14.1.2018

17:00 - Registration is open and Get Together

15.1.2018

09:30 - 10:00 - Morning Coffee

10:00 - Opening Session

10:00 – 10:10 Greeting – Michael Gozin + Brian Rosen

10:10 – 10:20 Prof. Yoav Henis, Vice President for Research and Development, Tel Aviv University.

10:20 - 12:00 - BATTERIES PART 1, Chair: Alex Schechter

10:20 – 10:40 - Doron Aurbach, Bar Ilan University, *The Frontier of Advanced Rechargeable Batteries: Reality VS Illusions*

10:40 – 11:00 - Atsuo Yamada, University of Tokyo, *Recent Progress of Electrode and Electrolyte Research for Battery Applications*

11:00 – 11:20 - Yair Ein-Eli, Technion, Advanced Materials for Li-ion Batteries

11:20 – 11:40 - Sagar Mitra, Indian Institute of Technology Bombay, *Developing Sodium-ion Battery to Address the Future Energy Storage Applications*

11:40 – 12:00 – Kisuk Kang, Seoul National University, *New Electrode Chemistry Via Nanocomposites for Advanced Rechargeable Batteries*



12:00 - 13:30 - Lunch Break

13:30-15:10 - BATTERIES PART 2, Chair: Michal Leskes

13:30 – 13:50 - Emanuel Peled, Tel Aviv University, *High Capacity Silicon Nano Structure Anode for Electric Mobility*

13:50 – 14:10 - Jang Wook Choi, Seoul National University, *Supramolecular Chemistries for Advanced Rechargeable Batteries*

14:10 – 14:30 - Yang-Kook Sun, Hanyang University, *High-Energy Cathode Material for Next-Generation Li-ion Batteries*

14:30 – 14:50 - Diana Golodnitsky, Tel Aviv University, *Towards Smart 3D Printable Batteries*



14:50 - 15:10 - Coffee Break

15:10-16:50 - FUEL CELLS, Chair: David Zitoun

15:10 – 15:30 - Scott A.Barnett, Northwestern University, *The Effect of Catalyst Exsolution on the Electrochemical Properties of Solid Oxide Fuel Cell Anodes*

15:30 – 15:50 - Lior Elbaz, Bar-Ilan University, *Methodological Approach for the Study of Catalyst Durability in Alkaline Fuel Cells*

15:50 – 16:10 - John Irvine, University St. Andrews, *Emergent Materials, a New Dimension in Energy Materials*

16:10 – 16:30 - Fikile Brushett, MIT, *Towards Deterministic Eelectrode Design: Elucidating the Role of Surface Chemistry and Microstructure on Flow Battery Performance*

16:30 - 17:00 - Coffee Break

17:00 – 19:00 – Tour at the Steinhardt Museum of Natural History

16.1.2018



09:30 - 10:00 - Morning Coffee

10:00 – 10:10 Greeting –Yael Hanein

10:10 - 10:20 Greeting - Yossi Rosenwaks

10:20 – 12:00 SYNTHETIC FUELS, Chair: Yaniv Gelbstein

10:20 – 10:40 - Dario Dekel, Technion, Anion-Exchange Membrane Fuel Cells – a Promising Alternative Energy Conversion Technology

10:40 – 11:00 - Matthew Kanan, Stanford, Nanoscience for Carbon Dioxide Utilization

11:00 – 11:20 - Paul Kenis, University of Illinois at Urbana-Champaign, *Electrochemical* **Conversion of Carbon Dioxide to Value Added Intermediates**

11:20 – 11:40 - Kimberly A. Gray, Northwestern University, *The Role of Photo- and Thermal* Catalytic Materials in the Conversion of CO2 to Useful Products

11:40 – 12:00 - Rajiv Dusane, Indian Institute of Technology Bombay (IITB), Silicon Nanowires for Energy Generation and Storage

12:00 – 12:20 – Yujing Li, Beijing Institute of Technology (BIT), Rational Design of High-Performance Electrocatalysts for Proton Exchange Membrane Fuel Cells

12:20 - 13:50 - Lunch Break



13:50 – 15:10 THEORETICAL AND COMPUTATIONAL METHODS, Chair: Oswaldo Dieguez

13:50 – 14:10 – James Rondinelli, Northwestern University, TBC



14:10-14:30 - Ilya Grinberg, Bar Ilan University, TBC

14:30 – 14:50 - Chris Wolverton, Northwestern University, Materials Design of High-Energy Cation/Anion Redox in Li-rich Cathode Materials: Li5FeO4, Li4Mn2O5, and Li2MO3

14:50-15:10 - Amir Natan, Tel Aviv University, Quantum and Classical Simulations for Metal-**Air Batteries**



15:10 - 15:30 - Coffee Brea

15:30 – 16:30 JOINT RESEARCH AND INDUSTRY, Chair: Brian Rosen

15:30 – 15:50 – Raanan Rein, Vice President of Tel Aviv University, TBC

15:50 – 16:10 - Gideon Friedman, Chief Scientist of Ministry of Water, Energy and Infrastructures, TBC

16:10 – 16:30 - Irvin Gutelmacher PO CELLTech, TBC

16:10 – 17:00 - Poster Flash – Up to 2 min. for each poster presentation

17:00 - 17:10 - Closing Remarks

17:10 - Poster Session

17.1.2018

Day Tour to Jerusalem