





The 50th Meeting of the Israeli Polymers & Plastics Society

July 2, 2024 | Tel Aviv, Israel

FINAL PROGRAM

TUESDAY, JULY 2, 2024		
07:30-09:00	Registration and Breakfast	<i>Foyer</i>
09:00-09:10	Opening Statement	<i>Hall K+L+M</i>
09:10-09:30	Honorary Membership Award – Mr. Nadav Goldstein Almog	
09:30-09:55	Honorary Membership Award	
09:55-11:15	Keynote Lectures	
09:55-10:35	"Supramolecular Approaches to Detect and Heal Defects in Polymers" Prof. Christoph Weder, University of Fribourg, Switzerland	
10:35-11:15	"Surface Engineering of Cellulose Nanocrystals for Sustainable Bioproduct Development" Prof. Emily Cranston, University of British Columbia, Canada	

11:15-11:45	Coffee Break <i>Foyer/Exhibition</i>			
	HALL K+L+M	HALL F	HALL G	HALL H
11:45-13:30	<p>Session 1A: Functional Fabrics and Fibers (In memory of <i>KAFRIT IL</i> fallen)</p>  <p>Chair: Prof. Elizabeth Amir, <i>Shenkar - Engineering. Design. Art</i></p>	<p>Session 1B: Materials for biological Applications (In memory of <i>TADBIK</i> fallen)</p>  <p>Chair: Prof. Gerardo Byk, <i>Bar-Ilan University</i></p>	<p>Session 1C: Functionalized Polymers (In memory of <i>RAVAL A.C.S. LTD</i> fallen)</p>  <p>Chair: Dr. Shady Farah, <i>Technion - Israel Institute of Technology</i></p>	<p>Session 1D: Sustainability Solutions in the Plastic Industry (In memory of <i>MOR PLASTIC INDUSTRIES LTD</i> fallen)</p>  <p>Chair: Dr. Jasmine Rosen-Kligvasser <i>Plaskolite</i></p>
	<p>11:45-12:05 Invited Lecture: "Long-Range Ordering of Polyelectrolyte Complexes" Eyal Zussman <i>Technion - Israel Institute of Technology</i></p>	<p>11:45-12:07 Invited Lecture: "Microneedles for Tissue Adhesion, Drug Delivery and as a Platform for Living Materials" Boaz Mizrahi <i>Technion - Israel Institute of Technology</i></p>	<p>11:45-12:07 Invited Lecture: "Facile One-Step Synthesis of Water-Soluble Cellulose Acetate" Yachin Cohen <i>Technion - Israel Institute of Technology</i></p>	<p>11:45-12:07 Invited Lecture: "Can We Make a Recycled Material Equivalent to Prime?" Shiran Garnai Hirsch <i>Netafim</i></p>

	<p>12:05-12:25 Invited Lecture: "Shape-Morphing of Hierarchical Stimuli-Responsive Microfiber-Meshes" Amit Sitt <i>Tel Aviv University</i></p>	<p>12:07-12:29 Invited Lecture: "Dual Composite Hydrogels as Bioadhesives, Medical Sealants, and Scaffolds for Tissue Regeneration Applications" Meital Zilberman <i>Tel Aviv University</i></p>	<p>12:07-12:29 Invited Lecture: "Polymeric Architecture as Tool for Programming Transformable Materials" Roey Amir <i>Tel Aviv University</i></p>	<p>12:07-12:29 Invited Lecture: "The Road to TÜV Biodegradability Certification" Moira Nir <i>Solutum</i></p>
	<p>12:25-12:45 Invited Lecture: "When Nature meets Nanotechnology: Development of Novel Bio-Composites and Polymers from Renewable Resources" Shachar Richter <i>Tel Aviv University</i></p>	<p>12:29-12:51 Invited Lecture: "Multifunctional Remotely Targeted Nanoparticles and Mechanical Targeting of Cancer Cells" Ofra Benny <i>The Hebrew University of Jerusalem</i></p>	<p>12:29-12:51 Invited Lecture: "Salt Dependent Behavior and Properties of Methylcellulose Solutions" Lucy Liberman <i>Technion - Israel Institute of Technology</i></p>	<p>12:29-12:51 Invited Lecture: "Converting Agricultural Plastic Waste into Value-Added Composite Materials" Jenny Goldman <i>Carmel Olefins</i></p>

