



האקדמיה הלאומית הישראלית למדעים
THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES

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

The Authority for Research and Development, the Hebrew University

The Fritz Haber Research Center for Molecular Dynamics, the Hebrew University

Russell Berrie Nanotechnology Institute, Technion, Israel Institute of Technology

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



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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”



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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?”



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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**



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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 Alumina 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



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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



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