

**Photon-Based Nanoscience & Technology:
From Atomic Level Manipulation to Materials Synthesis
& Nanobiodevice Manufacturing**
September 19-29, 2005
Orford, Québec, Canada

Sunday, September 18, 2005

14:00	<i>Bus Departs Trudeau International Airport *pick-up location TBD</i>
18:00	<i>Bus Departs Trudeau International Airport *pick-up location TBD</i>
17:30 – 21:30	Dinner
22:00	<i>Bus Departs Trudeau International Airport *pick-up location TBD</i>

Monday, September 19, 2005

07:30 – 09:00	Breakfast
09:00 – 09:30	Official Opening
09:30 – 10:30	<i>Photochemistry of Adsorbates: Toward Maskless Nanopatterning Dr. J. C. Polanyi, University of Toronto, Canada</i>
10:30 – 11:00	Introduction of Participants
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>Laser Interactions with Inorganic Materials - I Dr. T. Dickinson, University of Washington, USA</i>
12:15	Lunch and Networking
14:00 – 15:00	<i>Laser and Self-Organized Synthesis of Inorganic Materials Dr. F. Traeger, Kassel University, Germany</i>
15:00 – 16:00	<i>Fundamentals of Nanobiophotonics - I Dr. P. Prasad, University of Buffalo, USA</i>
16:00 – 16:30	Coffee Break
16:30 – 17:30	<i>Processing of Nanoparticles by UV Laser Irradiation in a Field Cage Dr. M. Stuke, Max Planck Institute, Germany</i>
19:00 – 21:00	Reception - I (Nolain A/B Room)

Tuesday, September 20, 2005

07:30 – 09:00	Breakfast
09:00 – 10:00	<i>Laser Interactions with Inorganic Materials – II Dr. T. Dickinson, University of Washington, USA</i>
10:00 – 11:00	<i>Laser Manipulation and Probing of Nanoparticles Dr. F. Traeger, Kassel University, Germany</i>
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>Fundamentals of Nanobiophotonics - II Dr. P. Prasad, University of Buffalo, USA</i>
12:15 – 14:00	Lunch
14:00 – 15:00	Networking

Tuesday, September 20, 2005 (cont'd)	
15:00 – 16:00	<i>Laser-Made and Laser-Driven Nanorobots</i> Dr. M. Stuke, Max Planck Institute, Germany
16:00 – 16:30	Coffee Break
16:30 – 17:30	<i>Fs Laser Processes for Precise Nanostructuring and Nanomachining</i> Dr. K. Sugioka, RIKEN, Japan
17:30 – 18:30	Roundtable Discussion – I
19:00	Dinner
Wednesday, September 21, 2005	
07:30 – 09:00	Breakfast
09:00 – 10:00	<i>Three-Dimensional Micro and Nanochips for Biomedical Applications</i> Dr. K. Sugioka, RIKEN, Japan
10:00 – 11:00	<i>Photonic Approaches to Studying Intermolecular Interactions in Biological Membranes – I</i> Dr. N. Petersen, NRC National Institute of Nanotechnology, Alberta, Canada
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>Optical Methods in Cell Biology and Biophysics: Tweezers, Tracking, and Fluctuation Spectroscopy</i> Dr. M. Elbaum, Weizmann Institute of Science, Israel
12:15 – 14:00	Lunch
14:00 – 15:00	Networking
15:00 – 16:00	<i>Photonic Approaches to Studying Intermolecular Interactions in Biological Membranes – II</i> Dr. N. Petersen, NRC National Institute of Nanotechnology, Alberta, Canada
16:00 – 16:30	Coffee Break
16:30 – 17:30	<i>Biophotonics and Nanobiophotonics for Treatment, Diagnosis and Research in Oncology - I</i> Dr. B. Wilson, Ontario Cancer Institute, Canada
17:30 – 19:00	Poster Session – I (Nolain B)
19:00	Dinner
Thursday, September 22, 2005	
07:30 – 09:00	Breakfast
09:00 – 10:00	<i>Photophysical Processes that Activate Selective Changes in Photostructurable Glass Ceramic Material Properties</i> Dr. H. Helvajian, Space Materials Laboratory, The Aerospace Corporation, LA, California, USA
10:00 – 11:00	<i>The Nuclear Pore: Analytical Chemist and Thermodynamic Engine in the Cell</i> Dr. M. Elbaum, Weizmann Institute of Science, Israel
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>Photonic Approaches to Studying Intermolecular Interactions in Biological Membranes – III</i> Dr. N. Petersen, NRC National Institute of Nanotechnology, Alberta, Canada
12:15 – 14:00	Lunch
14:00 – 15:00	Networking
15:00 – 16:00	<i>Biophotonics and Nanobiophotonics for Treatment, Diagnosis and Research in Oncology- II</i> Dr. B. Wilson, Ontario Cancer Institute, Canada
16:00 – 16:30	Coffee Break
16:30 – 17:30	Roundtable Discussion – II
19:00	Dinner