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	Session 1A: Functional Fabrics and Fibers (cont.)	Session 1B: Materials for biological Applications (cont.)	Session 1C: Functionalized Polymers (cont.)	Session 1D: Sustainability Solutions in the Plastic Industry (cont.)
	12:45-13:05 Invited Lecture: "Functional Non-Woven Fabrics Comprising Probiotics" Nir Debotton <i>Shenkar - Engineering, Design, Art.</i>	12:51-13:04 "Novel Non-viral Biocompatible Nano Hydrogel for Gene Delivery" Eswaran Lakshmanan <i>Bar Ilan University</i>	Invited Lecture: 12:51-13:04 "Development and Characterization of Integrated Nano-Sensors for Organic Residues and pH Field Detection" Ran Suckeveriene <i>Kinneret Academic Collage</i>	12:51-13:04 "Recycled Rubber Powder from End of Life Tires as a Functional Filler and Additive in Polyolefines - A Circular Economy Approach" Eynat Matzner <i>Tyrec</i>
	13:05-13:18 "One-Dimensional Assembly of Proteins via Electrospinning" Rita Vilensky <i>Technion - Israel Institute of Technology</i>	13:04-13:17 "Thermoplastic Segmented Polyurethane/poly(L-lactide) Blend as Drug-Eluting Delivery System" Deborah Shalev <i>Azrieli College</i>	Invited Lecture: 13:04-13:17 TBA Qi Wu <i>Technion - Israel Institute of Technology</i>	13:04-13:17 "Environmental Impact Differences in Batch and Flow Chemistry: Case Study of Single-Chain Nanoparticle Production" Or Galant <i>Technion - Israel Institute of Technology</i>
	13:18-13:30 "Electrospinning of Epoxy Fibers: Solution, Process and Mechanical Properties" Mark Shneider <i>Weizmann Institute of Science</i>	13:17-13:30 "Unlocking Next-Gen Polyolefin Degradation by Heat-Resistant Double Emulsions" Jesila Antolin <i>Volcani Institute</i>	Invited Lecture: 13:17-13:30 "Tba Engineering Linear And Crosslinked Nanoparticles Dual Functionalized Uracil And Hydantoin-Based Antiviral/Antimicrobial Polymers" Eid Marjeh <i>Technion - Israel Institute of Technology</i>	13:17-13:30 "Hydrothermal Decomposition of Plastic — Valorization of Non-Recyclable Mixed Plastic Waste" Ran Darzi <i>Volcani Institute</i>
13:30-14:45	Lunch			
14:45-15:45	Poster Session			

