

Conference Program

IVS Student 2021

July 15 | ONLINE

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Click on the respective [link button](#) below to join the sessions

Opening Remarks

[Click here for the Zoom link >>](#)

9:15 Prof. Daniel Nessim (IVS President)

Parallel Sessions I

| | | | | |
|------|--|--|--|--|
| 9:30 | Energy and Sustainability: Mechanism Investigation Chair: Shira Haber (WIS) Zoom link >> | Soft and Biological Matter I Chair: Kusha Sharma (BIU) Zoom link >> | Nanomaterials I Chair: Lev Rovinsky (TAU) Zoom link >> | Nanoelectronics and Spintronics Chair: Rajashree Konar (BIU) Zoom link >> |
| 9:30 | Isaac Buchine (BIU) <i>How Does Humidity Influence the Mechanical Behavior of Halide Perovskite?</i> | Shiran Ziv Sharabani (TAU) <i>Messy to Ordered: The Role of Fiber Diameter in Determining the Shape Morphing Behavior of Mesoscale Responsive Fibers</i> | Gal Michaely (BGU) <i>Mixed Dimensionality: High Robust and Multifunctional Carbon-based Composites</i> | Ieva Valbraithe Adereth (TAU) <i>Soft Organic Neural Interface for Recording and Stimulating the Intact Retina</i> |
| 9:50 | Sreelakshmi Anil (ISER, India) <i>Insights into the Role of Ion-Solvent Complex on the Mechanism and Kinetics of Reductive Decomposition of Electrolytes for Lithium Ion Batteries and Post-Lithium Ion Batteries</i> | Sara Battista (AQ, Italy) <i>Strongly Anharmonic, Antibacterial Activity and Synergistic Combination With Antibiotics of Structurally Related Liposomes</i> | Din Zelikovich (HUJI) <i>Shell-Matrix Interaction in Nanoparticle Imprinted Matrices (NAIMs)</i> | Daniel Nikiforov (Technion) <i>Intra-Island Coulomb Correlations in PEDOT:PSS Thin Films: Saturation of Spin Polarization Magnetoresistance</i> |

10:10 Break

Plenary Session I

[Click here for the Zoom link >>](#)

10:20 *Organic Semiconductors – Why Do They Work?*
Prof. Sir Richard Friend (University of Cambridge)

11:00 Break

Parallel Sessions II

| | | | | |
|-------|---|--|---|--|
| 11:10 | Electrocatalysis Chair: Iris Berg (HUJI) Zoom link >> | Spectroscopy and Microscopy I Chair: Shir Abramovich (BGU) Zoom link >> | Nanomaterials II Chair: Madina Telkhozayeva (BIU) Zoom link >> | Soft and Biological Matter II Chair: Kusha sharma (BIU) Zoom link >> |
| 11:10 | Dima Azaiza-Dabbah (WIS) <i>Electrocatalytic Reduction of CO₂ and Oxidation of CO Catalyzed by Polyoxometalates</i> | Shani Har Lavan (BGU) <i>Investigating Decomposition Mechanisms in Cold Plasma with In-situ Optical Diagnostics</i> | Ella Sanders (WIS) <i>Remanent Polarization and Strong Photoluminescence Modulation by an External Electric Field in Epitaxial Halide Perovskite Nanowires</i> | Shiri Dishon (WIS) <i>Surface Piezoelectricity and Pyroelectricity in Centrosymmetric α-glycine</i> |
| 11:30 | Melina Zysler (BIU) <i>Carbon Supported Pt-Ni Octahedral Electrocatalyst As a Model to Follow Nickel Corrosion and Particle Detachment</i> | Matan Menahem (WIS) <i>Strongly Anharmonic Octahedral Tiling in 2D Hybrid Halide Perovskites</i> | Lior Asor (HUJI) <i>Doped InAs Nanocrystals: from Structure to Functionality in All-Nanocrystal-Based Electronic Devices</i> | Dana Cohen-Gerassi (TAU) <i>Phase Transition and Crystallization Kinetics of a Supramolecular System in a Microfluidic Platform</i> |


11:50 Break

Round Table Discussion: Career Path Choices


- Intel - Dr. Alexander Strikovsky
- Pearl Cohen Zedek Latzer Baratz - Dr. Rivi Steinhart
- 3DBattery - Yehuda Buganin
- ScienceAbroad - Nadav Douani (CEO), Dr. Hannah Noa Barad (Max Planck Institute for Intelligent Systems), Dr. Ronen Gottesman (Helmholtz-Zentrum Berlin)
- Academia - Prof. Elad Gross (HUJI), Dr. Michal Leskes (WIS)

[Zoom link >>](#)

