DIANA GOLODNITSKY, PhD, FRSC, FES
TEL AVIV UNIVERSITY
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C U R R I C U L U M V I T A E

PERSONAL DETAILS

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Marital Status (No. of Children):	Married, 2 children

EDUCATION

Name of Address of School	Subject	Degree	Date of Award
L. Ya. Karpov Physicochemical Scientific Research Institute, Moscow and State Technological University, Kazan, USSR	Phys.Chem.	**MSc** *summa cum laude*	1974
State Technological University, Kazan, USSR	Phys.Chem.	**PhD**	1984

Title of Master's Thesis:	Study of Electrochemical and Corrosion Behavior of Copper in the Concentrated Acetate Electrolyte
Supervisor:	Professor V.V. Losev and Professor N.V. Gudin
Title of Doctoral Thesis:	Electrode processes in Sulfamate Solutions with Various Anion Additives for Electrodeposition of Nickel-Cobalt Alloys
Supervisor:	Professor N. V. Gudin and Dr. G. A. Volyanyuk

ACADEMIC AND PROFESSIONAL EXPERIENCE

Period	Name & Address of Institution
1974 - 1991	Junior Research Fellow, Senior Research Fellow Research Institute of Aircraft Technology, Kazan, USSR
10.91- 03.1992	Research Fellow Golan Technological Center, Israel
04.92- 12.2013	Senior Research Fellow, Principal Research Fellow, School of Chemistry and Wolfson Applied Materials Research Center, Academic Instructor in undergraduate Laboratories in General and Analytical and Physical Chemistry, Tel Aviv University, Tel Aviv, Israel
1.2014-11.2016	Associate Professor, School of Chemistry, Tel Aviv University, Israel
12.2016-	Full Professor, School of Chemistry, Tel Aviv University, Tel Aviv, Israel
06.2018-	The Raymond and Beverly Sackler Chair in Chemistry and Energy Sciences, Tel Aviv University, Tel Aviv, Israel

FIELDS OF INTEREST

Fundamental electrochemistry, electrochemical energy conversion and storage, interfacial and solid-state electrochemistry, mechanisms of ionic conduction in polymer and ceramic electrolytes, electrochemical materials science, electrochemical synthesis, electrodeposition of metals and alloys, electrophoresis, electroforming

ADMINISTRATIVE POSTS AND OTHER ACTIVITIES

1995-2020	Thermal Analysis Services for different research groups at TAU and other Universities (Materials Research Center)
2011-	Board Member of the Israel National Research Center for Electrochemical Propulsion
2014	Member of the Organizing Committee of IFCBC, Tel Aviv
2014	Member of the Organizing Committee of German-Israel Workshop
2014	Member of the Scientific Board of XIV International Symposium on Polymer Electrolytes, Australia
2014	Invited Expert For The EU Call H2020-GV
2014-	An Executive Committee Member of The Israel Section of Electrochemical Society, Treasurer of Israeli Section of Electrochemical Society
2015	Member of The Scientific Board of 5th Israeli Power Sources Conference, Herzlia
2016	Chairman of the judgement committee of MOST proposals
2016	Member of the Scientific board of XV International Symposium on Polymer Electrolytes, Sweden
2016	Chairman of GIBS2 Meeting Munich, Germany
2016	Chairman of EMRS Meeting, Warsaw, Poland
2017	Guest Editor of the Electrochimica Acta
2017	Guest Editor of the Journal of Solid State Electrochemistry
2017	Member of the Scientific Board of SSI Conference, Padua, Italy
2017	Expert of the Evaluation Committee of Skoltech Centers for Research, Education, and Innovations (CREIs), Moscow, Russia
2018	Member of Symposium International Programme Committee of 3rd ISE Satellite Student Regional Symposium on Electrochemistry – Promising Materials and Processes in Applied Electrochemistry-2018, and member of Jury Open (International) All-Ukrainian Student Olympiad on Technical Electrochemistry Kyiv, Ukraine
2018	Scientific Advisory Board Member of ISPE16, Yokohama, Japan
2018	Scientific Board Member of International Meeting on Ionic Liquids for Electrochemical Devices (ILED 2018), Rome, Italy
2018-	Member of Tel Aviv University Committee of Research and Development
2019	The Academic Board Member of BSF judgement committee of scientific proposals
2019	M-ERANET Strategic Expert
2020-	Core Member of Senate, Tel Aviv University
2020-	President of Israel Electrochemical Society
2021-	Member of the appointment commission
	Co-founder of three startup companies- DEVIS Electrocopy **(1996),** 3D-on-Si chip microbattery **(2014)** and SiLiB **(2020)** https://www.si-lib.com/

