4:40 PM Stefan Diez,* Cerasela Dinu, Cordula Reuther, Ralf Seidel, Joerg Optiz, Michael Mertig, Wolfgang Pompe, Joe Howard Manipulating DNA Molecules in Synthetic Environments by Motor Proteins & Microtubules 5:00 PM Mahsa Rouhanizadeh*, Tao Tang, Chao Li, Gopikrishnan Soundararajan, Chongwu Zhou, and Tzung K. Hsiai Applying Indium Oxide Nanowires as Sensitive and Specific Redox Protein Sensors 6:30 PM Foresight Institute Feynman Prize Banquet Junior Ballroom 9:00 PM Student Network Event Santa Clara Room Ralph Merkle roundtable with students

Sunday, October 12

Section 0	James Spencer, Session Chair Grand Ballroom E						
	•						
8:00 AM	Continental Breakfast						
9:00 AM	,						
9:30 AM	Keynote: Feynman Prize Winner (Experimental)						
10:00 AM	Luc Jaeger* and Arkadiusz Chworos						
	How to Play LEGO with RNA: Design of RNA Cellular						
	Automata						
10:20 AM	Yanhong Hu, Susan Sinnott*						
	Nanometer-Scale Engineering of Composites						
11:00 AM	Break						
Session 1	Chris Gorman, Session Chair Grand Ballroom E						
11:20 AM	Richard T. Pomerantz*, Michael Anikin, Jordanka Zlatanova,						
11.20 AIVI	William T. McAllister						
	RNA Polymerase as an Information-Dependent Molecular Motor						
11 40 43 4	nieteetten niete						
11:40 AM							
Chiatzun Goh							
	Infiltrating Semiconducting Polymers Into Self-Assembled						
	Mesoporous Titania To Make Photovoltaic Cells						
12:00 PM	Jun Huang*, Weixing Lu, Hsian-Rong Tseng, Branden						
	Brough, Amar Flood, Bi-Dan Yu, J. Fraser Stoddart,						
	Chih-Ming Ho						
	Molecular Shuttle Switching in Closely Packed						
	Langmuir Films						
12:20	James Spencer—Closing remarks						
12:30	Box Lunch (for those who purchased lunch plan)						

Thank You Corporate Sponsors

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11th Foresight Conference on Molecular Nanotechnology

October 9-12, 2003

San Francisco Airport Marriott

Conference Co-chairs: James T. Spencer, Syracuse University Christopher Gorman, North Carolina State University

Program

Thursday, October 9

7:30 AM	Tutorial Registration	Junior Ballroom Foyer
10:00 AM	Conference Registration opens	Junior Ballroom Foyer
6:00 PM	Conference Registration	Registration Counter
6:30 PM	Welcome Reception	San Ramon
8:30 PM	Registration closes	

Tutorial Schedule October 9

Continental Breakfast Junior Ballroom Foyer Opening Remarks, Hicham Fenniri Junior Ballroom National Institute for Nanotechnology and The University of Alberta					
A Top-Down Look at Bottom Up Electronics Mark S. Lundstrom, Purdue University					
Break/Discussion					
Nanostructured Catalysts Susannah Scott, University of California at Santa Barbara					
Lunch (included) Junior Ballroom Foyer					
Implications of Nanotechnology for Energy and Environmental Remediation Thomas E. Mallouk, Pennsylvania State University					
Break/Discussion					
Self-Assembly Approaches to Nanoscale Materials Steven C. Zimmerman, University of Illinois at Urbana–Champaign					
Break/Discussion					
An Integrated Systems-Oriented Approach to Molecular Electronics Fraser Stoddart, University of California at Los Angeles					
Discussion					
Closing Remarks, Hicham Fenniri					