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15:45-17:30	<p>Session 2A: Physics and biophysics of biopolymers (In memory of UBQ fallen)</p>  <p>Chair: Anne Bernheim, <i>Ben-Gurion University</i></p>	<p>Session 2B: Composite materials (In memory of POLYSACK FLEXIBLE PACKAGING LTD fallen)</p>  <p>Chair: Noa Lachman-Senesh, <i>Tel-Aviv University</i></p>	<p>Session 2C: Bioinspired and biodegradable polymers (In memory of EREZ THERMOPLASTIC PRODUCTS fallen)</p>  <p>Chair: Moran Frenkel-Pinter, <i>The Hebrew University of Jerusalem</i></p>	<p>Session 2D: Self-assembly in biomaterials (In memory of RODED RECYCLING INDUSTRIES LTD fallen)</p>  <p>Chair: Ulyana Shimanovich, <i>Weizmann Institute of Science</i></p>
	<p>15:45-16:07 Invited Lecture: "Mechanical Aspects Govern the Function of Milk Producing Cells in Culture" Yifat Brill-Karniely <i>Volcani Institute</i></p>	<p>15:45-16:11 Invited Lecture: "What Can We Learn from Nature's Soft Composite Materials?" Mirit Sharabi <i>Ariel University</i></p>	<p>15:45-16:07 Invited Lecture: "New Biodegradable Materials Based On Nature-Sourced Polysaccharides" Elena Poverenov <i>Volcani Institute</i></p>	<p>15:45-16:07 Invited Lecture: "Self-Assembly of Short Peptides and Amino Acids into Functional Coatings" Meital Reches <i>The Hebrew University of Jerusalem</i></p>
	<p>16:07-16:29 Invited Lecture: "Polymer Physics of DNA and Bacterial Chromatin" Oleg Krichevsky <i>Ben Gurion University</i></p>	<p>16:11-16:37 Invited Lecture: "Thermal conductivity enhancement of polymer based composite materials" Avia Ohayon <i>Ben Gurion University</i></p>	<p>16:07-16:29 Invited Lecture: "Bioinspired Materials for Biomedical Applications" Lihl Adler-Abramovich <i>Tel Aviv University</i></p>	<p>16:07-16:29 Invited Lecture: TBA Ben Palmer <i>Ben Gurion University</i></p>
	<p>16:29-16:51 Invited Lecture: "The unique properties of fibrous gels and how they mediate cellular interaction" Ayelet Lesman <i>Tel Aviv University</i></p>	<p>16:37-16:50 Invited Lecture: "Modifying the Properties and Performance of Biodegradable Polymers with Atomic Layer Deposition" Gil Menasherov <i>Technion - Israel Institute of Technology</i></p>	<p>16:29-16:51 Invited Lecture: TBA Gonen Ashkenasy <i>Ben Gurion University</i></p>	<p>16:29-16:51 Invited Lecture: "Ice Nucleation Proteins' Self-Assembly" Ido Braslavsky <i>The Hebrew University of Jerusalem</i></p>

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	Session 2A: Physics and biophysics of biopolymers (cont.)	Session 2B: Composite materials (cont.)	Session 2C: Bioinspired and biodegradable polymers (cont.)	Session 2D: Self-assembly in biomaterials (cont.)
	16:51-17:04 "Engineering Culture Systems with Controlled Properties for Exploring Milk Proteins Secretion" Nir Zaharoni <i>Volcani Institute</i>	16:50-17:03 "Alloy Nanowire Arrays with Controlled Compositions Templated by Block Copolymers" Ofer Burg <i>The Hebrew University of Jerusalem</i>	16:51-17:04 "Bioplastic Material Based on Ethyl Cellulose" Eden Shlush <i>Technion - Israel Institute of Technology</i>	16:51-17:04 "Nitrogen-Rich, Polyethyleneimine-Based, Interpenetrating Network Porous Monoliths: Synthesis and Application" Dahiana Mayer-Keren <i>Technion - Israel Institute of Technology</i>
	17:04-17:17 "Boronic Esters as Dynamic Crosslinks in Covalent Adaptable Network" Tair Sasson <i>Shenkar - Engineering. Design. Art.</i>	17:03-17:16 "Additive Manufacturing of Graphene-Based Composites with Diamonds as High-Volume Fillers" Shani Ligati Schleifer <i>Ben Gurion University</i>	17:04-17:17 "Degradable Porous Polyesters via Emulsion-Templating: Synthesis, Properties, 3D Printing, and Cell Growth" Bar Shlomo-Avitan <i>Technion - Israel Institute of Technology</i>	17:04-17:17 "A Self_Healing Multispectral Transparent Adhesive Peptide Glass" Gal Finkelstein-Zuta <i>Tel Aviv University</i>
	17:17-17:30 "Biocompatibility and Degradation of PLA Reinforced with Tungsten Disulfide Nanotubes for 3D-printed Bone Scaffold" Ofek Golan <i>Tel Aviv University</i>	17:16-17:30 "Technological Synergy: Integration of Polymers and Ceramics in Design, Through Advanced Processes" Ira Shtein Rozenman <i>Shenkar - Engineering. Design. Art. Technology</i>	17:17-17:30 "A Novel Hot-Melt Biodegradable Tissue Adhesive for Bone Fracture Repair" Orel Shem Tov <i>Shenkar - Engineering. Design. Art.</i>	17:17-17:30 "Bioadhesive Microneedle Patches for Tissue Sealing" Eden Freundlich <i>Technion - Israel Institute of Technology</i>
17:30-17:45	Closing Remarks and Best Poster/Talk Award			