

Monday August 12, 2013

8:00-9:00	Registration
	Opening Remarks
8:45-8:50	Prof. Mahi Singh (Conference Chair)
8:50-8:55	Shantanu Basu (Chair, Department of Physics and Astronomy, Western University)
8:55-9:00	Bryce Pickard (Manager, Research & Development, Western University) on behalf of John Capone (Vice-President of Research)
Session A	Session Chair: Godfrey Gumbs
9:00-9:30	(Invited) <i>Putting the "Quantum" into Quantum Dots</i> Garnett W. Bryant , National Institute of Standards and Technology
9:30-10:00	(Invited) <i>Obtaining Bright Visible Light Emission from "Bulk" Silicon by Nanocavity Plasmons</i> Ritesh Agarwal , University of Pennsylvania
10:00-10:30	Coffee Break
Session B	Session Chair: Andrea Soddu
10:30-11:00	(Invited) <i>Hybrid Plasmonic Nanodevices: Switching Mechanism for the Nonlinear Emission</i> Andrea V. Bragas, et al , Universidad de Buenos Aires, Argentina
11:00-11:30	(Invited) <i>Future Nano- and Micro-systems Using Nanobonding Technologies</i> M. Jamal Deen, et al , McMaster University
11:30-12:00	(Invited) <i>Fundamentals and Applications of Nanoplasmonics and Ultrafast Lasers to Nanomedicine</i> Michel Meunier , École Polytechnique de Montréal
12:00-1:30	Lunch
Session C	Session Chair: Lyudmila Goncharova
1:30-2:00	(Invited) <i>Bloch Oscillations in Two Dimensions</i> Wei Pan , Sandia National Laboratories
2:00-2:30	(Invited) <i>Synthesis and magnetic properties of meta-stable BiVO₃ and La₂BMnO₆</i> M. P. Singh, et al , Brock University
2:30-3:00	(Invited) <i>Engineering Topological Phases in Graphene Systems</i> Qian Niu , University of Texas at Austin
3:00-3:30	Coffee Break
Session D	Session Chair: Giovanni Fanchini
3:30-4:00	(Invited) <i>Tracking the Transformation and Electronic Structure of TiO₂ Nanocomposites with Synchrotron Spectroscopy</i> T. K. Sham, et al , Western University
4:00-4:30	(Invited) <i>Determining Electron Phase in Mesoscopic Interferometers</i> Bilal Tanatar, et al , National Institute of Materials Physics
4:30-5:00	(Invited) <i>Controlling InGaN Quantum Dots -- from Property to Performance</i> Hui Deng , University of Michigan
5:00-5:15	(Oral) <i>Novel Nitride-Based Quantum Wells and Superlattices</i> Devki N. Talwar , Indiana University of Pennsylvania
5:15-5:30	(Oral) <i>Engineering a Resonant Nanocoating for an Optical Refractive Index Sensor</i> Aliaksandr Bialiyayeu , Carleton University