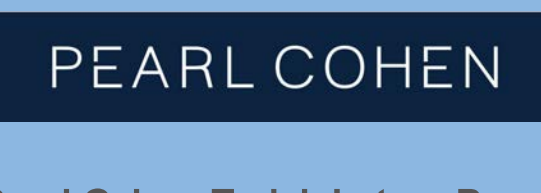
Company Designated Rooms




Zoom link >>




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13:20 Break

Parallel Sessions III

| | | | | |
|-------|---|---|--|--|
| 13:30 | Catalysis and Sustainability Chair: Iris Berg (HUJI) Zoom link >> | Spectroscopy and Microscopy II: Magnetic Resonance Chair: Maor Asher (WIS) Zoom link >> | Nanomaterials III Chair: Lev Rovinsky (TAU) Zoom link >> | Energy Storage Materials Chair: Nital Arbell (Technion) Zoom link >> |
| 13:30 | Ashish Prajapti (BGU) <i>Broadband Absorption with Arrays of Subwavelength Trumpet Non-imaging Light Concentrators</i> | Asya Svirinovsky-Arbell (WIS) <i>Monitoring Dendrites Growth in Composite Electrolytes by Solid-State NMR Spectroscopy</i> | Faris Horani (Technion) <i>II-VI Anisotropic Nanocrystals and Core/Shell Colloidal Semiconductor Nanoplatelets: Room-Temperature Synthesis, Physical Characterizations, and Exotic Optical Properties</i> | Gayathri Peta (BIU) <i>The Electrochemical Performance of NaPF₆-P(EO)₁₆-TiO₂ Composite Electrolytes for Na-ion Batteries</i> |
| 13:50 | Nagaprasad Reddy Samala (BIU) <i>Approaches for Controlling the Mechanism of Molecular Catalysts Towards ORR</i> | Nir Dayan (Technion) <i>Electron Paramagnetic Resonance Measurements of Micro-crystals and Subnanoliter Liquids</i> | Avis Ohayon-Levi (BGU) <i>Compression-Enhanced Thermal Conductivity of Carbon-loaded Polymer Composites</i> | Adva Shpatz Dayan (HUJI) <i>Study of Selective Contacts in Inverted Perovskite Solar Cells</i> |

14:10 Break

Flash Talks Session

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|--|---|---|--|--|---|
| Materials Characterization Techniques Chair: Nital Arbell (Technion) Zoom link >> | Soft and Biological Matter Chair: Kusha Sharma (BIU) Zoom link >> | Spectroscopy and Microscopy Chair: Maor Asher (WIS) Zoom link >> | Nanomaterials Chair: Madina Telkhozayeva (BIU) Zoom link >> | Nanoelectronics and Spintronics Chair: Rajashree Konar (BIU) Zoom link >> | Energy Materials: Modifications Chair: Shira Haber (WIS) Zoom link >> |
| Flash Talks Session | | | | | |
| Paz Stein (BGU) <i>Synthesis and Characterization of Nickel-Based Solid Oxide Fuel Cell Anode by Inkjet Printing</i> | Yuval Segal (BGU) <i>Nanofabricated Patterns for the Control of T-cell Receptor Clustering</i> | Guy Reuveni (WIS) <i>Effect of The Organic A-site Cation in Lead Halide Bromides</i> | Jyoti Jaiswal (Rajiv) <i>Growth of Vertically Aligned Nanocrystalline MoS₂ Thin Films by DC Sputtering: Microstructural, Optical and Electrical Properties</i> | Subhajt Sarkar (BGU) <i>Theory of Hot Carriers and Carrier Heating In Semiconductors</i> | Anagha Usha Vijayakumar (BIU) <i>Combinatorial Synthesis and Screening of a Ternary NiFeCo_x Library for the Oxygen evolution Reaction</i> |
| Flash Talks Session | | | | | |
| Chen Oppenheim (WIS) <i>Investigation of the Ceramic-Polymer Interface in composite Electrolyte by DNP-NMR Spectroscopy</i> | Hani Burham (TAU) <i>Functional Decoration of Biocompatible Veteiric Mesoporous Nanoparticles for Targeted Drug Delivery: Tailored Properties for in-situ Theragnostic</i> | Bharathi Rajeswaran (BIU) <i>Exploring Dielectric Stacks for Raman Enhancement in Exfoliated CVD-grown 2D Nanosheets of Transition Metal DiChalcogenides</i> | Lucas Luciano Cullari (BGU) <i>Trapped and Alone: Clay-assisted Aqueous Graphene Dispersions</i> | Nitzan Shauloff (BGU) <i>Sniffing Bacteria with a Carbon-Dot Artificial Nose</i> | Elihan Evenstein (BIU) <i>Li Batteries Cathode Material Stabilization Using ALD Synthesis of Artificial Cathode Electrolyte Interphase (ACEI) for Medical Applications</i> |
| Flash Talks Session | | | | | |
| Asmita Dutta (Ariel) <i>Laser Carbonization of Carbon Composite for Flexible Electronics</i> | Gal Yosefi (BGU) <i>Time Matters for Macroscopic Membranes Formed by Alginate and Cationic β-sheet Peptides</i> | Tamir Yeshurun (TAU) <i>Method for Extraction of Spatial External Luminescence Efficiency in Solar Cells Using Photoluminescence Measurements and Optical Modeling</i> | Gal Finkelstein Zuta (TAU) <i>Energy Harvesting by Piezoelectric Peptides for Biocompatible Power Solutions</i> | Itamar Eyal (TAU) <i>"All Electric" Ion Pumps for Artificial Cell Membranes</i> | Sivan Tzadka (BGU) <i>Direct Nanoimprint on Chalcogenide Glasses Substrate for Optical Applications</i> |

14:50 Break

Plenary Session II

[Click here for the Zoom link >>](#)

15:00 *The World of 2D Carbides and Nitrides (MXenes)*
Prof. Yury Gogotsi (Drexel University)

15:40 Break

Closing Remarks & Awards

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