ISEL2021 Scientific Program

16.06.2021

17:00-18:00: Online Keynote Lecture: Prof. Stanley Whittingham

Nobel Lecture perspective on Lithium Battery Origins & Future Challenges/Opportunities

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08:30-9:00	**Gathering and registration Floor 0, Building of the NanoCenter**
09:00-11:00 - Morning Session, Session Chair: Prof. Yair Ein Eli, Auditorium, Nanotechnology - building 206	
09:00-09:10	**Greetings- President of ISEL – Prof. Diana Golodnitsky**
09:10-09:45	**Plenary lecture: Prof. Itamar Willner -** *Redox-Active Hydrogels - En Route to an Artificial Pancreas (HUJI)*
09:45-10:20	**Plenary lecture: Prof. Emanuel Peled –** *Lithium Batteries for EVs and Renewable Energy Storage (TAU)*
10:20-10:45	**Invited Lecture: Prof. Noam Eliaz** *– Electrodeposition of Functional Metals and Alloys (TAU)*
10:45-11:30	**Coffee Break and 1st Poster session**
11:30-13:00	**Session A: Electrochemistry for Energy and Environment Session Chair: Prof. Idan Hod. (Nanotechnology - building 206, Auditorium)**
11:30-11:55	**Invited: Dr. Daniel Sharon -** *Intrinsic Properties of Polymeric Nanostructured Solid Electrolytes (HUJI)*
11:55-12:10	**Alon Herman -** *Ratchet-Based Ion Pumps (TAU)*
12:10-12:25	**Atanu Roy -** *Single-Step Electrochemical Deposition of CoMn-LDH on 3D Graphite Current Collector for Supercapacitive Applications (HUJI)*
12:25-12:40	**Dr. Netanel Shpigel -** *On The Use Of Highly Concentrated Aqueous Solutions For High Voltage Li-ion And Beyond Lithium Batteries* (BIU)
12:40-13:00	**Gold sponsor -Dr. Nir Pour:** *Driving the zero emission revolution: StoreDot's EV extreme fast charging technology Presenter* **(Storedot)**

11:30-13:10	**Session B: When Electrochemistry meets Spectroscopic tools (Nanotechnology - building 206, 9th floor) Session Chair: Dr. Michal Leskes (WIS)**
11:30-11:55	**Invited: Prof. Sharly Fleischer -** *In-operando Terahertz Spectroscopy of Solid Electrolyte Interphase Evolution on Silicon Anodes (TAU)*
11:55-12:10	**Dr. Svetlana Menkin -** *Interface Dynamics and Metal Plating in Lithium Anode-Free Batteries (University of Cambridge)*
12:10-12:25	**Dr. Chanderpratap Singh -** *Metal-Organic Framework Derived Amorphous Iron Sulphide for Efficient Nitrogen to Ammonia Conversion Under Ambient Condition (BGU)*
12:25-12:40	**Dr. Vivek Ramakrishnan-** *Surface States in Water Photo-Oxidation on Hematite – Photoelectrochemical Coupled Operando Raman Spectroscopic Studies (BGU)*
12:40-12:55	**Shira Haber -** *Following Lithium-Ion Transport across Artificial Cathode Electrolyte Interphases on High Voltage Cathodes with solid state NMR Spectroscopy (WIS)*
12:55-13:10	**Jonathan Tzadikov -** *Heteroatom Incorporated Carbon Materials (BGU)*
11:30-12:55	**Session C: Electrochemistry and Theoretical methods (Nanotechnology - building 206, 5th floor) Session Chair: Prof. Brian Rosen (TAU)**
11:30-11:55	**Invited: Prof. Ilya Grinberg -** *Studies of Molecular Corrole Electrocatalysts Using First-principles CalculationS (BIU)*
11:55-12:10	**Yael Avni -** *Charge Oscillations in Ionic Liquids: A Microscopic Cluster Model (TAU)*
12:10-12:25	**Oles Dubrovsky -** *Convective Mitigation of Dendrite Growth (Technion)*
12:25-12:40	**Arup Chakaraborty -** *Improving the Structural Stability and Electrochemical Performance of Ni-Rich Lini0.85Co0.10Mn0.05O2 Cathode Material via B-Doping (BIU)*
12:40-12:55	**Matan Aroosh** - *Intelligent Microelectrode Array for Hydroxyurea Prediction in Blood* (BGU)
11:30-12:55	**Sessions D: Sensors and Electrocatalysis (New chemistry building 211, Auditorium, 1st floor) Chair: Prof. Lital Alfonta (BGU)**
11:30-11:55	**Invited: Dr. Rakefet Ofek Almog -** *Electrochemically Decoration of ZnO Nanostructures with Noble Metal for Bio-Sensing Applications (TAU)*
11:55-12:10	**Amit Kumar -** *Terminal Metal-oxo Complexes for Electrocatalysis (Technion)*
12:10-12:25	**Ran Shimoni -** *Design of ElectroCatalytic Systems Based on the Immobilization of Molecular Catalysts Within Metal-Organic Frameworks (BGU)*
12:25-12:40	**Melina Zysler** - *Carbon Supported Pt-Ni Octahedral Electrocatalyst as a Model to Follow Nickel Corrosion and Particle Detachment (BIU)*
12:40-12:55	**Annie Cleetus -** *CuCr Catalysts for Ammonia Electro-Oxidation: A Study on Activity and Selectivity (Ariel)*
12:55-13:10	**Roy Cohen -** *Utilization of Fad-Glucose Dehydrogenase from Aspergillus Sp. And T. Emersonii for Glucose Amperometric Biosensing and Biofuel Cell Devices (Technion)*
13:00-14:00	**Lunch (please look at your vouchers for exact starting time)**
14:00 – 17:30 - Afternoon Session, Session chair: Prof. David Zitoun Auditorium, Nanotechnology - building 206	
14:00-14:35	**Plenary – Prof. Doron Aurbach -** *Composite Electrodes Comprising Room Temperature Solid State Mercury Nano-Particles and Their Electrocatalytic Activity (BIU)*
14:35-15:00	**Invited - Prof. Daniel Mandler -** *From Nano to Nano: Electrochemical Deposition Using Nanomaterials as Building Blocks (HUJI)*

15:00-15:45	**2nd poster session + coffee + desserts (2nd floor)**
15:45-16:10	**Prof. Omer Yehezkeli** - *Biotic/Abiotic Interfaced Systems for Biosensing and Enhanced (Bio)Catalysis (Technion)*
16:10-16:35	**Invited – Prof. James Becker -** *Anodic Oxidation of Metal-Centered 9,9'-Spiro-Bifluorenes (BGU)*
16:35-17:00	**Invited - Dr. Arie Borenstein -** *Laser Carbonization: Beyond Graphene Oxide (Ariel)*
17:00-17:30	**Closing remarks, awards announcement**