ACADEMIC AND PROFESSIONAL GRANTS (since 2000)

Title of project	Source	Total grant, k$/ k€, kILS	From date	To date Month/Y
1. Li/ polymer electrolyte/ pyrite battery	Ministry of Energy		1997	2000
2. Advanced Lithium/Gel Polymer Electrolyte Battery for Electric Vehicles Application	Ministry of Infrastructures /Italy		2001	2003
3. Ion transport in anisotropic solid systems	Israel Science Foundation		10/00	10/03
4. Ion transport in ordered polymer electrolytes	Israel Science Foundation	150	10/03	10/06
5. Novel, solvent free, single ion conductive polymer electrolytes (2 three-year projects)	USA AF	200	03/02	02/08
6. Development of the 3D thin-film microbattery	Ramot	1000	05/03	04/06
7. Single ion conducting channels	BSF	100	10/07	10/11
8. High Energy Density 3D On-chip Microbattery	"Pearl of wisdom" non-profit association	160	02/08	02/10
9. Superior power and energy density Li-on microbattery	FP7 EU	648	09/08	09/11
10. Novel High-Performance, Low-Cost and Safe Anode Materials for Advanced Energy Storage	Min Infrastructures	210	01/10	12/12
11. Improved performance Li-ion batteries through micro-structural optimization	BIRAX	30£	01/11	05/12
12. Towards a novel sodium-air battery for EV applications	BSF	176	10/11	09/14
13. Development of novel sodium-air battery for EV applications	ISAEF	196	10/11	09/14
14. Lithium-Air Batteries with split Oxygen Harvesting and Redox processes	FP7	350	10/11	09/15
15. Petroleum Alternatives for Transportation- Israel National Research Center for Electrochemical Propulsion	ISF	1,071,128 ILS	10/11	09/16
16. Materials for Ageing Resistant Li-ion High Energy Storage for the Electric Vehicle	FP7	385	10/13	09/17
17. Transportation Electric Power Solutions. TEPS Consortium. Advanced Energy and Power		625ILS	10/14	09/16

Technologies for Automotive Electrification				
18. Superior Lithium-Sulfur Batteries for EV Applications	ISF	573 ILS	10/14	09/17
19. HELIS High energy lithium sulfur cells and batteries	Horizon 2020	650	07/15	06/19
20. Novel All-Solid-State Rechargeable 3D-Microbattery on 3D Printed Perforated Polymer Substrate		1,475 ILS	04/16	04/19
21. Israel National Research Center for Electrochemical Propulsion	ISF	4,580 ILS	10/16	09/21
22. Transportation Electric Power Solutions. TEPS Consortium		1,540 ILS	10/16	09/18
23. Printed batteries	Min. Defense	500	10/16	09/21
24. A novel 3D high-performance and low-cost SiNWs anode for lithium ion batteries	Momentum fund	$1,000	05/17	04/19
25. High-Energy, Safe, Lithium Metal-Free Sulfur/Silicon Battery	GIBS	300Euro	10/17	03/21
26. Integrated 2D&3D Functional Printing of Batteries with Metamaterials and Antennas	MOST	412ILS	01/19	12/21
27. U.S. – Israel Center of Excellence in Energy, engineering and Water Technology	BIRD	2,141,517	09/20	08/25
28. On the road to a flexible multi-coaxial-cable 3D printed battery	BSF	$141,600	10/21	09/24

Awards

1978 "Electroforming of miniature nozzles from Ni-Co alloy"
Bronze medal at the All-Union Exhibition of New Technology, Russia

1996 Gordon Foundation for Energy Studies, Special Research grant for young scientists

1998 "Stretching-induced conductivity enhancement of LiI-P(EO)-polymer electrolyte" Best poster presentation out of 81 posters presented at The Sixth International Symposium on Polymer Electrolytes (ISPE-6), Hayama, Kanagava, Japan

1999 "Cathode process in nickel-cobalt alloy deposition from sulfamate electrolytes. Application to electroforming"
Silver Medal Abner Brenner Award for an outstanding paper published in "Plating & Surface Finishing"

2004 "Toward New Generation of Polymer electrolytes for lithium batteries". Best poster presentation at Battery and Fuel Cells Materials Symposium, Graz, Austria

