

# SCHEDULE 2023

## Tuesday, August 1<sup>st</sup>

08:00	Registration + Light breakfast
09:00	Opening remarks
09:15	Opening lecture – Dr. Valeri Frumkin (MIT) <a href="#">Applications of interfacial phenomena: from space telescopes to quantum simulations</a>

### Session I: Environmental

10:00	Emily Hanhauser (MIT) <a href="#">Creating Monitoring Paradigms and Sensors for Decentralized Settings: From Water Quality Monitoring to Clinical Diagnostics</a>
10:30	Yifan Li (Technion) <a href="#">Phase Separation of Oil-in-Water Emulsion with Surface Acoustic Wave</a>
10:45	Yuejun Yu (Technion) <a href="#">Developing and study of an automatic on-line micro-biototoxicity sensing and control unit for wastewater treatment, based on a cell viability monitoring assay</a>

11:00 Coffee break

11:30 Flash talk – session I

### Session II: Polymers

12:00	Cornelia Meissner (University of Massachusetts Amherst) <a href="#">Mesoscale Polymer Ribbons as Hierarchically Ordered Building Blocks</a>
12:30	Michal Levin (Technion) <a href="#">Measuring swelling induced stress of gels under constraints using 3D printing</a>
12:45	Or Peleg Evron (Technion) <a href="#">Crosslinking konjac-glucomannan with kappa-carrageenan nanogels: A step toward the design of sacrificial materials</a>

13:00 Lunch

13:30 Poster viewing - session I

### Session III: Electrochemistry

14:30	Melissa Bodine (Argonne National Laboratory) <a href="#">Development and Characterization of Electrodes with Atomic Layer Deposition for Two-Dimensional Infrared Spectroelectrochemistry</a>
15:00	Rinat Attias (Technion) <a href="#">Evaluation of Electro-catalysts Reaction Kinetics for OER by Relaxation Phenomena Analysis</a>
15:15	Noam Zyser (Technion) <a href="#">Linking Rational Activity and Stability Design in Catalytic Electrooxidation over Nickel</a>

15:30 Coffee break

### Session IV: Nano-materials

16:00	Yael HersHKovitz Pollak (Technion) <a href="#">Volatile Markers as Intercellular Communication Agents of Apoptosis</a>
16:15	David Attia (BGU) <a href="#">Chiral Interactions and Assembly of Cellulose Nanocrystals Mesophases</a>
16:30	Yaniv Dror (BGU) <a href="#">Close-spaced sublimation of (Bi<sub>1-x</sub>Sb<sub>1-x</sub>)<sub>2</sub>Se<sub>3</sub> thin films for short-wavelength infrared photovoltaics</a>

17:00 End

## Wednesday, August 2<sup>nd</sup>

08:00 Registration + Light breakfast

### Session V: Modeling

09:00	Matthew S. Johnson (Sandia National Laboratories) <a href="#">Pynta: A software for automatic calculation of microkinetic rate coefficients on metallic surfaces</a>
09:30	Calvin Pieters (Technion) <a href="#">Automated rate calculator (ARC): A tool for automated ab-initio kinetics computations</a>
09:45	Roy Almog (BGU) <a href="#">The effect of accelerated flow on the resuspension of small particles</a>

### Session VI: Sustainable energy

10:00	Neetu Rani (DTU) <a href="#">Microscale mapping of thermal diffusivity in thermoelectric materials using a micro four-point probe</a>
10:30	Sapir Willdorf Cohen (Technion) <a href="#">Ionomer Stability Studies for Anion-Exchange Membrane Fuel Cells</a>
10:45	Yaniv Farkash (Technion) <a href="#">Nanofiber Electrodes for Efficient Decoupled Hydrogen Generation by the E-TAC process</a>

11:00 Coffee break

11:30 Flash talk – session II

### Session VII: Biomed

12:00	Timothy Little (North Carolina at Chapel Hill) <a href="#">Simultaneous dual epitope blocking CCR2 antibody to induce synergistic macrophage polarization</a>
12:30	Gal Chen (Technion) <a href="#">Developing Artificial Cell Micro-Factories as Next-Generation Therapeutic Platforms</a>
12:45	Chen Benafsha (BGU) <a href="#">Enhancing HNSCC therapeutic efficiency by overcoming cetuximab resistance using modified Q-Starch/siRNA particles decorated with cetuximab as a targeting agent</a>

13:00 Lunch

13:30 Poster viewing - session II

### Session VIII: Catalysis

14:30	Alexia Simon (Harvard) <a href="#">Laboratory Investigation on Entrapment of Hyper-Volatiles in Interstellar and Cometary H<sub>2</sub>O and CO<sub>2</sub> Ice Analogs: Importance on parameters dependence</a>
15:00	Leo Giloni (Technion) <a href="#">Assessing acid-base cooperativity of layered oxides for biomass conversion</a>
15:15	Jonathan Prilusky (Ariel) <a href="#">Enhanced photocatalytic activity of Cs<sub>4</sub>PbBr<sub>6</sub>/WS<sub>2</sub> hybrid nanocomposite</a>

15:30 Coffee break

16:00 Prizes + closing remarks

17:00 End

## Organizing committee:

Si Naftaly-Kiros  
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## Sponsors:



Technion Chemical Engineering Student Conference

