion electrochemist.

During the meeting, the excellent report paper award committee was formed by domestic and foreign experts and scholars to evaluate the invitation report, keynote report, oral report and wall poster. The following are the announcements of Cao Chunan Awards, Best Presentation Awards, Best Poster Awards and 3MT Awards, and congratulations on the awards. At the same time, we would like to express our heartfelt thanks to all the delegates from home and abroad for their strong support to this conference.



Annex : List of Awards

List of Chunan Cao Awards

No.	Authors	Topic
1	Li Liu	Study of corrosion of high-strength steel in 3.5% NaCl solution under hydrostatic pressure using electrochemical impedance spectroscopy
2	Yuming Tang	Study on the rapid detection method for coating performance based on phase angles with three methods of correlation analysis
3	Zhou Dong	Electrochemical Impedance sensor for early failure monitoring of coatings in offshore wind power station

List of Best Presentation Awards

No.	Session	Authors	Topic
1	Inhibitors	Baoming Fan	Benzothiazole derivatives-based supramolecular assemblies as efficient corrosion inhibitors for copper in artificial seawater: Formation, interfacial release and protective mechanisms
2	Metallic Corrosion	Yaojun Hou	The effect of Cl ⁻ and applied potential for corrosion resistance on CrMnFeCoNi high entropy alloys by electrochemical measurements in sulfuric acid
3		Reynier Revilla	EIS comparative study and critical EEC analysis of the native oxide layer of additively manufactured and wrought 316L stainless steel
4		Haotian Ji	Study on the metal/salt hydrate interfaces under solid-liquid transitions of phase change material based on EIS and EN methods
5	Measurements & analysis and Sensors	Benny Wouters	Investigating the diffusion of water and ions in organic coatings using coupled ORP-EIS and in situ ATR-FTIR in Kretschmann geometry
6		Noël Halleman	Operando EIS and its application to Li-ion batteries
7	Coatings & films	Guoqing Wang	An EIS study of corrosion resistance and antibacterial activities of a new composite coating on AZ91 magnesium alloy surface
8	Batteries	Chong Yan	Determining the fast-charging boundary and achieving lithium plating early warning with EIS for safe lithium-ion batteries
9	Electro-catalysis	Yiming Zhang	Analysis of Proton Transport in Electrospun Catalyst Layer
10	Tribo-corrosion	Xiankang Zhong	The research progress on adsorption-desorption of corrosion inhibitor under the pipe flow condition

List of Best Poster Awards

No.	Authors	Topic
1	Sara Genoveva Hernán	Frequency response of Gibbs free energy and enthalpy changes of electrochemical systems analyzed as thermometric transfer functions
2	Yanming Xia	Effect of Cu ²⁺ and Hg ²⁺ on the corrosion behavior and mechanism of Al-2 %Zn coatings in 3.5 % NaCl solution
3	Shixiong Wu	Application of electrical impedance spectroscopy in cathodic protection studies
4	Zhihong Liu	Research on the Correlation between ICG and Tensile Properties of Alloy 625
5	Denghui Xia	Electrochemical characteristics of the additive manufacturing AlSi10Mg alloy in a 3.5 wt.% NaCl solution
6	Xiaomei Dong	Features of electrochemical impedance spectroscopy during the failure of conductive coatings
7	Lili Xie	Global and local electrochemical behaviors of the in-situ conversion coating of Mg alloy based on EIS and SVET
8	Benny Wouters	Development of an Odd Random Phase Electrochemical Impedance Spectroscopy Sensor for Battery Management Systems
9	Pingan Li	Analysis of degradation mechanism in unitized regenerative fuel cell based on the EIS method
10	Gokberk Katrici	EIS Investigation of Vitzrocell C and D Size Li/SOCl ₂ and Li/SOCl ₂ /SO ₂ Cl ₂ Mixture Batteries

List of 3MT awards

No.	Authors	Grade	Topic
1	Ruqing Fang	1st prize	A Theoretical Study of the Mechanical Effect on Impedance Response of Lithium Ion Batteries: from Single Particle to Porous Electrode
2	Yuanyuan Ji	2nd prize	Effect of substrate orientations on the electrochemical and localized corrosion behavior of a quad-layer Al alloy composite
3	Yiming Zhang	2nd prize	Residual PAA makes the proton transport path in Electrospun CL more tortuous
4	Haotian Ji	3rd prize	Fractals — The beauty from nature geometry, the answer to local corrosion
5	Yanhui Sun	3rd prize	Pioneering Performances of RuIr Nanoalloys towards Efficient Acidic Water Splitting
6	Zhangmin Zhang	3rd prize	Highly Stable Chloride Sensor in Reinforced Concrete