Dima Kaplan, Ph.D.

Electrochemist

Personal Data

Phone	+972 0545211771
E-Mail	dima_kaplan@yahoo.com
Country of residence	Israel

Education

Ph.D.	School of Chemistry, Tel Aviv University, Israel Supervisor: Prof. Emanuel Peled Thesis topic: Preparation and Characterization of Low-Platinum nano-size catalysts for fuel cells fed by hydrogen, methanol and ethylene glycol.	2011 - 2016
M.Sc. (*magna cum laude)*	School of Chemistry, Tel Aviv University, Israel Supervisor: Prof. Emanuel Peled Thesis topic: Core - Shell platinum-based catalysts for methanol and ethylene glycol oxidation	2009 – 2011
B.Sc.	School of Chemistry Tel Aviv University Chemistry	1999 - 2002

Research Experience

- Thirteen years of experience in fuel cells research.
- Expertise in synthesis, physical (SEM, TEM, XPS, XRD, TGA) and electrochemical (cyclic voltammetry and chronoaperometry) characterization of catalysts for polymer electrolyte fuel cells.
- Experience with single cell MEA assembly and characterization.

Nuclear Research Center – Negev (NRCN), Israel	• Lead electrochemist at direct methanol fuel cells durability studies using physical and electrochemical characterization of catalysts and MEAs. • Study of ruthenium effect on ORR at DMFC cathodes. • Study of ruthenium dissolution from DMFC PtRu anode catalysts.	2016–now
School of Chemistry Tel Aviv University Israel	Volunteering scientist, taking part in studies of catalysts for ORR in fuel cells and durability of catalysts for DMFCs.	2018–now
School of Chemistry Tel Aviv University Israel	Ph.D. thesis research under the supervision of Prof. Emanuel Peled. Synthesis, physical and electrochemical characterization of platinum-based catalysts for methanol oxidation and oxygen reduction in PEM-based fuel cells.	2011–2016

School of Chemistry Tel Aviv University Israel	M.Sc. thesis research under the supervision of Prof. Emanuel Peled. Synthesis, physical and electrochemical characterization of platinum-ruthenium-based catalysts for methanol and ethylene glycol oxidation in PEM-based fuel cells.	2009–2011

International Experience

Collaboration with Dr. Meital Shviro at Institute of Energy and Climate Research, Forschungszentrum Jülich.	STEM analysis of electrocatalysts for oxygen reduction in PEM fuel cells. Study of catalysts for oxygen reduction and oxygen evolution in PEM fuel cells/electrolyzers.	2018-now

Current Supervisions

M.Sc.: Mrs. Chen Olewsky (School of Chemistry, Tel Aviv University, Israel)
M.Sc.: Mr. Semyon Sisorov (School of Chemistry, Tel Aviv University, Israel)

Project Funding

Funding source	Period	Topic of the project/activities
Pazy foundation	2017-2021	Direct Methanol Fuel Cell (DMFC) - Study of Catalysts Degradation Processes
Israeli Ministry of Energy	2022-2025	Development of Active and Durable Nano-Catalysts for Electrolyzers

Honors

Funding

- Katzir fellowship from Israeli Ministry of Defense 2017