

MOST Conference

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engineering science

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2017

משרד המדע
והטכנולוגיה
Ministry of Science & Technology



יום ראשון | 18/06/2017 | כ"ד בסיון תשע"ז
מלון דן פנורמה תל אביב | בשעות 8:30-16:30

טופס ההרשמה בתחתית העמוד

08:30-09:30 Registration

09:30-09:40 **Greetings and Opening Remarks**

Mr. Peretz Vazan, Director General at the Ministry of Science and Technology

09:40-09:50 **The mission of the Ministry of Science and Technology**

Dr. Andrey Broisman, Director of Applied Science and Engineering,
Ministry of Science and Technology

09:50-10:30 **The key speech**

Prof. Michael Levitt, Stanford University (Nobel Prize Laureate)

10:30-11:00 **Coffee break + Posters**

Auditorium 1

Session 1 Biotechnology Chair: Prof. Tal Dvir , Tel Aviv University

11:00 **Engineering Organs and Body Parts**

Prof. Tal Dvir , Tel Aviv University

11:20 **Tissue Engineered Heart Construct: Bridging the Gap between
Ex- and In Vivo Mechanical Effects Towards Clinical Achievements**

Prof. Marcelle Machluf, Technion

11:40 **Converting GsXynB2 from hydrolase to glycosynthase**

Prof. Gil Shoham, Hebrew University of Jerusalem

12:00 **Hybrid polymer/lipid drug delivery systems for treating oral cancers**

Prof. Avi Shroeder, Technion

12:20 **Discovery and development of new immunosuppressant by
computational and biophysical tools**

Dr. Maayan Gal, MIGAL - Galilee Technology Center

12:40 **Analysis of Uterine Peristalsis in Non-Pregnant Mice**

Prof. David Elad, Tel Aviv University

13:00-14:00 **Lunch + Posters**

Session 2 Bio materials Chair: Prof. Daphne Weihs, Technion

14:00 **Investigation of the influences of micro/nano patterning of gel surface on
cancer cell interactions**

Prof. Daphne Weihs, Technion

14:20 **Multifunctional Theranostic Nanoparticles for Alzheimer's Disease**

Prof. Shai Rahimipour, Bar-Ilan University

14:40 **Non-surgical cancer therapy for the 3rd age: Nanoparticle siRNA with
tumor ablation to suppress ablation-induced tumorigenesis**

Prof. Nahum Goldberg, Hadassah Medical Center

15:00-15:30 **Coffee break + Posters**

Session 3 Bio materials Chair: Prof. Hadas Mamane, Tel Aviv University

15:30 **How to follow or regulated bi-potential mesenchymal cell fate?**

Prof. Dafna Benayahu, Tel Aviv University

15:50 **Treatment of hospital wastewater using hybrid MBR-modified AOP technology**

Prof. Hadas Mamane, Tel Aviv University

16:10 **Muoadhesive drug delivery carriers**

Prof. Havazelet Bianco-Peled , Technion

Auditorium 2

Session 4 Medical Devices Chair: Prof. Avi Domb, Hebrew University of Jerusalem

11:00 **Development of portable and laboratory tools for improving the manual
skills and performance of undergraduate dental students**

Prof. Tamar Brosh, Tel Aviv University

11:20 **Biodegradable disposable medical syringes and tubes**

Prof. Avi Domb, Hebrew University of Jerusalem

11:40 **The Impact of Delay Announcements on Hospital Network Coordination
and Waiting Times**

Dr. Galit Yom Tov, Technion

12:00 **Endovascular Electrodes for Electrical Stimulation of Blood Vessels
for Vasoconstriction**

Dr. Yossi Mandel, Bar-Ilan University

12:20 **Investigation of Multimodal Imaging Methods of Nanoparticles for Early
Detection of Cancer**

Prof. Haim Azari, Technion

12:40 **Ferritin nanocage engineering via magnetotactic bacteria proteins toward in
vivo auto-produced MRI contrast agent**

Prof. Raz Zarivach, Ben Gurion University of the Negev

13:00-14:00 **Lunch + Posters**

Session 5 Medical Devices Chair: Prof. Michael Margalio, Tel Aviv University

14:00 **A Generic Platform for Optimized Expression of Bio-Engineered Genes
in Micro-Algae**

Prof. Tamir Tuller, Tel Aviv University

14:20 **The Ribosome Flow Model: Theory and Applications**

Prof. Michael Margalio, Tel Aviv University

14:40 **Visible Bioorganic Nanodots**

Prof. Gil Rosenman, Tel Aviv University

15:00-15:30 **Coffee break + Posters**

Session 6 Medical Devices Chair: Prof. Avishay Eyal, Tel Aviv University

15:30 **Multiplexing of fiber-optic ultrasound sensors via optical frequency
domain reflectometry (OFDR)**

Prof. Avishay Eyal, Tel Aviv University

15:50 **Small, sensitive, portable – towards next-generation arrayed biosensors**

Prof. Levi Gheber, Ben Gurion University of the Negev

16:10 **Optical Microfiber Biosensor Enhanced with Photothermal Interferometric
Imaging of Plasmonic Nanoparticles**

Prof. Natan Tzvi Shaked, Tel Aviv University

Auditorium 3

Session 7 Robotics Chair: Prof. Zvi Shiller , Ariel University

11:00 **High-Speed Autonomous Robot Navigation in Dynamic Urban Environments**

Prof. Zvi Shiller , Ariel University

11:20 **Bio Sensory (Vision + Sonar) inspired for Robot localization and mapping**

Prof. Hedva Spitzer, Tel Aviv University

11:40 **Development of novel topologies of parallel robots and characterization of
their singular configurations**

Prof. Yoram Reich, Tel Aviv University

12:00 **Decentralized Multi-Robot Belief Space Planning in Unknown Environments
via Identification and Efficient Re-Evaluation of Impacted Paths**

Prof. Vadim Indelman, Technion

12:20 **Our Eyes Beneath The Sea – a Holistic AUV Based Framework for Visual
Seafloor Surveys – the Platform**

Prof. Morel Groper, Haifa University

12:40 **Follow me.... Proxemics and responsiveness for following tasks in adaptive
assistive robotics**

Prof. Tal Oron-Gilad, Ben Gurion University of the Negev

13:00-14:00 **Lunch + Posters**

Session 8 Mechanical eng Chair: Prof. Lev Shemer, Tel Aviv University

14:00 **Wet Power: harnessing energy from evaporation**

Prof. Yehuda Agnon, Technion

14:20 **SPATIAL EVOLUTION OF AN INITIALLY NARROW-BANDED WAVE TRAIN:
Relation to appearance of rogue waves**

Prof. Lev Shemer, Tel Aviv University

14:40 **Modeling and control of near-field acoustically levitated and transported objects**

Prof. Izhak Bucher, Technion

15:00-15:30 **Coffee break + Posters**

Session 9 Mechanical eng Chair: Prof. Haim Abramovich, Technion

15:30 **Aluminum-Water Green Propellant for On Board Propulsion Systems**

Dr. Yavor Yinon, Technion

15:50 **Additive manufacturing of metallic parts with improved physical and
mechanical properties for applications under severe conditions**

Prof. Haim Abramovich, Technion

16:10 **A novel soil remediation based on a combination of a recycled extraction
solution and Liquid-Liquid Critical Solution Mixtures**

Dr. Zvi Ludmer , Hebrew University

*There may be changes later

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