Foresight president Christine Peterson will recap be testimony at the U.S. House Science Committees he testimony at the U.S. House Science Committees are testimony and not not held on the U.S. House Science Science on the National American and Properties are testimony and the U.S. House Science Science Science of the U.S. House Science Science Science of the U.S. House Science Science Science of the U.S. House Science Science		Friday, October 10		6-9 PM 8-9 PM	Poster Session & Reception Foresight Institute Public Policy Forest	Grand Ballroom F
Session James Spencer, I conference Chair Welcome and Introduction		2 0		0-9 FWI	testimony at the U.S. House Science Committee's hearing	
Section Welcome and Introduction Weynote: Finser Stocklart* Meccano on the NanoScale: A Blueprint for Making Some of the World's Times Machines Mark Lundstrom*, Jing Guo Garbon Nanonbe Electromics: Device Physics, Technology; & Applications Session 2	Session 1	James Spencer, Session Chair	Grand Ballroom E			chnology with
Session Sess	8:50 AM	-				
10:10 AM Mark Lundstrom*, Jing Guo Carbon Namoube Electronics: Device Physics, Technology, & Applications Session 1 Chris Gorman, Session Chair Grand Ballnoom E 11:10 AM Hicham Fennin* Grand Ballnoom E 12:10 PM Indiangle Distriction of Electrically Conductive Bridging Structures Dallnoom E 13:00 PM Poster presenters—Please set-up Ballnoom G-J Session 3 Hicham Fennini, Session Chair Grand Ballnoom E 13:00 PM Poster presenters—Please set-up Ballnoom G-J Session 4 Hicham Fennini, Session Chair Grand Ballnoom E 13:00 PM Poster presenters—Please set-up Ballnoom G-J Session 5 Hicham Fennini, Session Chair Grand Ballnoom E 13:00 PM Poster presenters—Please set-up Ballnoom G-J Session 6 Hicham Fennini, Session Chair Grand Ballnoom E 13:00 PM Poster presenters—Please set-up Ballnoom G-J Session 6 Hicham Fennini, Session Chair Grand Ballnoom E 13:00 PM Poster presenters—Please set-up Ballnoom G-J Session 6 Hicham Fennini, Session Chair Grand Ballnoom E 13:00 PM Poster presenters—Proteins 13:00 PM Poster presenters—Please set-up Ballnoom E 13:00 PM Poster presenters—Please set-up Ballnoom E 13:00 PM Poster presenters—Proteins 13:00 PM Poster presenters—Protei	9:00 AM				Saturday, October 11	
10:10 AM Mark Lundstroms*, Jing Guo Carbon Nanotube Electronics: Device Physics, Technology, & Applications Policy Echnology, & Polic			for Making Some of	0	1 On Oni Ohi	G 10 " E
Carbon Nanotube Electronics: Device Physics, Technology, & Applications Self-Assembly of Nanophotonic Materials and Device Structures 10:50 AM Break 10:00 AM JG, Lu*, D.W. Wang, C.J. Otten, and W.E. Buhro Electrical Properties of Boron Nanowires 10:20 AM Sangleing Duan* Semiconductor Nanowires: from Nanoelectronics to Macroelectronics Magnetic Entrepment of Carbon Nanotubes for the Fabrication of Electrically Conductive Bridging Structures Magnetic Entrepment of Carbon Nanotubes for the Fabrication of Electrically Conductive Bridging Structures 10:40 AM Semiconductor Nanowires: from Nanoelectronics to Macroelectronics Mac					•	
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Session 2 Chris Gorman, Session Chair Grand Baltroom E 11:10 AM Hicham Fenniri* Organic Nanotubes with Tunable Dimensions and Properties D.P. Long*, J. L. Lazorcik, and Ranganathan Shashidhar Magnetic Entrapment of Carbon Nanotubes for the Fabrication of Electrically Conductive Bridging Structures Lunch Junior Baltroom District Grand Baltroom E 12:10 PM Poster presenters—Please set-up Baltroom G-J Session 3 Hicham Fenniri, Session Chair Grand Baltroom E 1:40 PM Seth Marder* and Joseph W. Perry Two-Photon Materials Chemistry Photon Materials Chemistry 2:20 PM Thomas Piok, Stefan Gamerith, Christoph Gadermaier, Franz P. Wenzl, Saish Patil, Rivelino Montenegro, Thomas Kietzke, Ullrich Scherf, Katharina Landfester, Dieter Neher, Emil J.W. List* Organic Light Emitting Devices Fabricated from Semiconducting Nanospheres 2:40 PM M. Meyyappan*, Jie Han, Jun Li, and Jing Li Nanostructure Engineered Molecular Electronic Sensors Simon Dunne*, Lasses Nurkkala, Robert Steen Molecular Electronic Devices Based on Oligothiophene Architecture Session 4 Chris Gorman, Session Chair Grand Baltroom E Session 5 Chris Gorman, Session Chair Grand Baltroom E 1:40 PM Marya Lieberman* Molecular Quantum-dot Cellular Automata: Computation without Current 1:20 PM Marya Lieberman* Molecular Quantum-dot Cellular Automata: Computation without Current 1:20 PM Marya Lieberman* Molecular Quantum-dot Cellular Automata: Computation without Current 1:20 PM Marya Lieberman* Molecular Quantum-dot Cellular Automata: Computation without Current 1:20 PM Marya Lieberman* Molecular Grand Baltroom E 1:20 PM Marya Lieberman* Molecular Quantum-dot Cellular Automata: Computation 1:20 PM Marya Lieberman* Molecular Guentum-dot Cellular Automata: Computation 1:20 PM Marya Lieberman* Molecular Guentum-dot Cellular Automata: Computation 1:20 PM Marya Lieberman* Molecular Quantum-dot Cellular Automata: Computation 1:20 PM Marya Lieberman* Molecular Quantum-dot Cellular Automata: Computation 1:20 PM Marya Lieberman* Molecular Quantum-dot Cellular Au	10.50 AM					ais and Device
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Sivaramakrishnan, H. Liao, J. Jasinksi, Z. Liliental-Weber **Ultrahigh Density Data Storage Using Epitaxial** Novel Chemical Strategy to Link Protein to DNA for Directed Molecular Assembly						in to DNA for
Ultrahigh Density Data Storage Using Epitaxial Directed Molecular Assembly Phase-Change Media Diodes 3:20 PM Larry W. McLaughlin*, Kristen M. Stewart			риахии	3·20 PM	2	wart
4:40 PM Robert A. Kaindl*, Daniel Haegele, Marc A. Carnahan, Synthesis and Self-Assembly of Metal-Centered DNA	4:40 PM	8		J.20 1 IVI	-	
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5.00 TWT Tailct. Venture Capital for Natione Children	5:00 PM		gy			Grand Ballroom E
Panel Chair: Ed Niehaus. 4:00 PM Jan Genzer* Material townships through substrate bound molecular			A 1 XV	4:00 PM		hound molecular
Panelists: Steve Jurvetson, Alan Marty, Alex Wong, Jim Von Ehr Material templating through substrate-bound molecular and macromolecular gradients		•	Alex wong,			ооина тогесшаг