Friday, September 23, 2005 – A Day to Explore Québec, Canada	
07:00 – 10:30	Breakfast
08:00	<i>Bus Departs for Quebec (optional)</i> <i>*must register in advance with Vitesse</i>
10:30 – 12:15	Interest Group Meetings and Networking
12:15 – 14:00	Lunch
14:00 – 19:30	Interest Group Meetings and Networking
16:30	<i>Bus Departs for Auberge Estrimont</i>
19:30	Dinner
Saturday, September 24, 2005	
07:30 – 09:00	Breakfast
09:00 – 10:00	<i>Optical, Electronic and Biomedical Applications of CVD Diamond Films</i> Dr. V. Konov, General Physics Institute, Russia
10:00 – 11:00	<i>Presentations by Participants – I</i>
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>Presentations by Participants – II</i>
12:15 – 14:00	Lunch and Networking
14:00 – 15:00	<i>Photostructurable Glass-Ceramic Materials and Variable Dose Direct-Write Laser Patterning: The Development of Space Satellites in Glass-Ceramic Materials</i> Dr. H. Helvajian, Space Materials Laboratory, The Aerospace Corporation, LA, California, USA
15:00 – 16:00	<i>Laser Synthesis of Solid Nanoclusters</i> Dr. W. Marine, University of Marseille, France
16:00 – 16:30	Coffee Break
16:30 – 17:30	<i>Attosecond Science</i> Dr. A. Bandrauk, Université de Sherbrooke, QC, Canada
17:30 – 18:30	<i>Laser-Based Synthesis, Diagnostics, and Control of Single-Walled Carbon Nanotubes and Nanohorns for Composites and Biological Nanovectors</i> Dr. D. B. Geohegan, Oak Ridge National Laboratory, USA
19:00	Dinner
Sunday, September 25, 2005	
07:30 – 10:30	Breakfast
10:30 – 12:15	Interest Group Meetings and Networking
12:15 – 14:00	Lunch and Networking
14:00 – 15:00	<i>Liquid Phase Laser Synthesis of Nanoparticles and Nanohybrid Materials for Bioapplications</i> Dr. W. Marine, University of Marseille, France
15:00 – 16:00	<i>Thermo-Responsive Nano-Sized Polymeric Systems</i> Dr. D. Cohn, The Hebrew University of Jerusalem, Israel
16:00 – 16:30	Coffee Break
16:30 – 17:30	<i>Photo-Excited Processes from the Liquid Phase for Nanodevice Synthesis</i> Dr. A. Peled, Holon Academic Institute of Technology, Holon, Israel

