

May 1st and 2nd, 2017

CAMaR opening activities

Visit us at: <http://camar.chemistry.uottawa.ca>

Monday May 1st, 2017

Morning Session Location FSS 2005 Organizer: Tito Scaiano

- 9:00 Tito Scaiano on the background leading to this day (CFI, CAMaR, ARC renovations)
9:15 Words from the Faculties of Science, Engineering and Medicine

Chair: Hanan Anis

- 9:30 **Andrew Pelling**, Department of Physics, uOttawa
 "Disruptive Biomaterials Found in the Grocery Store"
- 10:15 Coffee break and networking
- 10:50 **Marius G. Ivan, PhD, Manager**
 Manufacturing, Communications and Technologies Division Research Partnerships, NSERC
 "Photons – their surprising effects on development of materials and technologies, and my career path"
- 11:20 **Patrick R. L. Malenfant**, Materials Thrust Leader, Printable Electronics Program, National Research Council of Canada (Ottawa)
 "Nanomaterials in Printed Electronics"
- 11:45 **Michelle Chretien**, Senior R&D Manager, Materials Science Electronic Materials, Xerox Research Centre of Canada
 "The role of chemistry and materials in innovation at Xerox"
- 12:10 **Lunch** (*Lobby in front of FSS 2005*)
 Coffee available until 2:00 PM

12:45 Careers round table (FSS2005)

- **Moderator:** Marc Dubé, Faculty of Engineering, uOttawa
- Michelle Chretien. Xerox Research Centre of Canada
- Marius Ivan, Natural Sciences and Engineering Research Council
- Wojtek Michalowski, Telfer School of Management
- Tom Baker, Centre for Catalysis Research and Innovation
- Louis Barriault, Faculty of Science, uOttawa

CAMaR

Centre for Advanced
Materials Research

Centre de recherche sur les
matériaux avancés

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uOttawa

Afternoon Session Location FSS 2005 Chair: Tito Scaiano

- 2:00 **Jeongwon Park**, Electrical Engineering and Computer Science,
University of Ottawa
“Nanotechnology-Enabled Flexible Hybrid Electronics for
New Functionalities”
- 2:25 **Anabel Lanterna**, Chemistry, University of Ottawa
”Thiol-stabilized Gold Nanoparticles can undergo ligand exchange
in the presence of Rare Earth ions”
- 2:50 **Eva Hemmer**, Chemistry, University of Ottawa
“Shining a Light on Upconverting and Near-Infrared Emitting
Nanoparticles”
- 3:15 Adjourn and move to ARC 5th floor

4:30 Poster session Location ARC 5th floor

Guided tour of facilities
Poster presentations
Pizza and pop will be provided

7:00 PM *End of Poster session & PUB suggestions for those who feel networking
is incomplete without a beer*

Tuesday May 2nd, 2017

Morning Session Location FSS 1007 Organizer: Jim Harden

Workshop on Materials and Devices for Medicine

- 9:00 **Jim Harden**: Introduction to the workshop
- 9:10 **Hanan Anis**, Engineering, University of Ottawa
“Raman Biosensors”
- 9:35 **Michel Godin**, Physics, University of Ottawa & Ottawa-Carleton
Institute for Biomedical Engineering
“Encapsulating Therapeutic Cells using Microfluidic Technologies”
- 10:00 Coffee break
- 10:30 **Delphine Gourdon**, Physics, University of Ottawa
“Crystal-protein interface mediates breast cancer cells adhesion and
secretion”
- 10:55 **Robert Ben**, Chemistry, University of Ottawa
“Using Ice Recrystallization Inhibitors to Overcome the Obstacles in
Cryopreservation”
- 11:20 **Emilio Alarcon**, uOttawa Heart Institute
“Bio-nanomaterials for tissue engineering: There is still something new
under the Sun”
- 11:45 **May Griffith**, Ophthalmology, Université de Montreal
“The translational pathway from biomimetic materials research to
clinical application”
- 12:15-1:15 **Lunch** (Served in lounge area)

Tuesday May 2nd, 2017

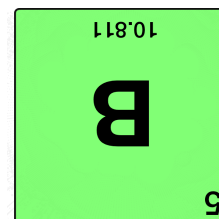
Afternoon Session FSS 1007 Organizer Muralee Murugesu

