

Department of Chemistry Newsletter

Issue 7 (November), 2021



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Sylx Okanagan Nation Territory

Announcements

Congratulations to:



Dr. Jolene Garber, who won the prestigious NSERC postdoctoral fellowship, cross appointed with Dr. Wesley Zandberg's group and Dr. Wade Abbott at Agriculture and Agri-Food Canada. She'll be starting at UBC next week.



Dr. Mitra Tabatabaee, BIMB program, who successfully defended his PhD thesis "Glutamate-induced morphological responses in astrocytoma cells."



Jesse Lafontaine, a recent chemistry honours graduate has been selected as a Rhodes Scholar! He is in medical school at the University of Alberta.

<https://www.vernonmorningstar.com/community/med-student-from-vernon-named-2022-rhodes-scholar/>



Dr. Robert Godin for his radio interviews on the occasion of his participation at the UN Climate Change Conference (COP26) (<https://ukcop26.org>). Listen to the interviews in English: <https://www.cbc.ca/listen/live-radio/1-110/clip/15875999> and in French: <https://ici.radio-canada.ca/ohdio/premiere/emissions/phare-ouest/episodes/581236/rattrapage-du-mardi-2-novembre-2021/9> .



Dr. Isaac Li, whose The British Columbia Knowledge Development Fund (BCKDF) CFI matching fund was approved for a new Atomic Force Microscopy instrument for Life Science (bioAFM)

Facilities/Instruments News

The “hand-carried” wet chemistry lab that was allowed to follow **Dr. Szilagyi** arrived. Many thanks for UBC’s Custom Broker Agency, UBCO Central Receiving, and Facilities who created all the paperwork and made the move successful. The content of a 15” truck now floods SCI334.



Among the notable equipments: Schlenk line with brand new vacuum pumps and glassware, large LN2 dewar, cartridge-based solvent purification systems, hydrothermal reactors, low-field Mössbauer spectrometer for Fe chemistry, closed cycle LHe optical cryostat, XAS toolboxes. Please contact Robert if you wish to borrow anything until he is able to stand up the laboratory.

Dr. Li’s laboratory installed a lipid nanoparticle synthesizer in order to make formulations to do genetic medicine and for cell line transfection. This instrument is based on an UBC invention that is identical to that used for mRNA vaccine delivery using lipid nanoparticles.

Welcome

Ezra Sebastian, M.Sc. student is now co-supervised by Dr. Wesley Zandberg and Dr. Kenneth Chau (SOE).



James (Teddy) Herriman, a transfer student from Montana State University will join the lab of Dr. Robert Szilagyi as a M.Sc. student.

Recent publications/presentations



Mathieu L. Lepage, Mahdi Takaffoli, Chakravarthi Simhadri, Ryan Mandau, Mazeyar Parvinzadeh Gashti, Rashid Nazir, Majid Mohseni, Wu Li, Chang Liu, Liting Bi, Greg Falck, Peter Berrang, Kevin Golovin, Abbas S. Milani, **Gino A. DiLabio**, and Jeremy E. Wulff: *Influence of Topical Cross-Linking on Mechanical and Ballistic Performance of a Woven Ultra-High-Molecular-Weight Polyethylene Fabric Used in Soft Body Armor* ACS Appl. Polym. Mater. 2021, 3, 11, 6008–6018 DOI: 10.1021/acsapm.1c01301



Viki Kumar Prasad, M. Hossein Khalilian, Alberto Otero-de-la-Roza, **Gino A. DiLabio**: *BSE49, a diverse, high-quality benchmark dataset of separation energies of chemical bonds* Scientific Data volume 8, Article number: 300 (2021)

Upcoming Seminars

Dr. Isaac Li gave a chemistry colloquium talk St. Mary University, titled “Imaging molecular force with DNA sensors”.

Dr. Robert Godin presents a special FIPKE Chemistry Colloquium on COP26. November 30, 2:30-4 pm in ASCI30.

Botanical Society of America (BSA) - Phytochemistry Section announces a brand new **virtual** seminar series - **#PhytochemTalks** - launched this fall! <https://phytochemtalks.github.io/> The seminars take **on Fridays at 12pm EST**. Each seminar will feature one **20-25 min talk and a 10-20 min discussion period**.

December 3rd: Sandra Irmisch (Assistant Professor, Leiden University, Netherlands)
A Novel Plant-Derived Anti-Diabetic Compound: From metabolite biosynthesis to engineering production systems

December 10th: Bryan Leong (Postdoc, University of Florida - Gainesville, USA)
How novel chemical phenotypes evolve: A case study using acylsugars.

Student affairs

Research proposals

None scheduled for December

Ph.D. comprehensive/candidacy oral examination

None scheduled for December

Thesis oral examinations

November 30, 8:00am - Emma Mitchell, Chemistry MSc (Godin lab)

December 17, 13:00 - Viki Prasad, Chemistry PhD (DiLabio lab)

Committee meetings:

None scheduled for December

We would like to express our gratitude for accessing the land on which we gather, work, and live from which is the unceded territory of the Syilx (Okanagan) People.

If you would like to contribute to, or have any suggestions for, our Department's upcoming newsletters, please contact Thuy Dang (thuy.dang@ubc.ca) editor-in-chief or her 'assistant editor' Robert Szilagyi (robert.szilagyi@ubc.ca).