Sunday, September 25, 2005 (cont'd)	
17:30 – 18:30	<i>Micro and Nanocrystalline CVD Diamond: Deposition Techniques and Properties</i> Dr. V. Konov, General Physics Institute, Russia
18:30 – 19:00	Roundtable Discussion – III <i>**driven by participants</i>
19:30	Dinner
Monday, September 26, 2005	
07:30 – 09:00	Breakfast
09:00 – 10:00	<i>Quantum Dot Bio-Template</i> Dr. J. Dubowski, Université de Sherbrooke, Canada
10:00 – 11:00	<i>Tailoring biomedical polymeric surfaces</i> Dr. D. Cohn, The Hebrew University of Jerusalem, Israel
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>Molecular Design of Polymers for Laser Structuring</i> Dr. T. Lippert, Paul Scherrer Institute, Switzerland
12:15 – 14:00	Lunch and Networking
14:00 – 15:00	<i>Nanomedicine R&D in Canada – the CIHR Vision</i> Dr. E. Marcotte, Canadian Institutes of Health Research, Canada
15:00 – 16:00	<i>Metal Oxide Nanocrystals for Biomedical Applications</i> Dr. R. Haglund, Vanderbilt University, USA
16:00 – 16:30	Coffee Break
16:30 – 17:30	<i>Optical imaging based on nanoparticles and fluorescent probes</i> Dr. I. Gannot, Tel-Aviv University, Tel-Aviv, Israel
17:30 – 19:00	Poster Session – II (Nolain B)
19:00	Dinner
Tuesday, September 27, 2005	
07:30 – 09:00	Breakfast
09:00 – 10:00	<i>Thin Films Produced by PLD as Model System for Electrochemical Applications</i> Dr. T. Lippert, Paul Scherrer Institute, Switzerland
10:00 – 11:00	<i>Free Electron Lasers: Bio-Medical Applications</i> Dr. R. Haglund, Vanderbilt University, USA
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>Opportunities and Challenges in Nanomedicine Research Funding</i> Dr. E. Marcotte, Canadian Institutes of Health Research, Canada
12:15	Business Lunch and Networking
14:00 – 16:00	<i>Presentations of Projects Supported by the STCU in Kiev, Ukraine</i>
16:00 – 16:30	Coffee Break
16:30 – 17:30	Interest Group Meetings and Networking
18:00 – 19:30	Industry Displays/Exhibition – I (Nolain B)
19:30 – 21:00	Reception - II (Nolain A/B)

INDUSTRY FOCUS

Wednesday, September 28, 2005	
07:30 – 10:30	Breakfast
09:00 – 12:15	Industry Displays, Exhibition and Networking – II (Nolain B)
11:00 – 11:15	Coffee Break
12:15 – 14:00	Business Lunch and Networking
14:00 – 16:00	<i>Presentations of Projects Supported by the ISTC in Moscow, Russia</i>
16:00 – 16:30	Coffee Break
16:30 – 17:30	<i>Optical Gas Sensing Properties of Laser-Shaped Nanoparticles</i> Dr. H. Ouacha, Université Moulay Ismail, Morocco
17:30 – 18:30	<i>Application of Bio-Conjugated Quantum Dot Labels for Dynamic ICS Measurements in Living Cells</i> Dr. P. Wiseman, McGill University, Montreal, QC, Canada
19:00	Dinner
Thursday, September 29, 2005	
07:30 – 09:00	Breakfast
09:00 – 10:00	<i>Surface Plasmon Resonance: Fundamentals and Applications</i> Dr. R. Haglund, Vanderbilt University, USA
10:00 – 11:00	<i>AFM Techniques Applied to Nanobio and Sensing - I</i> Dr. P. Grutter, McGill University, Montreal, QC, Canada
11:00 – 11:15	Coffee Break
11:15 – 12:15	<i>AFM Techniques Applied to Nanobio and Sensing - II</i> Dr. P. Grutter, McGill University, Montreal, QC, Canada
12:15 – 13:00	Closing Remarks
13:00 – 14:00	Lunch and Networking
TBD	<i>Bus departs for Trudeau International Airport</i>

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