

PROGRAM

Wednesday, June 20, 2018

08:15 - 09:15	Registration, Light Refreshments, Vendors Exhibition & Posters Mounting		
09:15 - 09:35	OPENING SESSION		Hall A
	Session Chair: Amit Kohn , ISM Chairperson Opening Remarks: Prof. Yossi Rosenwaks , Dean of the Faculty of Engineering, Tel Aviv University Presentation of the Lev Margulis Prize to Mr. Elias Nehme , Technion - Israel Institute of Technology		
09:35 - 10:20	PLENARY LECTURE I		Hall A
	Session Chair: Yuval Garini , Bar-Ilan University Invited Stefan Diez , Dresden Technical University, Dresden, Germany 3D-OPTICAL NANOMETRY FOR AND WITH BIOMOLECULAR MOTOR SYSTEMS		
10:20 - 10:50	Coffee Break and Vendors Exhibition		
10:50 - 11:35	PLENARY LECTURE II		Hall A
	Session Chair: Yaron Kauffmann , Technion - Israel Institute of Technology Invited Frances M. Ross , Thomas J. Watson Research Center, Yorktown Heights, NY, USA IMAGING AND CONTROLLING THE GROWTH OF NANOSTRUCTURES IN THE TRANSMISSION ELECTRON MICROSCOPE		
11:35 - 12:15	SPECIAL SESSION on CRYO-EM – 2017 Nobel Prize for Chemistry		Hall A
	Session Chair: Martin Kessel , The Hebrew University of Jerusalem and the National Cancer Institute, NIH, USA		
11:35 - 11:55	Nadav Elad , Weizmann Institute of Science, Rehovot, Israel SINGLE PARTICLE CRYO-EM OF BIOLOGICAL MACROMOLECULES		
11:55 - 12:15	Gabriel A. Frank , Ben-Gurion University of the Negev, Beer-Sheva Israel CRYO ELECTRON MICROSCOPY - A BRIDGE BETWEEN STRUCTURE AND FUNCTION		
12:15 - 13:15	LUNCH SESSION		
	Life Sciences Posters (P-1 – P-26) Materials Science Posters (P-27 – P-44) Micrographs Competition (P-45 – P-49) Vendors Exhibition	ISM GENERAL ASSEMBLY	Hall A
13:00 - 14:10	Lunch and Vendors Exhibition		
14:10 - 15:45	PARALLEL SESSIONS I		
	Life Sciences	Hall A	Materials Science Hall B
15:45 - 16:15	Coffee Break and Vendors Exhibition		
16:15 - 18:10	PARALLEL SESSIONS II		
	Life Sciences	Hall A	Materials Science Hall B
18:10 - 18:30	CLOSING SESSION		
	Session Chair: Amit Kohn , ISM Chairperson Closing Remarks - Best Poster and Best Micrograph Prizes		

PARALLEL SESSIONS I

14:10-15:45 Life Sciences		14:10-15:45 Materials Science	
Hall A		Hall B	
Session Chair: Eyal Shimoni , Weizmann Institute of Science		Session Chair: Lothar Houben , Weizmann Institute of Science	
14:10 - 14:35	<div style="background-color: #008000; color: white; padding: 2px; display: inline-block;">Invited</div> Shelly Tzliil , Technion - Israel Institute of Technology, Haifa, Israel MECHANICAL COMMUNICATION IN CARDIAC CELL BEATING	14:10 - 14:35	<div style="background-color: #008000; color: white; padding: 2px; display: inline-block;">Invited</div> Lewys Jones , Trinity College Dublin, Dublin, Ireland MINIMISING DOSE(-RATE) IN THE STEM WHILE MAXIMISING INFORMATION CONTENT
14:35 - 14:50	Yair Razvag , The Hebrew University of Jerusalem, Israel FORCES ACTING AT THE INTERFACE OF T-CELLS AND APCs AND DRIVE T CELL ACTIVATION	14:35 - 14:50	Maya Barzilay , Technion - Israel Institute of Technology, Haifa, Israel ATOMIC-STRUCTURE REORGANIZATION AT THE SURFACE OF BaTiO₃ NANOPARTICLES
14:50 - 15:05	Omer Wagner , Bar-Ilan University, Ramat-Gan, Israel MINIMALLY INVASIVE MICRO-ENDOSCOPY FOR BIOMEDICAL IMAGING IN HIGHLY SCATTERING MEDIA	14:50 - 15:05	Yariv Drezner , Intel Israel, Haifa, Israel CHARACTERIZATION OF MATERIAL INTERACTION AND COMPOSITIONAL ANALYSIS OF NANOMACHINING AND NANODEPOSITION USING A Cs⁺ FOCUSED ION BEAM – A SOURCE TECHNOLOGY CANDIDATE FOR FUTURE CIRCUIT EDIT PLATFORMS
15:05 - 15:20	Adi Biram , Weizmann Institute of Science, Rehovot, Israel B CELL CLONAL SELECTION IN RESPONSE TO ORAL VACCINATION	15:05 - 15:20	Gili Yaniv , Ben-Gurion University of the Negev, Beer-Sheva, Israel INVESTIGATION OF THE STRUCTURE OF A NEW ND-RE-AL PHASE USING ELECTRON CRYSTALLOGRAPHY METHODS
15:20 - 15:45	<div style="background-color: #008000; color: white; padding: 2px; display: inline-block;">Invited</div> Amnon Buxboim , The Hebrew University of Jerusalem, Israel EVALUATING THE DEVELOPMENTAL POTENTIAL OF OOCYTES AND PREIMPLANTATION EMBRYOS BASED ON MECHANICAL AND MACHINE LEARNING TOOLS	15:20 - 15:45	<div style="background-color: #008000; color: white; padding: 2px; display: inline-block;">Invited</div> Gary Hodes , Weizmann Institute of Science, Rehovot, Israel ELECTRON BEAM-INDUCED CURRENT ELUCIDATES PHOTOVOLTAIC MECHANISMS IN HALIDE PEROVSKITE SOLAR CELLS
15:45 - 16:15	Coffee Break and Vendors Exhibition		