Tuesday August 13, 2013

8:00-8:30	Registration
Session A	Session Chair: G. P. Srivastava
8:30-9:00	(Invited) <i>Photon Assisted Current in Molecular Nanojunctions with Novel Types of Contacts Made of Semiconductor and Graphene</i> Boris Fainberg, Holon Institute of Technology
9:00-9:30	(Invited) <i>Fabrication and Long-Wavelength Characterization of Neat and Chemically-Modified Graphene</i> Nikolai G. Kalugin, New Mexico Tech
9:30-9:45	(Oral) <i>Nanomaterials Driven Clean Energy, Environmental and Biomedical Research</i> Prakash C. Sharma, et al, Tuskegee University
9:45-10:00	(Oral) <i>Li Adsorption on Graphene Derivatives</i> Veronica Barone, Central Michigan University
10:00-10:30	Coffee Break
Session B	Session Chair: Gil de Aquino Farias
10:30-11:00	(Invited) <i>Helical Edge States in Multiple Topological Mass Domains</i> J. Carlos Egues, Instituto de Física de São Carlos, Universidade de São Paulo
11:00-11:30	(Invited) <i>Modeling Nanoparticle Optics and Surface Enhanced Emission</i> Kevin L. Shuford, Baylor University
11:30-12:00	(Invited) <i>Quantum Nanoplasmonics</i> Stephen Hughes, et al, Queen's University
12:00-1:30	Lunch
Session C	Session Chair: Durga Basak
1:30-2:00	(Invited) <i>Multi-Phase Semicrystalline Microstructures Drive Extrinsic Charge Photogeneration in Plastic Semiconductors</i> Carlos Silva, et al, Université de Montréal
2:00-2:30	(Invited) <i>Coherently-Coupled Dangling-Bond Dynamics on the Silicon Surface</i> Barry Sanders, University of Calgary
2:30-2:45	(Oral) <i>Magnetocaloric Effect of Ultrathin Terbium Films</i> Vamberto D. Mello, et al, Universidade do Estado do Rio Grande do Norte
2:45-3:00	(Oral) <i>Polaritons in One-Dimensional Rare-Earth Magnonic Quasicrystals</i> Dory Hélio A. L. Anselmo, et al, Universidade Federal do Rio Grande do Norte
3:00-3:30	Coffee Break
Session D	Session Chair: Jayshri Sabarinathan
3:30-4:00	(Invited) <i>Nanostructure-based optical filters for multispectral imaging applications</i> Jeff Carson, et al, Western University
4:00-4:30	(Invited) <i>Plasmonic Enhanced QDIP Technology and Different Configurations</i> Xuejun Lu, University of Massachusetts at Lowell
4:30-5:00	(Invited) <i>Optoelectronic Devices Based on Colloidal Quantum Dot Solids</i> Mingjian Yuan, University of Toronto
5:00-5:30	(Invited) <i>Understanding the Ultraviolet Photoresponse Properties of ZnO Nanorods: Effect of Surface Modification, Doping and Microstructure</i> Durga Basak, et al, Indian Association for the Cultivation of Science
5:30-6:00	(Invited) <i>Quantum Engineered Interband Cascade Structures for Optoelectronic Devices</i> Rui Q. Yang, University of Oklahoma

Wednesday August 14, 2013

8:00-8:30	Registration
Session A	Session Chair: Boris Fainberg
8:30-9:00	(Invited) <i>Tuning Phonon Properties for Enhancement in Thermoelectric Figure of Merit</i> G. P. Srivastava, University of Exeter
9:00-9:30	(Invited) <i>Into the flat land: Quantum Wigner Crystallization in Zero Magnetic Field</i> Jian Huang, Wayne State University
9:30-10:00	(Invited) <i>Recent Advances of Three-Dimensional Optical Photonic Crystal: Light Trapping and Light Manipulation</i> Shawn-Yu Lin, et al, Rensselaer Polytechnic Institute
10:00-10:30	Coffee Break
Session B	Session Chair: Paul Charpentier
10:30-11:00	(Invited) <i>Plasmonic Metamaterials and Their Applications in Light Manipulations</i> Zhaowei Liu, et al, U. of California, San Diego
11:00-11:30	(Invited) <i>Reconfigurable Photonic Metamaterials driven by Coulomb, Lorentz and Optical Forces</i> Eric Plum, et al, University of Southampton, Southampton
11:30-11:45	(Oral) <i>Photophysical Properties Enhancement of Bare and Core-shell Quantum Dots</i> Md Abdul Mumin, et al, Western University
11:45-12:00	(Oral) <i>Simulation of laser-induced thermal and plasma dynamics of hollow gold nanoshells in hyperthermia therapy</i> Ali Hatef, et al, École Polytechnique de Montréal
12:00-1:30	Lunch
Session C	Session Chair: Andrea Bragas
1:30-2:00	(Invited) <i>Effects of Periodic Scatter Potential on the Landau Quantization and Ballistic Transport of Electrons in Graphene</i> Godfrey Gumbs, et al, Hunter College of CUNY
2:00-2:30	(Invited) <i>Dynamic Polarization of Carbon Nano-Structures by Charged Particles</i> Zoran Miskovic, University of Waterloo
2:30-2:45	(Oral) <i>Modeling Ellipsometry and Electron Energy Loss Spectroscopy of Graphene</i> Keenan Lyon, et al, University of Waterloo
2:45-3:00	(Oral) <i>A Study of Ferromagnetic Signals in SrTiO₃ Nanoparticles</i> Paul Kovacs, et al, Brock University
3:00-3:30	Coffee Break
Session D	Session Chair: Yining Huang
3:30-4:00	(Invited) <i>Gold Nanoparticles Fabricated by OMCVD, LIL and e-Beam Lithography for Bio-Sensing</i> Silvia Mittler, et al, Western University
4:00-4:30	(Invited) <i>Nanostructure Symmetry: Relevance for Physics and Computing</i> Marc-André Dupertuis, et al, Laboratory for Physics of Nanostructure
4:30-5:00	(Invited) <i>Topological Entropy After a Quantum Quench</i> Alioscia Hama, Perimeter Institute for Theoretical Physics
5:00-5:30	(Invited) <i>Supercritical Fluids-A New Tool for Nanotechnology</i> Paul Charpentier, Western University
5:30-5:45	(Oral) <i>Experimental and Theoretical X-ray Absorption Near Edge Structure of Cd_{Sx}Se_{1-x} Nanostructures</i> Y. M. Yiu, et al, The University of Western Ontario
5:45-6:00	(Oral) <i>Dipole Nano-Laser: Theory, Properties, and Applications</i> Talal Ghannam, King Abdullah Institute for Nano Technology

