August 24-25th, 2022 | 8:30-17:30 | Auditorium in Building 6
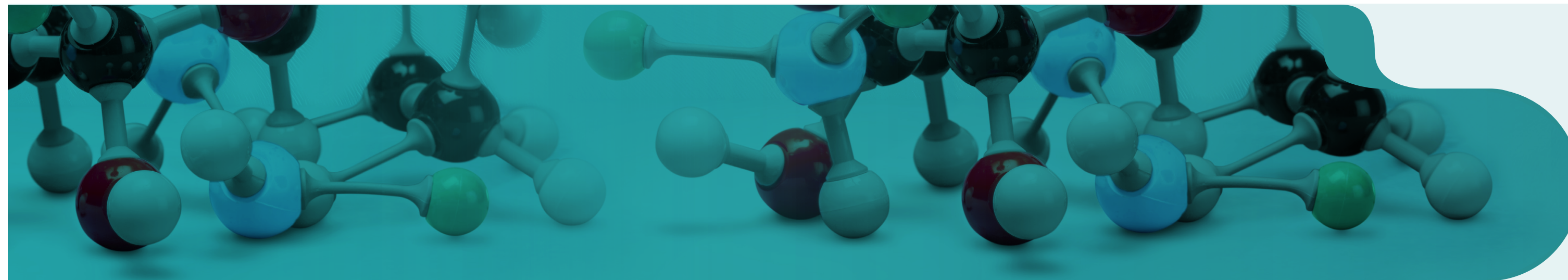
PROGRAM | Wednesday 24.8.2022

Time	Session / Details
08:30-09:30	**Registration & Refreshments**
09:30-09:50	**Opening Session** **Chair: Prof. Reshef Tenne** - Weizmann Institute of Science, Israel. **Greetings:** **Prof. Eduard Yakubov** – HIT President **Prof. Shaul Bar Lev** – HIT Rector **Prof. Ezra Zeheb** – Dean, Faculty of Sciences, HIT **Prof. Yosef Ben Ezra** – Dean, Faculty of Electric and Electronics Engineering, HIT
	Session 1 **Chair: Boris Fainberg**
09:50-10:35	**Plenary Speaker: Prof. Giulio Cerullo** Politecnico di Milano, Italy. ***Ultrafast Dynamics of Two-Dimensional Materials***
	Session 2 **Polaritonics and Topological Plasmonics** **Chair: Lena Yadgarov**
10:35-11:10	**Keynote Speaker: Prof. Tal Schwartz** Tel-Aviv University, Israel. ***Molecules in a Quantum-Optical Flask***
11:10-11:35	Coffee Break; Exhibition and Posters Viewing
11:35-12:05	**Invited Speaker: Dr. Yuri Gorodetski** Ariel University, Israel. ***Topological Effects in Plasmonic Metasurfaces***

Time	Session / Details
	Session 3 **Spintronics and Photonics** **Chair: Yuri Gorodetski**
12:05-12:40	**Keynote Speaker: Prof. Yossi Paltiel** The Hebrew University of Jerusalem, Israel. ***Enabling Efficient Green Energy and Pure Drugs by Manipulating the Electron Spin***
12:40-13:10	**Invited Speaker: Dr. Lena Yadgarov** Ariel University, Israel. ***Dynamical Nature of Exciton-Polariton Coupling in WS_2 Nanoparticles***
13:10-14:10	Lunch; Exhibition and Posters Viewing
	Session 4 **Emergent Tools for Nanomaterials & Nanotechnology I** **Chair: Alex Laikhtman**
14:10-14:45	**Keynote Speaker: Prof. Antonio Di Bartolomeo** University of Salerno, Italy. ***2D Materials in Back-Gate Field-Effect Devices***
14:45-15:15	**Invited Speaker: Prof. Yaron Paz** Technion, Israel. ***Transient Infrared Spectroscopy as a Tool for Studying Photoactive Materials***
15:15-15:45	**Invited Speaker: Dr. Ivan Bykov** NT-MDT Spectrum Instruments. ***Novel AFM-Based Methods for Complex Analysis of Nanomaterials***
15:45-16:05	Coffee Break; Exhibition and Posters Viewing

Time	Session / Details
	Session 5 **Emergent Tools for Nanomaterials & Nanotechnology II** **Chair: Zdenek Sofer**
16:05-16:35	**Invited Speaker: Dr. Sidney R. Cohen** Weizmann Institute of Science, Israel. ***Remarkable Properties of Pb-Based Halide Perovskites Revealed by Nanotools***
16:35-17:05	**Invited Speaker: Dr. Alex Axelevitch** Holon Institute of Technology (HIT), Israel. ***Characterization of Wide Bandgap Semiconductor Thin Films by the Dynamical Hot-Probe Method***