PARALLEL SESSIONS II

16:15-18:10 Life Sciences		Hall A	16:15-18:05 Materials Science		Hall B
Session Chair : Levi Gheber , Ben-Gurion University of the Negev			Session Chair : Zahava Barkay , Tel Aviv University		
16:15 - 16:35	<div style="background-color: #008000; color: white; padding: 2px; display: inline-block; font-size: small;">Margulis</div> Elias Nehme , Technion - Israel Institute of Technology, Haifa, Israel DEEP-STORM: SUPER RESOLUTION SINGLE MOLECULE MICROSCOPY BY DEEP LEARNING		16:15 - 16:40	<div style="background-color: #0056b3; color: white; padding: 2px; display: inline-block; font-size: small;">Invited</div> Alexander Eggeman , University of Manchester, Manchester, UK STATISTICAL METHODS AND MACHINE LEARNING OF DIFFRACTION DATA FOR MICROSTRUCTURE ANALYSIS	
16:35 - 17:00	<div style="background-color: #008000; color: white; padding: 2px; display: inline-block; font-size: small;">Invited</div> Yaron Shav-Tal , Bar-Ilan University, Ramat Gan, Israel CHARACTERIZING MRNA EXPORT AT HIGH RESOLUTION IN INDIVIDUAL NUCLEAR PORES IN SINGLE CELLS		16:40 - 16:55	Olga Kleinerman , Technion - Israel Institute of Technology, Haifa, Israel DIRECT IMAGING OF CARBON NANOTUBES IN SUPER-ACID SOLUTIONS AND LIQUID CRYSTALLINE PHASES	
17:00 - 17:15	Ron Brand , Ben-Gurion University of the Negev, Beer Sheva, Israel SPONTANEOUS BUCKLING OF CONTRACTILE POROELASTIC ACTOMYOSIN SHEETS		16:55 - 17:10	Matan Dascalu , Tel Aviv University, Tel-Aviv, Israel SUPER-FERROMAGNETISM OF IRON DISILICIDE NANO-ISLANDS	
17:15 - 17:30	Sergey Kapishnikov , Niels Bohr Institute - University of Copenhagen, Copenhagen, Denmark CORRELATIVE CRYO X-RAY MICROSCOPY SHEDS LIGHT ON HEME DETOXIFICATION AND THE MECHANISM OF DRUG ACTION IN THE MALARIA PARASITE PLASMODIUM FALCIPARUM		17:10 - 17:25	Yael Tsarfati , The Weizmann Institute of Science, Rehovot, Israel IMAGING ORGANIC CRYSTALLIZATION IN AQUEOUS MEDIA	
17:30 - 17:45	Zipora Lansky , Weizmann Institute of Science, Rehovot, Israel CRYO-SCANNING TRANSMISSION ELECTRON TOMOGRAPHY REVEALS THE EXTRACELLULAR MATRIX AGAINST ORGANELLE ULTRASTRUCTURE		17:25 - 17:40	Kangpeng Wang , Technion - Israel Institute of Technology, Haifa, Israel PHOTON-INDUCED FAR-FIELD AND NEAR-FIELD ELECTRON MICROSCOPY	
17:45 - 18:10	<div style="background-color: #008000; color: white; padding: 2px; display: inline-block; font-size: small;">Invited</div> Dan Oron , Weizmann Institute of Science, Rehovot, Israel QUANTUM ENHANCED SUPERRESOLUTION MICROSCOPY		17:40 - 18:05	<div style="background-color: #0056b3; color: white; padding: 2px; display: inline-block; font-size: small;">Invited</div> Ady Arie , Tel Aviv University, Tel Aviv, Israel ABERRATION CORRECTION IN TRANSMISSION ELECTRON MICROSCOPES USING SCULPTED MEMBRANES	