The Taiwan-Israel Binational Meeting

Dynamics on Many Length (and Time) Scales: From Elementary Chemical Processes to Nano and Surface Functionalities

Sponsored by:

The Israel Academy of Sciences and Humanities
Academia Sinica
The Center for Nanoscience and Nanotechnology, the Hebrew University
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The Fritz Haber Research Center for Molecular Dynamics, the Hebrew University
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The Helen and Martin Kimmel Center for Nanoscale Science, the Weizmann Institute
The Bar Ilan Center for Nanotechnology and Advanced Materials
The Center for Nanoscience and Nanotechnology at Tel Aviv University
The Taiwan-Israel Binational Meeting

**Dynamics on Many Length (and Time) Scales: From Elementary Chemical Processes to Nano and Surface Functionalities**

March 13 09:00 **Opening**

Welcoming remarks: Joshua Jortner and Raphael D. Levine

March 13, morning: **Elementary Chemical Processes**

09:10-09:40
Kopin Liu
Institute of Atomic and Molecular Sciences, Academia Sinica
“From Product Pair Correlation to Mode-specific Reactivity”

09:40-10:10
Salman (Zamik) Rosenwaks
Department of Physics, Ben-Gurion University
“Controlling bond cleavage via vibrationally mediated photodissociation (VMP): How far can we go?”

10:10-10:40
Jim J. – M. Lin
Institute of Atomic and Molecular Sciences, Academia Sinica
“Dynamics of Reaction between Two Stable Molecules: A Crossed Molecular Beam Study”

10:40-11:10 **Coffee break**

Chair: Robert Gerber
Institute of Chemistry, The Hebrew University

11:20-11:50
Izhack Oref
Department of Chemistry, Technion - Israel Institute of Technology
“Energy Transfer between Azulene and Argon- Experimentally motivated Computation”

11:50-12:20
Chi-Kung Ni
Institute of Atomic and Molecular Sciences, Academia Sinica
“Energy Transfer of Highly Vibrationally Excited Molecules Studied by Crossed-Beam Time-sliced Velocity Map Ion Imaging”

12:20-12:50
Uzi Even
Department of Chemistry, Tel Aviv University
"Slow Supersonic Beams"
March 13, 12:50-15:00 buffet lunch and Poster session

March 13, afternoon: Bridges

Chair: Itamar Procaccia
The Weizmann Institute of Science

15:10-15:40
Sheng-Hsien Lin
Institute of Atomic and Molecular Sciences, Academia Sinica
“Ultrafast Electron Transfer in Dye-sensitized Organic Solar Cells”

15:40-16:10
Itamar Willner
Institute of Chemistry, The Hebrew University
“Molecular and Macromolecular Motors”

16:10-16:40 Coffee break

Chair: Shammai Speiser
Department of Chemistry, Technion - Israel Institute of Technology

16:50-17:20
Ron Naaman
The Weizmann Institute of Science
"Cooperative Molecular Field Effect-Surprising electric and magnetic properties of monolayers"
17:20-17:50
Yu-Tai Tao
Institute of Chemistry, Academia Sinica
“Tuning of Surface Structure and Property for Organic Electronic Applications”
17:50-18:20
David Cahen
Department of Materials and Interfaces, The Weizmann Institute
“Electronic Transport through Molecular Monolayers: Is there a molecular signature?”
March 14: **Nano and Surface Functionalities**
Chair: Reshef Tenne
Department of Materials and Interfaces, The Weizmann Institute of Science

09:10-09:40
Maw-Kuen Wu
Institute of Physics, Academia Sinica
“Overview of the Taiwan National Program on Nano Science & Nanotechnology”

09:50-10:20
Ting-Kuo Lee
Institute of Physics, Academia Sinica
“Academia Sinica Program on Nano Science and Technology”

10:20-10:50 **Coffee break**

Chair: Efrat Lifshitz
Department of Chemistry, Bar-Ilan University

11:00-11:30
Oded Millo
Racah Institute of Physics, The Hebrew university of Jerusalem
“Proximity Effects Studied by STM”

11:30-12:00
Yia-Chung Chang
Research Center for Applied Sciences, Academia Sinica
“Optical Nanometrology”

12:00-12:30
Yossi Rosenwaks
Department of Electrical Engineering, Tel Aviv University
"Kelvin Probe Force Microscopy: From Single Dopants to Large Proteins"

March 14, 12:30-14:30 buffet lunch and **Poster session**
Chair: Chaim Sukenik  
Department of Chemistry, Technion - Israel Institute of Technology

14:40-15:10  
Yuh-Lin Wang  
Institute of Atomic and Molecular Sciences, Academia Sinica  
“Creating Monodispersed Ordered Arrays of Surface-Magic-Clusters and Anodic Alumia Nanochannels by Constrained Self-organization”

15:10-15:40  
Nir Tessler  
Department of Electrical Engineering, Technion - Israel Institute of Technology  
"Electrical Engineering Perspective of Material Development"

15:40-16:00  
Arie Zaban  
Department of Chemistry, Bar-Ilan University  
"Organic/inorganic modification of the electronic properties of nanosize TiO2 for solar cell applications"

16:00-16:30  
Kuei-Hsien Chen  
Institute of Atomic and Molecular Sciences, Academia Sinica  
“CNTs for Energy Applications”

16:30-17:00  
Uri Banin  
Institute of Chemistry, The Hebrew university of Jerusalem  
"Hybrid metal-semiconductor nanoparticles: a new type of functional materials"

17:00-17:30 Coffee break
March 14, 2007
5:30 PM
Chair: Prof. I. Willner
Institute of Chemistry, The Hebrew University,

“Perspectives in Chemical and Biochemical Dynamics”

Prof. Chi-Huey Wong
President, Academia Sinica
“Tackling the Problems of Carbohydrate-mediated Biological Recognition”

Prof. Joshua Jortner
President Emeritus, Israel Academy of Sciences and Humanities

March 14, 2007
8:00 PM
Prof. M. Yaari, President Israel Academy of Sciences and Humanities, Chair

The 2007 Einstein Lecture
Prof. Yuan-T. Lee
President Emeritus, Academia Sinica
“Energy, Environment, and the Responsibility of Scientists”

Reception at the Academy 7:00 PM