2007 "Effect of Nano-Fillers on the Ion Conductivity of Polymer Electrolytes Cast under a Magnetic Field, Best Poster presentation 3rd PBFC Meeting, Rome,

2007 Novel Porous-Silicon Structures for 3D-Microbatteries. Best poster presentation 3rd PBFC Meeting, Rome

2010	Israel Government acknowledgment for the outstanding contribution to the development of Israel Science
2017	Fellow of Royal Society of Chemistry
2020	Fellow of Electrochemical Society

Master students supervised (past)

1984-86	S. Semyannikova	Study of the codeposition of nickel and cobalt from sulfamate electrolyte
1986-88	I. Averyanova	Study and development of electroforming of complex-shape nozzles
2003-5	R. Kovarsky	Single ion conducting polymer electrolytes
2003-5	K. Freedman	Development and characterization of thin film FeOxSy cathodes for Li and Li-ion battery applications
2005-7	H. Mazor	Development and Characterization of single ion conducting polymer electrolytes
2005-7	S. Menkin - Bachbut	Study of the Artificial SEI formation
2007-9	R. Hadar	Electrophoretic deposition of composite ceramic membranes
2007-10	K. Goldshtein	Synthesis, study and characterization of Si-based anodes for Li-ion batteries
2007-9	A. Avshalom	Novel Na-air batteries
2014-16	T. Mukra	Lithium sulfide batteries
2013-17	K. Raz	Modeling of ion transport in ordered polymer electrolytes
2014-17	N. Aloni	Mixed ion-electron conducting cage silicon anodes
2016-19	M. Lifshitz	Mixed ion-electron conducting cage sulfur cathodes Ion conducting ceramic membranes
2017-20	E. Mados	Mechanical and Electrochemical Properties of Metallic-Mesh-Supported Silicon Nanowires (SiNWs) anode for Li-ion batteries
2018-21	A. Inbar	Development of novel polymer electrolyte for 3D printed free form-factor battery

Current Master Students supervised

2019-	S. Cherf	High-power, on-copper-foam silicon anodes
2021-	D. Stark	Simultaneous electrophoretic deposition of materials on nanoporous membranes

Doctoral Students supervised (past)

2001-5	V. Yufit	Research and Development of a new 3D-Lithium-ion "on-chip" microbattery
2001-5	E. Livshits	Ion transport in anisotropic systems
2003-9	T. Ripenbein	Novel Technological Processes for the Development and Preparation of Li-ion 3D microbattery
2005-9	R. Kovarsky	Effect of the magnetic field on ordering of composite polymer electrolytes
2005-10	K. Freedman	Thin film cathodes for microbattery applications
2007-11	S. Menkin - Bachbut	High capacity nanocomposite anode materials for large Lithium Ion Batteries
2007-12	H. Mazor	Development and Characterization of Nano-Composite Cathode Materials for Three-Dimensional Microbatteries
2011-16	K. Goldshtein	Si-MWCNT anodes for Li-ion batteries
2012-16	R. Blanda	Study and development of solid composite polymer-in-ceramic electrolyte for 3D-MB
2014-20	L. Faktorovich	Catalysts for Na/air batteries

Current Doctoral Students supervised

2011-	R. Hadar	Study of the SEI formation and electrolytes for Na-air batteries
2015-	E. Cohen	3D-microbatteries on 3D-printed substrates
2017-	Niv Aloni	Combinatorial and mechanochemical research and development of solid electrolytes
2017-	Ido Ben Barak	3D printed batteries by DoD method
2019-	Moran Lifshitz	Ion transport phenomena in polymer-in-ceramic electrolytes
2020-	Edna Mados	Electrospinning of electrochemically active core/shell fibers
2021-	Adi Vinegrad	Development of solid electrolytes from biodegradable polymers by fused filament fabrication
2021-	I. Ankonina	Study of ion transport via thin protecting layers of the high-voltage cathodes

Postdoctoral Students supervised

2016-18	I. Belenkaya	Study of chalcopyrite cathodes
2017-20	H. Ragones	3D-printed microbatteries
2017-20	Y. Horowitz	Multiphase Nanotube Silicon-Based Anodes for High-Energy-Density Li-ion Batteries
2018-19	H. Mazor	Lithiated chalcopyrite cathodes
2019-	M. Sivak	Novel confined-in-ceramic solid polymer electrolytes for post lithium and lithium-ion batteries