Workshop on Advanced Materials

- 1:15 **Muralee Murugesu**. Introduction to the topics of the workshop
- 1:25 **Jon Veinot**, Chemistry, University of Alberta, Edmonton
“Adventures in Si Nanocrystal Surface Chemistry”
- 2:05 **Jaclyn Brusso**, Chemistry, University of Ottawa
“A Building Block Approach to Functional Materials”
- 2:30 Coffee break
- 2:55 **Benoit Lessard**, Engineering, University of Ottawa
“Performance Improvement of organic electronic devices through Interface Engineering: from surface initiated polymerization off the electrodes to crosslinking silicon phthalocyanine additives”
- 3:20 **Guojun Lui**, Chemistry, Queens University, Kingston
“Nanostructured Polymer Materials for Applications”
- 3:45 **Closing remarks by Sylvain Charbonneau**, Associate Vice-President, Research, followed by a Short break

CAMaR is honored by having its opening activities host the Distinguished Leibniz Lecturer, Professor Holger Braunschweig

- 4:00 **Leibniz Lecture**
Professor Holger Braunschweig, University of Würzburg
- Welcoming Remarks – **Sylvain Charbonneau**, VPA – Research
 - Remarks – German Embassy (tbc)
 - Introduction – **Dr. Annette Doll-Sellen**, DFG Office North America, Director.
- Lecture: - **H. Braunschweig**: “*Turning Boron Chemistry on its Head: The unusual chemistry of boron in low oxidation states*”
- 6:00 Reception honouring Professor Braunschweig
FSS Lobby 4th Floor
Please note that you need to RSVP for the 6 PM reception:
RSVP by following this [link](#).



CAMaR Opening - ARC520

POSTERS

May 1st, 2017

1. *Visible and NIR Plasmon Mediated Molecular Release from Cucurbit[6]uril Mesoporous Gated Systems*

Daniela T, Marquez and Juan C. Scaiano

University of Ottawa

2. *Ultra-high density optical data storage in common plastics*

D. Kallepalli, A. Alshehri, D. Marquez, J. C. Scaiano and R. Bhardwaj

University of Ottawa

3. *Preparation and Characterization of Polymeric Scaffolds Containing Nano-Textured Eggshell Particles for Bone Regeneration*

Nicholas D. Calvert, Scott Proulx, Tamer Ahmed, Isabelle Catelas, Maxwell T. Hincke

Faculty of Medicine, CMM, University of Ottawa

4. *Synthesis of New Coordination Polymers using 1,2,4,5-tetrazine*

Paul Richardson, Bulat Gabidullin, Muralee Murugesu*

University of Ottawa

5. *Integration of Femtosecond fiber laser and miniaturized nonlinear endoscopy*

Huda Yousif, Hussien Kotb, Majid Najj, Mohammed Abu Saif, Sangeeta Murugkar, Hanan Anis

University of Ottawa

6. *Investigation of the Dissolution of Crystalline Core Block Copolymer Micelles*

Menandro V. Cruz, Jessica Yu, Dmitry Pichugin, Gerald Guerin, Ian Manners, Mitchell A. Winnik

University of Toronto

7. *Photocatalytic Performance of Palladium Modified TiO₂*

Ayda Elhage, Anabel Lanterna, Juan C. Scaiano

University of Ottawa

8. *Applications of Metal Colorization using Picosecond Laser Pulses*

J-M Guay, A. Cala Lesina, G. Côté, J. Walia, G. Killaire, M. Ginn, L. Ramunno, P. Berini, A. Weck

University of Ottawa

9. *Photocatalytic Hydrogen Production using Modified Semiconductors*

Justin Hodgins, Victoria Sandre, Anabel Lanterna, Juan C. Scaiano

University of Ottawa

10. *Mechanical Properties in Radial Bones of Polypterus Senegalus*

Sakib Kazi, Emily Standen

University of Ottawa

11. *Long-Range Surface Plasmon Polariton (LRSP) waveguides as (Bio)Chemical and Biological Sensors*

O. Krupin, W.W. Wong, C. Wang and P. Berini

University of Ottawa

12. *Materials Characterization Core Facility*

Yun Liu

University of Ottawa

13. *Electrospun collagen-like-peptide hybrids as nanofibrous scaffolds for retinal tissue regeneration*

