



THE HEBREW UNIVERSITY OF JERUSALEM
ISRAEL INSTITUTE FOR ADVANCED STUDIES

Nanoscience and Nanotechnology at Interfaces (NaNaInt)

April 3-5, 2017

All lectures will take place at the Israel Institute for Advanced Studies,
on the Edmond J. Safra, Givat Ram Campus

Organizers:

Ehud Gazit (Tel Aviv University)

Raz Jelinek (Ben-Gurion University of the Negev)

Daniel Mandler (The Hebrew University of Jerusalem)

Program

Monday, 3 April

- 08:00 - 08:30 Registration
- 08:30 - 08:40 Opening Remarks
- 08:40 - 09:25 **Tuomas Knowles** (University of Cambridge)
- 09:25 - 10:10 **Alvaro Mata** (Queen Mary University of London)
Engineering biomaterial complexity by modulating
supramolecular interfaces
- 10:10 - 10:55 **Efrat Lifshitz** (Technion, Israel Institute of
Technology)
Magneto-optical properties of colloidal quantum
dots
- 10:55 - 11:20 Coffee Break
- 11:20 - 12:05 **Samuel I. Stupp** (Northwestern University)
Chemical and Biological Functions in Soft
Nanostructures
- 12:05 - 12:50 **Yael Hanein** (Tel Aviv University)
Nano Interfaces for Brain-Machine Technologies
- 12:50 - 14:15 Lunch
- 14:15 - 15:00 **Yamuna Krishnan** (University of Chicago)
Designer DNA nanocapsules for live imaging
- 15:00 - 15:45 **Juyoung Yoon** (Ehwa University)
Fluorescent probes from small molecules to nano
systems for detection and theranostics
- 15:45 - 16:30 **Luisa De Cola** (Strasbourg University)
Test

- 16:30 - 17:00 Coffee Break
- 17:00 - 17:45 **Daniel Mandler** (The Hebrew University of Jerusalem)
From Nano to Nano: A New Approach for the Formation of Thin Films of Nanomaterials
- 17:45 - 18:30 **Electra Gizeli** (IMBB Forth)
Acoustic waves for biosensing and molecular diagnostics
- 18:30 - 20:30 Reception

Tuesday, 4 April

- 08:45 - 09:30 **Bai Yang** (Jilin University)
The Preparation and Fluorescence Mechanism of Polymer Carbon Dots
- 09:30 - 10:15 **Adi Salomon** (Bar-Ilan University)
3D metallic networks – A new class of Materials
- 10:15 - 11:00 **Uri Banin** (The Hebrew University of Jerusalem)
Surface matters: Interface effects on optoelectronic behavior of semiconductor nanocrystals and hybrid semiconductor-metal nanoparticles
- 11:00 - 11:30 Coffee Break
- 11:30 - 12:15 **Tanja Weil** (Universität Ulm)
- 12:15 - 13:00 **Raz Jelinek** (Ben-Gurion University of the Negev)
interfaces and adventures in the carbon nanoworld
- 13:00 - 14:00 Lunch
- 14:00 - 14:45 **Raffaele Mezzenga** (Eidgenössische Technische Hochschule Zürich (ETH))
Amyloid Fibrils @ Liquid-Air, Liquid-Liquid and Liquid-Solid Interfaces

- 14:45 - 15:30 **Ernesto Joselevich** (Weizmann Institute of Science)
Shaping Nanotubes and Nanowires with Surfaces
- 15:30 - 16:00 Coffee Break
- 16:00 - 16:45 **Junbai Li** (Chinese Academy of Sciences, Najing)
Interfacial Assembly of Photosystem II Integrated in Multilayer Films with Enhanced Photocurrent
- 16:45 - 17:30 **Ehud Gazit** (Tel Aviv University)
Interaction and mimicking membranes by molecular self-assembly
- 17:30 - 18:15 **Nurit Ashkenasy** (Ben-Gurion University of the Negev)
peptide tailored functional surfaces
- 19:00 - 22:00 Speakers Dinner

Wednesday, 5 April

- 08:30 - 09:15 **Lihi Adler-Abromovich** (Tel Aviv University)
Controlling Nanomaterials Physical Properties by Supramolecular Polymer Co-assembly
- 09:15 - 10:00 **Martin Pumera** (Nanyang Technological University, Singapore)
2D Materials for Electrochemical Sensing
- 10:00 - 10:45 **Junjie Zhu** (NanJing University)
Gold and CuS nanoparticles as Multifunctional Theranostics Platform for Imaging and Therapy
- 10:45 - 11:15 Coffee Break

- 11:15 - 12:00 **Meital Reches** (The Hebrew University of Jerusalem)
Interactions between Peptides and Inorganic Matter: Design of Simple Functional Coatings
- 12:00 - 12:45 **Sharon Marx** (Israel Institute for Biological Research, Ness Tziona)
Application of nanomaterials for chemical sensor array: prototype of a wearable sensor for first responders
- 12:45 - 13:00 Concluding Remarks
- 13:30 - 18:00 Jerusalem Tour