NANOTECHNOLOGY FROM ACADEMIA TO INDUSTRY

NT-MDT Spectrum Instruments

HIT מכון טכנולוגי חולון — Holon Institute of Technology — *More than 50 Years*
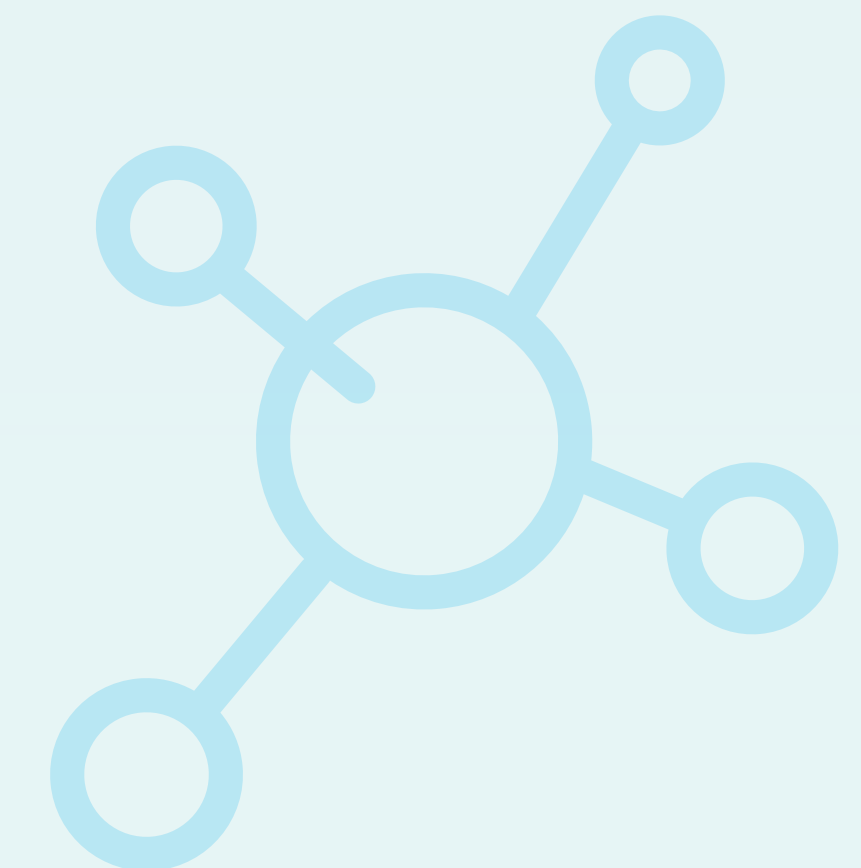
August 24-25th, 2022 | 8:30-17:30 | Auditorium in Building 6

PROGRAM | Thursday 25.8.2022

Time	
08:30-09:30	**Registration & Refreshments**
9:30-10:15	**Session 6** **Chair: Julio A. Alonso**
	Plenary Speaker: Prof. Yuval Garini Technion, Israel. *DNA Origami & Single-Molecule Techniques for Biomedical Applications*
	Session 7 **Bionanotech & Nanomedicine** **Chair: Amos Bardea**
10:15-10:50	**Keynote Speaker: Prof. Ofra Benny** The Hebrew University of Jerusalem, Israel. *Nanomedicine and Smart Materials for Drug Delivery and Cancer Diagnostics*
10:50-11:20	Coffee Break; Exhibition and Posters Viewing
11:20-11:50	**Invited Speaker: Mr. Aryeh Batt** Precise Bio, Israel. *4D Bio Printing - from Theory to the Clinic*
11:50-12:20	**Invited Speaker: Prof. Amnon Bar-Shir** Weizmann Institute of Science, Israel. *In-Situ NMR Reveals Inorganic Nanocrystal Growth Mechanisms towards their Development as Functional Materials*

Time	
12:20-13:10	**Poster Session** **Chair: Alla Zak** Flash (3 minutes / 2 slides) Power Point presentations
13:10-14:10	Lunch; Exhibition Viewing
	Session 8 **Energy Conversion & Storage Materials** **Chair: Ofra Benny**
14:10-14:45	**Keynote Speaker: Prof. Julio A. Alonso** University of Valladolid, Spain. *Adsorption and Storage of Hydrogen in Porous and Layered Materials*
14:45-15:15	**Invited Speaker: Dr. Ehud Galun** Ministry of Defense, Israel. *3D Printing from Nano to Advanced Manufacturing*
15:15-15:45	**Invited Speaker: Prof. Zdenek Sofer** University of Chemistry and Technology of Prague, Czech Republic. *2D Materials in Electrocatalysis and Photo-Electrocatalysis*
15:45-16:00	**Closing Session** **Chair: Prof. Reshef Tenne**
	Poster Prize Awards Conference Closing