החברה הישראלית לכימיה
THE ISRAEL CHEMICAL SOCIETY
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June 8, 2023

Dear ICS members,

It is my great pleasure to announce that the winners of the 2022 ICS Prize for an Excellent Graduate Student are **David Azulay (**The Hebrew University of Jerusalem), **Ariel Friedman** (Bar-Ilan University), **Itai Massad** (Technion), **Noy Nechmad** (Ben-Gurion University), **Inbal Oz** (Tel-Aviv University), **Golokesh Santra** (Weizmann Institute of Science), and **Alina Sermiagin** (Ariel University).

David Azulay The Hebrew University | **Ariel Friedman** Bar-Ilan University | **Itai Massad** Technion | **Noy Nechmad** Ben-Gurion University | **Inbal Oz** Tel Aviv University | **Golokesh Santra** Weizmann Institute | **Alina Sermiagin** Ariel University

David N. Azulay was born in 1992 in Madrid, Spain. He made Aliya and obtained his B.Sc. from the Hebrew University. After spending a year in Yeshiva, he continued with a direct-track Ph.D. in chemistry with Prof. Liraz Chai. He explored bacterial biofilms from their molecular components to their final morphology and studied their effect on mineral crystallization. Using biochemical and biophysical tools, he characterized an aggregation mechanism of a key protein in biofilms and deciphered the influence of biofilm components on the crystallization of calcium minerals. He proposed a model that links biofilm morphology with the spatiotemporal distribution of cell phenotypes and molecular and ionic components. He received the Dean's Prize, Faculty excellent student, the Klein Prize, the Kaete Klausner Scholarships, and the HUJI Nano Prize for outstanding Ph.D. Students.

Ariel Friedman, a graduate of Bar-Ilan University, earned his B.Sc. degree in chemistry in 2015. He subsequently pursued his M.Sc. (2018) and Ph.D. (2022) under the supervision of Prof. Lior Elbaz. His research focuses on molecular catalysts for the oxygen reduction reaction, emphasizing their electropolymerization for potential application in fuel cells. Additionally, his work encompassed the study of other electrochemical reactions, including hydrogen evolution and CO_2 reduction, alongside the development of electrochemical techniques to quantitatively assess catalytic sites in precious group metal-free catalysts.

Itai Massad was born in 1998 and grew up in Zichron Ya'akov. He received his B.Sc. from the Technion (cum laude) and continued for a direct-track Ph.D. with Prof. Ilan Marek. His research concerns the strategic application of alkene isomerization in stereoselective synthesis – identifying cases where isomerization can bridge between readily available alkenes and their regio- and stereochemically challenging counterparts. For example, one of his projects establishes the first general access to the Coates-Claisen rearrangement – an underutilized variant of the canonical Claisen rearrangement that has been rarely applied due to the synthetically challenging positioning of alkenes in the starting materials. In October 2023, Itai will join the Nitschke group at the University of Cambridge as a Rothschild postdoctoral fellow.

Noy B. Nechmad was born in 1992 and raised in Shoham, Israel. Noy is married to Eitan and the mother of 9-month-old Ziv. She studied Chemistry and Biology at Shoham high school, obtained her B.Sc. degree in chemistry at Ben Gurion University, and continued her graduate studies under the supervision of Prof. Gabriel Lemcoff. Her research focuses on organometallic chemistry and catalysis. One of Noy's main breakthroughs was the synthesis of new iodine-containing ruthenium catalysts with outstanding activity and selectivity in olefin metathesis reactions. She currently focuses on new methods to produce useful molecules and novel polymer research using her exceptional catalysts.

Inbal Oz obtained her B.Sc. and M.Sc. from Tel Aviv University and is a recipient of the Adams fellowship program for outstanding doctoral students. Her Ph.D. work with Oded Hod at Tel-Aviv University and Abraham Nitzan of the University of Pennsylvania focuses on developing numerical tools for studying static, dynamic, and thermodynamic phenomena associated with the flow of electrical current through nanoscale systems. Her theoretical research focuses on the study of electron transport through nanoscale devices, where quantum mechanical effects become prominent, and the behavior of electrons can differ significantly from macroscopic systems.

Golokesh Santra was born in 1995 in West Bengal, India. He obtained his B.Sc. (2015, Gold Medal) in chemistry and M.Sc. (2017, with academic excellence) from the Indian Institute of Technology, Kanpur. In 2018 he joined Prof. Gershom (Jan) Martin at the Weizmann Institute. Recently, he completed his Ph.D. and started his postdoctoral research at the Max-Planck-Institut in Mülheim, Germany. His research focused on developing state-of-the-art double hybrid functionals for general chemistry, molecular spectroscopy, homogenous catalysis, and chemical biology. He published fifteen research papers and four conference proceedings. One of his papers is maintaining the "top 1% of the academic field of Chemistry" status for the last two years. In 2019, the Weizmann Institute awarded him a 2-year long ($10,000) student-initiated independent research grant.

Alina Sermiagin received her B.Sc. in chemistry and an education diploma in science teaching from the Hebrew University (2014). Following her 5-year military service as a teacher, she began her M.Sc. at Ariel University under Tomer Zidki, focusing on the hydrogen evolution mechanism on nanoparticle catalysts, and published her research in Angewandte Chemie. She continued her Ph.D. under Dr. Tomer Zidki and Prof. Dan Meyerstein on the mechanistic study of catalyzed reduction reactions on metal nanoparticles via isotopic studies. She explored the formation mechanism of gold and silver nanoparticles, the hydrolysis of borohydride, and the catalytic properties of gold and silver nanoparticles on SiO_2 and TiO_2 carriers. She has already published five papers. Alina mentored high school students in the Alpha program.

The ICS award ceremony will take place in the evening of February 20, 2024, during the 87th ICS Meeting.

Congratulations to David, Ariel, Itai, Noy, Inbal, Golokesh, and Alina on their achievements!

Ehud Keinan