



Dear ICS members,

It is my great pleasure to announce that the winners of the 2018 ICS Prize for an Excellent Graduate Student are **Sigalit Aharon** (the Hebrew University), **Maria Baskin** (Technion), **Jesus Barrio Hermida** (Ben-Gurion University), **Eitan Oksenberg** (Weizmann Institute), **Itay Pitussi** (Ariel University), **Tomer Rosen** (Tel Aviv University), and **Netanel Shpigel** (Bar-Ilan University).

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Sigalit Aharon Hebrew University **Maria Baskin** Technion **Jesus Barrio Hermida** Ben-Gurion University **Eitan Oksenberg** Weizmann Institute **Itay Pitussi** Ariel University **Tomer Rosen** Tel Aviv University **Netanel Shpigel** Bar-Ilan University

Sigalit Aharon works with Prof. Lioz Etgar, implementing organic and inorganic perovskites in optoelectronic devices, especially in solar cells (SC) and light emitting diodes (LEDs). She studies chemical modifications of the organic-inorganic lead-trihalide perovskite, including changing the composition of perovskite, as well as controlling its dimensionality, as bulk or as nano-particles. For this purpose, she developed size- and shape-controlled perovskite nanoparticles and studied their properties, aiming at using them in SCs and LEDs.

Maria Baskin works with Prof. Galia Maayan, on the interactions between metal ions and peptoids in order to use them as tools for structural studies and bio-mimetic applications. Peptoids, N-substituted glycine oligomers, represent an important class of peptide mimics capable of forming well-defined secondary structures, with demonstrated biological and chemical applications. She focuses on the design, synthesis and characterization of metal-binding peptoids, studying the effect of metal binding on their folding. She developed metallo-peptoids as functional materials, as highly selective chelators for various metal ions, allosteric cooperativity effects and chiral induction.

Jesús Barrio Hermida received his BSc in 2014 from the Universidad Autónoma de Madrid. He focused on the synthesis and characterization of Fe and Cu coordination polymers. In 2016 he received his MSc degree from the IMDEA Nanoscience Institute, working on the formation of controlled assemblies of plasmonic building blocks. He moved to the Max Planck Institute for Colloids and Interfaces at Potsdam, and later moved to Ben-Gurion University together with his PhD supervisor, Prof. Menny Shalom. He focuses on the design of metal-free carbon nitride materials for photo-catalytic applications. Jesús has co-authored 14 scientific publications and received several research awards.

Eitan Oksenberg received his BSc degree in Chemistry and Biology with distinction from Tel Aviv University and proceeded to a direct track PhD with Prof. Ernesto Joselevich at the Weizmann Institute. He investigated the guided growth and properties of nanowires of optoelectronic materials. He used substrate-material interactions to assemble horizontal arrays of parallel semiconductor nanowires in a controlled manner. He explored classic and soft semiconductors, and demonstrated their integration into field-effect transistors and fast visible-range photodetectors. He also designed and executed a growth scheme that produced arrays of horizontal core-shell nanowires, which are suitable for photovoltaic applications. He received the Dov Elad Award for outstanding PhD research.

Itay Pitussi received his BSc degree in 2011 from Ariel University, first in his class. Under the supervision of Prof. Haya Kornweitz and Prof. Alex Schechter he earned his MSc degree in the fields of computational chemistry and electrochemistry, focusing on CO adsorption over Sn coated with a thin layer of Pt. His PhD work, with Kornweitz, Schechter and Prof. Dan Meyerstein, focuses on new catalysts for direct methanol fuel cells, based on combination of Pt-Sn and computational chemistry. Itay is a teaching assistant in quantum chemistry, symmetry in chemistry and electrochemistry.

Tomer Rosen received his BSc in chemistry, magna cum laude, from Tel Aviv University and continued to a direct track PhD with Prof. Moshe Kol, focusing on the design of chelating ligands that wrap around metal centers in a uniform manner, and the development of well-defined catalysts for ring-opening polymerization of cyclic esters. He introduced several families of readily available catalysts with high activity and living character that enabled the one-pot synthesis of tailor-made block copolymers and stereo block-copolymers of lactic acid by sequential monomer addition. He has published in *JACS*, *Angew. Chem.*, *Chemical Science* and other journals, and two patent applications.

Netanel Shpigel specializes in advanced applications of EQCM-D and AFM for characterization of energy storage and conversion materials under the supervision of Profs. M. D. Levi and D. Aurbach. His PhD research focuses on real-time monitoring of mechanical and morphological properties of Li and beyond Li batteries, as well as supercapacitors. His work was published in high impact journals, including *Nature Materials*, *Nature Energy*, *Joule* and *Account of Chemical Research*.

The award ceremony will take place in February 12, 2019 in the 84th ICS Annual Meeting.

Congratulations to Sigalit, Maria, Jesús, Eitan, Itay, Tomer and Netanel for their achievements!

Ehud Keinan