Christopher McTiernan, Manuel Ahumada, Emilio Alarcon, Isabelle Brunette, May Griffith

Université de Montréal and University of Ottawa

14. *Catalysis for Energy Storage: Improved hydrogen Release from Ammine Metal Borohydrides*

Mehdi Mostajeran and R. Tom Baker

University of Ottawa

15. *Quantifying the chemical and physical properties of recycled, value-added phosphate and carbonate materials*

Jessica Ross, Lu Gao, Essie Anthony, Divya Sutarwala, Sidney Omelon

University of Ottawa

16. *Imidazole Based Poly(Ionic Liquid)s for use in Electrolyte-Gated Thin-Film Transistors*

Alexander Peltekoff, Benoit Lessard

University of Ottawa

17. *Photocatalytic Diels-Alder Reactions Mediated by TiO₂ and Visible Light Irradiation*

Spencer P. Pitre, Tehshik P. Yoon, Juan C. Scaiano

University of Ottawa and University of Wisconsin

18. *Heterogeneous Photocatalytic Click Chemistry: from the bench to the molecule*

Bowen Wang, Javier Durantini, Anabel Lanterna, J.C. Scaiano

University of Ottawa

19. *Ptychography for nonlinear optical microscopy*

Jarno N. van der Kolk and Lora Ramunno

University of Ottawa

20. *An Organo-Thulium Family of Single-Ion Magnets: Is Symmetry Enough?*

Katie L. M. Harriman, Ilia Korobkov, and Muralee Murugesu*

University of Ottawa

21. *A Multifunctional Ternary Additive for Increased Light Absorption and Stability in Organic Photovoltaic Devices*

Trevor M. Grant, Benoit H. Lessard

University of Ottawa

22. *Electroconductive nanoengineered biomimetic hybrid fibers*

Manuel Ahumada, Shelby Allison, Cristina Andronic, Brian McNeill, Fabio Variola, May Griffith, Marc Ruel, Veronique Hamel, Wenbin Liang, Erik J. Suuronen, and Emilio I. Alarcon

University of Ottawa Heart Institute

23. *Theoretical and experimental studies of GdRhO₃*

Farshad Nejdastari, Pu Wang, Zbigniew M. Stadnik

University of Ottawa

24. *Nanostructuring silicon with twisted light*

M.G.Rahimian,F.Bouchard,H.Alkhazraji,E.Karimi,P.B.Corkum,V.R.Bhardwaj

University of Ottawa

25. *Fabrication and characterization of a novel system for local drug release to the brain after stroke*

Taisa R. Stumpf, Patrick Fournier, and Xudong Cao

University of Ottawa

26. *Electronic structure and light-matter interaction in quantum materials: methods and computational tools*

Ludmila Szulakowska, Maciej Bieniek, Alain Delgado, Marek Korkusinski, Pawel Hawrylak

University of Ottawa

27. Third Harmonic Light Control in Plasmonic Metasurfaces for Nonlinear Beam Shaping

Antonino Calà Lesina, Pierre Berini, Lora Ramunno

University of Ottawa

28. Gallium Nitride on Gallium Oxide for integrated nonlinear optics

Kashif M Awan, Prof. Ksenia Dolgaleva

University of Ottawa

29. Hidden Transformations of a Crystalline Sponge

Gabriel Brunet, Damir A. Safin, Ilia Korobkov and Muralee Murugesu

University of Ottawa

30. Synthesis of New Coordination Polymers using 1,2,4,5-tetrazine

Paul Richardson, Bulat Gabidullin, Muralee Murugesu*

University of Ottawa

31. Integration of Femtosecond fiber laser and miniaturized nonlinear endoscopy

Huda Yousif, Hussien Kotb, Majid Naji, Mohammed Abu Saif, Sangeeta Murugkar, Hanan Anis

University of Ottawa

32. Relaxation of a Simulated Lipid Bilayer Vesicle Compressed by an AFM

Ben Barlow, Martine Bertrand, Béla Joós

University of Ottawa

33. Commercial Dye (Red GG) as Low Cost Semiconductor in Organic Thin-Film Transistors

Owen A. Melville, Benoit H. Lessard

University of Ottawa