





IVS Student Conference

19 September 2024 The David Lopatie Conference Centre Weizmann Institute of Science

♥ Kimmel Hall, The David Lopatie Conference Centre

Andrea's Room, The David Lopatie Conference Centre

Gathering & Coffee 8:30

9:10-10:10 Session 1 Electrochemistry Session Chair: Ido Biran		Session 2 Soft Matter and Biomaterials Session Chair: Avital Wagner
9:10	Tomer Reuveni - Catalytic Fabrics via In-situ Growth of Metallic Nanoparticles within Porous Polymeric Microfibers	Noam Pinsk - From Fireflies to Crystals: Synchronization Transition in Hydrogen-Bonded Crystals
9:25	Paz Stein - Nitrate Reduction to Ammonia: Assessing the Electrocatalytic Activity of Cu-Based Structures	Rachael Lynn Deis - Genetic Control Over Biogenic Crystal Morphogenesis in Zebrafish
9:40	Shiri Dishon - On the Chemistry of Electrofreezing of Super-Cooled Water as Induced by an Al electrode	Shashanka Indri - Elucidating Guanine Crystallization Pathways
9:55	Isaac Buchine - Advanced Characterization of Alucone- Coated Silicon Anodes for High-Energy Lithium-Ion Batteries	Lotem Alus - Bio-Inspired Crystalline Core-Shell Guanine Spherulites
10:10	10:10 Dr. Moshiel Biton - Addionics: from PhD research to a successful startup	

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11:10 **T** Coffee Break

11:40-12:40 Session 2 3D Printing and Functional Materials Session Chair: Shir Andreev Batat		Session 3 Spectroscopy and Nanoscience Session Chair: Noya Ruth Itzhak
11:40	Gal Finkelstein-Zuta - A Self-Healing Multispectral Transparent Adhesive Peptide Glass	Mor Cohen Jungerma - Unusually High Thermopower in Molecular Junctions From Molecularly Induced Quantized Two-Dimensional States in Their Semimetal Leads
11:55	Ranu Satish Dhale - Modulation of polyelectrolyte mechanical properties cast under external electrical fields	Anna Lavie - Alignment of Polarizable Elastic Dipoles Determines Anelastic and Electrostrictive Behavior of Aliovalent-Doped Ceria
12:10	Michal Levin - Exploiting 3D-printing to Measure Swelling- Induced Stress of Gels Under Constraints	Dekel Nakar - Three-Photon Cascaded Emission From Triexcitons in Giant CsPbBr ₃ Quantum Dots At Room Temperature
12:25	Ofir Shelonchik - Light-induced MOF Synthesis Enabling Composite Photothermal Materials	Guy Ohad - Accurate Solid-State Electronic and Optical Excitations From Non-Empirical (Time-Dependent) Density Functional Theory

12:40 Poster Viewing & Lunch

14:00 CV workshop | Hila Golshan | Senior HR Recruiter at Zota & Poster Viewing

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15:00-15:45 Session 5 Thin Films and 2D Materials Session Chair: Avital Wagner	Session 6 Biomedical Materials Session Chair: Tal Binyamin
15:00 Amir Kleiner - On The Complexity of Excitons At The TMD-Graphene Interface	Xiaoling Lin - Development of plant protein-based nanoparticles for the delivery of coenzyme-Q10
15:15 Dana Cohen-Gerassi - Conductive Peptide-Based MXene Hydrogel as A Piezoresistive Sensor	Gabriel Petresky - Near-Infrared Optical Fingerprinting Sensors Selection for Metal-ion Classification
15:30 Bar Favelukis - Without a Grain of Salt: Facile Micropatterning for Clean MXene Thin-Film Electronics	Yarden Nahmias - Inhibiting Pathological Calcium Phosphate Mineralization: Implications for Disease Progression

15:45 **Coffee Break & Poster Viewing**

16:10 Panel Discussion About Different Career Paths

Panel Host: Amir Gildor

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Keren Regev | Co-Founder and CTO of Polyfos 3D

Dr. Leeya Engel | Assistant Professor, Technion Israel Institute of Technology

Dr. Shira Rosencwaig | Head of the National Public Health Food Laboratory

Michal Khenkin | Head of Chemistry, Tomgrow

17:15 Presentation of Poster Awards & Rosh Hashana Happy Hour

ORGANIZING COMMITTEE

Noya Ruth Itzhak | Weizmann Institute of Science Avital Wagner | Ben-Gurion University of the Negev **Tal Binyamin** | Hebrew University of Jerusalem **Ido Biran** | Tel-Aviv University Shir Andreev Batat | Tel-Aviv University Srijith | Bar Ilan University

Amir Gildor | Technion - Israel Institute of Technology





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