



The Center for Physics and Chemistry of Living Systems Tel Aviv University



Biomaterials for Medical Application Symposium

July 25th, 2022

The Steinhardt Museum of Natural History, Tel Aviv University

08:30 Registration, gathering and coffee

09:00 Opening remarks

09:10-10:30 Session I Biomaterials Applications Chair: Ben Maoz

09:10 Rachela Popovzter (BIU) The Beauty of Gold: Endless Configurations for Personalized Cancer and Brain Disease Therapies

09:30 **Boaz Mizrahi** (Technion) *Multi-Armed Polymers as Tissue Adhesives: Fundamentals to Medical Glue-Gun*

09:50 **Tal Dvir** (TAU) *Tissue Engineering: From 3d Printed Tissues to Bionic Organs*

10:10 Galia Blum (HUJI) Chemical Tools for Detection and Treatment of Immunotherapy Resistant Cancers

10:30-11:00 Coffee break

11:00 - 12:00 Session II Structure and Properties Chair: Michal Halperin-Sternfeld (TAU)

11:00 Dror Seliktar (Technion)

12:00-12:45 Lunch break

12:45-13:30 Keynote talk

Ana Paula Pêgo (i3S/INEB, University of Porto, Portugal) Neural Regenerative Engineering: Breaking Barriers with Nano Biomaterials

13:30-14:10 Session III

Metabolites, Peptides and Lipides Chair: Gali Fichman (HUJI)

13:30 Ehud Gazit (TAU) Metabolite and Peptide Materials: Unique Biological, Chemical and Physical Properties

13:50 **Avi Schroeder** (Technion) Lipid Nanoparticles that Accumulate in the Reproductive and Nervous Systems

14:10-14:40 Coffee break

14:30-15:50 Session IV Biomaterials for Therapeutic Applications Chair: Moran Aviv (TAU)

14:40 **Ayala Lampel** (TAU) *Biomaterial Synthesis in Artificial Liquid Organelles*

15:00 **Ofra Benny** (HUJI) *"Precision Nanoparticles for Drug Delivery with Remote Control for Cancer Therapy"*

Gels in Biomedicine: Controlling Structure to Improve Performance 11:20 Ulyana Shimanovich (WIS) Self-Assembly in Silk Biomaterials 11:40 Lihi Adler Abramovich (TAU) Biomaterials for Tissue Regeneration

15:20 Assaf Zinger (Technion)

From Drug Delivery to Cell Communication-Targeting Diseased Tissues the Cell Way

15:40 Concluding remarks



https://docs.google.com/forms/d/e/1FAIpQLSdxJ3r7q8H7QYNqybfpatJZYSCeQo2oEz0U5WLFLPLKtNa5aw/viewform

Organizing committee: Lihi Adler-Abramovich, Ben Maoz