



25-28 September, Park Hotel Europe, Haskovo

Program

Wednesday, September 25 th 2024		
	13:00 - 14:00	Registration
	14:00 - 14:20	Opening
Chair: Vessela Tsakova	14:20 – 14:50	Daria Vladikova Differential Impedance Analysis – a Tool for Structural and Parametric Identification – in Memory of Prof. Zdravko Stoynov. <i>Invited lecture</i>
	14:50 – 15:20	Evelina Slavcheva , G. Borisov, B. Mladenova, I. Boshnakova On the role of catalytic support for cost efficient hydrogen production via electrochemical water splitting.
	15:20 – 15:40	Asrar Ahmad Sheikh , Daria Vladikova A short review on Proton Conducting Ceramic Cells (PCCCs).
	15:40 – 16:00	Milena Krapchanska , A. Sheikh, B. Burdin, D. Vladikova Accelerated stress tests for SOFC.
	16:00 – 16:30	Coffee Break
	16:30 – 18:00	Poster session I
	18:00 – 19:00	Welcome Party
	19:30 -	Dinner

Thursday, September 26th 2024

Chair: Svetlozar Ivanov	9:00 - 09:40	<p>Ilia Valov Electrochemical-based artificial neurons and synapses - processes and materials design. <i>Plenary lecture</i></p>
	9:40 – 10:10	<p>Martin Bojinov, Iva Betova, Vasil Karastoyanov Effect of water chemistry on corrosion of internals in pressurized water reactors. <i>Invited lecture</i></p>
	10:10 – 10:30	<p>Mariana Ilieva Electrochemical testing on intergranular corrosion susceptibility of austenitic stainless steels.</p>
	10:30 – 11:00	Coffee Break
Chair: Ilia Valov	11:00 – 11:20	<p>Kamelia Kamburova, Tsetska Radeva, Nelly Boshkova, Nikolai Boshkov Polysaccharide-based nanocarriers for entrapment of corrosion inhibitors.</p>
	11:20 – 11:40	<p>Neli Boshkova, K. Kamburova, T. Radeva, N. Boshkov Corrosion behavior of zinc composite coatings with polysaccharide-based nanoparticles.</p>
	11:40 – 12:10	<p>Maria Petrova, M. Georgieva, D. Lazarova, V. Chakarova Electroless Deposition of Metal Coatings on Dielectric Materials. <i>Invited lecture</i></p>
	12:10 – 12:40	<p>Boriana Tzaneva, B. Stefanov Photoelectrochemical behavior of TiO₂ functionalized with CuOx via photofixation. <i>Invited lecture</i></p>
	12:40 – 13:00	<p>Jenia Georgieva, A. Banti, S. Sotiropoulos, R. Mechkova Producing and characterization of PtCoP alloy coatings on powdered carbon support.</p>
	13:00 – 14:00	Lunch

Chair: Boriana Tzaneva	14:00 – 14:30	Nina Dimcheva , K.Kamarska, M. Pimpilova, A.Peshkov and M. Shukri Electrochemical behavior of immobilized oxido-reductase enzymes in aqueous and mixed solvents. <i>Invited lecture</i>
	14:30 – 15:00	Miroslav Karabaliev , Bilyana Tacheva, Boyana Parvanova, Radostina Georgieva Electrode-supported wetting lipid films as a model system for studying drug-membrane interactions.
	15:00 – 15:30	Vessela Tsakova Electrochemically produced conducting polymer layers for electroanalytical applications.
	15:30 – 15:50	Anelia Nakova , Chiydem Hyusein, Vessela Tsakova Spontaneous metal deposition on pre-reduced carbon screen printed electrodes.
	16:00 – 16:30	<i>Coffee Break</i>
	16:30 – 18:30	Poster session II
	19:30 –	<i>Dinner</i>

Friday, 27th September 2024		
Chair: Daria Vladikova	9:00 - 09:30	Svetlozar Ivanov , Ivan Genov, Mario Kurniawan, Michael Witt Electrodeposition Technologies for Energy Storage Application. <i>Key-note lecture</i>
	9:30 – 9:50	Toma Stankulov , B. Karamanova, A. Stoyanova Application of carbon-based materials in energy storage systems.
	9:50 – 10:20	Ivan Radev , M. Hesse, W. Philippi, O. Pasdag, T. Lange, V. Peinecke Optimization of electrochemical components for ion exchange membrane fuel cells and water electrolyzers. <i>Key-note lecture</i>
	10:20 – 10:50	Galin Borisov , N. Borisov, E. Slavcheva Electrochemical hydrogen compressor – novel cell design, electrode structure and MEA performance.

	11:00 – 11:30	Coffee Break
Chair: Daria Vladikova	11:30 – 12:10	Plamen Atanassov ARCHES: Alliance for Renewable Clean Hydrogen Energy Systems. <i>Plenary Lecture</i>
	12:10 – 12:40	Mila Manolova, Ş. Sörgel Elaboration of electrodes via electrodeposition for green electrochemical energy technologies. <i>Key-note lecture</i>
	12:40 – 13:00	Metrohm Bulgaria - presentation
	13:00 – 14:00	Lunch
Chair: Nina Dimcheva	14:00 – 14:30	Albena Aleksandrova, Maria Matrakova, Plamen Nikolov Evaluation of Lead Silicon Substance as Additive to Lead Batteries Positive Electrode.
	14:30 – 14:50	Vassil Boiadjiev Strategies for Surface Functionalization and their Application for Sensor Development.
		Young scientists session
	14:50 – 15:10	Todor Madzharov, D. Vladikova Life cycle assessment of green ammonia production via renewable energy and a solid oxide electrolyzer – a case study for Bulgaria.
	15:10 – 15:30	Reni Andreeva, D. Stoychev Investigation of the Influence of Cathodic Current Density and Electrochemical Deposition Time of Cerium Oxide Coatings Modified Carbon Screen Printing Electrodes.
	15:30 – 15:50	Veselina Chakarova, M. Petrova, D. Lazarova, M. Monev Electroless Ni-P coatings from acidic solution.
	16:00 – 16:30	Coffee Break
	16:30 – 16:50	Marina Arnaudova, Rashko Rashkov Electrochemical Preparation of Nickel-based Coatings on Different Substrates.
	16:50 – 17:10	Jordan Iliev, Dimitar Boychev, Galin Borisov, Evelina Slavcheva Influence of transient processes on degradation of PEM electrolyzers.
	17:10 – 17:30	AQUACHIM - presentation
	19:30 –	Gala Dinner

Saturday, September 28th 2024		
Chair: Maria Petrova	9:00 - 09:30	Bogdan Rangelov Microscopy with Electrons: A Century of Innovations in Science and Technology.
	9:30 – 10:00	Georgi Avdeev Glow-discharge optical emission spectroscopy (GDEOS), method principles, and applications. <i>Invited lecture</i>
	10:00 – 10:20	Maria Shipochka , I. Stambolova, D. Stoyanova, N. Boshkova, N. Boshkov Capabilities of X-ray photoelectron spectroscopy for characterization of ZnO and TiO ₂ based materials.
	10:20 – 10:40	Closing

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