

Monday, 29th of November 2021

Chair: N. Wagner	09:00	Welcome address by Professor K.A. Friedrich, head of "Electrochemical Energy Technology" department at DLR-Institute of Engineering Thermodynamics
		Welcome address by Chair of 12th EIA Zdravko Stoynov Award and Young scientist awards
	10:00	Key Note Lecture KN1: D. Vladikova <i>Differential Impedance Analysis – a Tool for Structural and Parametric Identification</i>
	10:30	LS1-1: R. Spotorno <i>Non-stationary Differential Impedance Analysis applied to corrosion and batteries studies</i>
	10:50	LS1-2: CANCELLED
	10:50	COFFEE BREAK
Chair: D. Vladikova	11:30	LS1-3: V. Vivier <i>Deciphering interfacial capacitance of passive electrode: contribution of the double layer</i>
	11:50	LS1-4: C. Pérez <i>Electrochemical study of the passive film of a shape memory alloy developed in alkaline medium</i>
	12:10	LS1-5: M. Hromadová <i>Charge transfer in self-assembled monolayers of molecular conductors.</i>
	12:30	LS1-6: E. Dickinson <i>Direct estimation of state-of-health (SOH) of commercial 18650 format cylindrical Li-ion cells from electrochemical impedance spectroscopy (EIS) equivalent circuit fit parameters</i>
	12:50	LS1-7: A. Chahbaz <i>Analysis of Degradation Mechanisms for Silicon-Graphite Anodes with Eco-Friendly Chitosan Binder using Electrochemical Impedance Spectroscopy</i>
	13:10	LUNCH
Chair: S. Risse	14:10	Key Note Lecture KN2: B.A. Boukamp <i>Alternatives for EIS data analysis of porous SOFC electrodes</i>
	14:40	LS2-1: F. Ciucci <i>Analyzing Impedance Spectra with the Probabilistic Distribution of Relaxation Times</i>
	15:00	LS2-2: N. Schlüter <i>Finding the Optimal Regularization Parameter in Distribution of Relaxation Times Analysis</i>
	15:20	LS2-3: W. Strunz <i>Reconstruction of Drift Affected Impedance Spectra</i>
	15:40	COFFEE BREAK
	16:00	LS2-4: D. Clematis <i>A new extended algorithm and an open-source app to face regularization troubles in the distribution of relaxation times analysis</i>
	16:20	LS2-5: T.P. Heins <i>State-of-health prediction of lithium-ion batteries based on DRT-derived impedance data</i>
	16:40	LS2-6: M. Francois <i>Comparison of SDC/Pt and SDC/LSCF systems: analysis by Distribution of Relaxation Times</i>
17:00	COFFEE BREAK	
Chair: B.A. Boukamp	17:30	LS2-7: S. Risse <i>Operando Electrochemical Impedance Spectroscopy for the Investigation of Batteries – A combined Time Drift Correction and Data Analysis Approach</i>
	17:50	LS2-8: J. Häcker <i>Insights into surficial processes of pristine and coated magnesium anodes in magnesium-sulfur batteries</i>
	18:10	LS2-9: A. Kube <i>Evaluation of porous gas diffusion electrodes with distribution of relaxation times and its limitations</i>



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Chair: Ulrike Krewe	09:00	Key Note Lecture KN3: Dr. Tanja Vidakovich-Koch Non-linear frequency response analysis: theory, experiment & applications
	09:30	LS3-1: C.A. Schiller <i>Progress in the Characterization of Electrochemical Energy Devices Using Nonlinear Frequency Response Analysis NFRA - Elimination of the Interference due to Harmonics Present in the Excitation Signal</i>
	09:50	LS3-2: H.S. Chang <i>Nonlinear Frequency Response Analysis in Capacity Estimation and Accelerated Aging Identification of Li-Ion Batteries</i>
	10:10	COFFEE BREAK
	10:40	LS3-3: T. Pajkossy Dynamic electrochemical impedance spectroscopy for the charge transfer rate measurement of the ferro/ferricyanide redox couple on gold
	11:00	LS3-4: A. Sorrentino <i>Application of the Loewner framework to the analysis of electrochemical impedance spectra: an alternative to the evaluation of the distribution function of relaxation time</i>
	11:20	LS3-5: G. Lang <i>Impedance analysis of PEDOT and poly(bisphenol A) supported PEDOT layers on gold</i>
	11:40	LUNCH
	13:30	SPONSOR SESSION 13:30 BioLogic GmbH 13:40 C3 Prozess-und Analysetechnik GmbH 13:50 Metrohm Autolab B.V. 14:00 rhd-instruments GmbH & Co. KG 14:10 ZAHNER-elektrik GmbH & Co. KG
	14:30	COFFEE BREAK
	14:50	POSTER SESSION* -poster will be presented as seen on the listing-
	16:20	Closing Remarks – Announcement for the 13th EIA



***POSTER SESSION**

P-01	B. Horstmann: <i>Modelling Impedance Spectroscopy of Solid-Electrolyte-Interphase in Lithium-Ion Batteries</i>
P-02	L. Katzenmeier: <i>Impedance Analysis of Space Charge in Solid Electrolytes.</i>
P-03	T. Bergmann: <i>Improved DRT determination through a modified sparse spike deconvolution</i>
P-04	M. Gerle: <i>Understanding Parameters Influencing the Impedance Response of Porous Cathode in Lithium-Sulfur Battery</i>
P-05	X.R. Nóvoa: <i>EIS to characterize Li-ion batteries</i>
P-06	CANCELLED
P-07	F. Adesanya: <i>Impedance spectroscopy characterization of GCE/f-MWCNTs/CuO in Pyrene</i>
P-08	J. Han: <i>Elementally resolved dissolution kinetics using atomic emission spectroelectrochemistry (AESEC) coupled with electrochemical impedance spectroscopy (EIS)</i>
P-09	A. Maria Asensio: <i>Infiltration of microporous SDC backbone as stable solid oxide cell BSCF-based air electrode</i>
P-10	A. Sheikh: <i>Impedance Monitoring of Ni/YSZ Electrode Redox Behavior for Artificial Accelerated Degradation</i>
P-11	D. Cademartori: <i>Impedance analysis of copper-based perovskite electrodes for reversible solid oxide cells</i>
P-12	A. Padinjarethil: <i>Experimental deconvolution of polarization contributions on Ni-CGO based SOC using different cathode materials</i>
P-13	C. Plank: <i>Model-free characterization and analysis method for various impedance spectra</i>
P-14	C. Ania: <i>Exploring the semiconducting character of metal-free carbon materials with intrinsic photoactivity by electrochemical impedance spectroscopy</i>
P-15	A. Lagunas: <i>Odorant Binding Changes the Electrical Properties of Olfactory Receptors at the Nanoscale</i>
P-16	F. Pineda: <i>Advantages of using electrochemical impedance spectroscopy in the study of corrosion of metal in contact with molten salt at high temperature</i>
P-17	S. Balogun: <i>Impedance Spectroscopy Characterization of NiPcMWCNTs/GCE in Bromate</i>
P-18	S. Elugoke: <i>Impedance Spectroscopy Characterization of Carbon dots/Copper Oxide Nanocomposite in Epinephrine</i>