Thursday August 15, 2013

8:00-8:30	Registration
Session A	Session Chair: Mahi Singh
8:30-9:00	(Invited) <i>Luminescent Gold Nanoparticles and Applications in Biological Imaging</i> Yu Chen, et al, Strathclyde University
9:00-9:30	(Invited) <i>The Self-Assembly of Particles with Isotropic Interactions: Using DNA Coated Colloids to Create Designer Nanomaterials</i> R. B. Thompson, University of Waterloo
9:30-9:45	(Oral) <i>Curcumin-Loaded Magnetic Nanoparticles Conjugated with Folic Acid for Targeted Cancer Treatment</i> Melessa Salem, et al, Western University
9:45-10:00	(Oral) <i>Nanosizing of ginseng polysaccharide using microfluidic device</i> Kazi Farida Akhter, Western University
10:00-10:30	Coffee Break
Session B	Session Chair: Yu Chen
10:30-11:00	(Invited) <i>The Evolvement of the Transport Mechanisms with the Ensemble Density of Si Quantum Dots</i> I. Balberg, The Hebrew University
11:00-11:30	(Invited) <i>Coherent Dynamics of Hybrid Quantum Dot-Metallic Nanoparticle Systems</i> Seyed Sadeghi, University of Alabama in Huntsville
11:30-12:00	(Invited) <i>Excitonic Approach to the Intraband THz Response of Semiconductor Nanostructures</i> Marc Dignam, Queen's University
12:00-1:30	Lunch
Session C	Session Chair: Styliani Conostas
1:30-2:00	(Invited) <i>Coherent Radiation by Quantum Dots and Magnetic Nanoclusters</i> V. I. Yukalov, et al, Bogolubov Laboratory of Theoretical Physics
2:00-2:30	(Invited) <i>The Split-Operator Technique in Low-Dimensional Systems</i> Gil de Aquino Farias, Universidade Federal do Ceará, Brazil
2:30-2:45	(Oral) <i>Application of TiO₂ and Fumed Silica Nanoparticles on Oil Recovery and Improve the Performance of Drilling Fluids</i> Goshtasp Cheraghiana, et al, Islamic Azad University
2:45-3:00	(Oral) <i>Fluorescence from a Quantum Dot and Metallic Nanosphere Hybrid System</i> Daniel Schindel, et al, University of Western Ontario
3:00-3:30	Coffee Break
Session D	Session Chair: Viktor Staroverov
3:30-4:00	(Invited) <i>Exploiting Linear and Non linear Piezoelectricity in Novel Semiconductor Devices</i> Max Migliorato, University of Manchester
4:00-4:30	(Invited) <i>Magnetoplasmons in Bilayer Graphene</i> Jhao-Ying Wu, et al, NCKU, Taiwan
4:30-5:00	(Invited) <i>Use of Nanomaterials for Mass Spectrometry Can Be Uplifting for Analyte Detection</i> Rob Lipson, University of Victoria
5:00-5:30	(Invited) <i>Nonlinear Optical Switching with Metamaterial Nanocomposites</i> Mahi Singh, Western University
5:30-5:45	(Oral) <i>New Metal-Organic Nanomaterials Synthesised by Laser Irradiation of Organic Liquids</i> Stanislav L. Kuzmin, et al, University of Waterloo
5:45-6:00	(Oral) <i>NEXAFS study of Fe-doped SrTiO₃</i> Olga Lobacheva, Western University