

# Department of Chemistry Newsletter

## January Issue, 2024



Irving K. Barber Faculty of Science, University of British Columbia  
Syilx Okanagan Nation Territory

**HAPPY NEW YEAR! May 2024 be a productive and joyful year for all!**

## Announcement

### Congratulations to:



**Dr. Wesley Zandberg** for winning the annual *Life Raft Debate* on January 25<sup>th</sup>. Representing our Department and the whole I.K. Barber Faculty of Science, Wes edged out the FCCS (English), Engineering, and FASS (Psychology) teams in arguing that chemistry is the most essential discipline. *Chemistry* is now tied with *Engineering* for the most wins with the first place in this year and 2019 (Dr. Stephen McNeil) debates.

A brief introduction of all the debaters this year can be found on the *UBCO Student Life* Instagram account at [https://www.instagram.com/reel/C2Nd6u\\_PDtA/?igsh=ejM3bmRqYjBsYWVl5](https://www.instagram.com/reel/C2Nd6u_PDtA/?igsh=ejM3bmRqYjBsYWVl5).

## Recent publications



Q. Wang, Z. Tang, R. Herout, **Chang Liu**, K. Yu, D. Lange, **Robert Godin**, J. Kizhakkedathu, T. Troczynski, R. Wang (2024). Axial suspension plasma sprayed Ag-TiO<sub>2</sub> coating for enhanced photocatalytic and antimicrobial properties. *Surfaces & Interfaces*. DOI: 10.1016/j.surfin.2024.103856.



N. Fancy, **Nitin**, D. Kniffen, M. Melvin, N. Kazemian, J. Sadeghi, C.A. Letef, L. D'Aloisio, A.G. Copp, R. Inaba, G. Hans, S. Jafaripour, N. Haskey, M. Raman, **Parandis Daneshgar**, K. Chadee, S. Ghosh, D.L. Gibson, S. Pakpour, **Wesley Zandberg**, K.S.B. Bergstrom (2024). Fecal-

adherent mucus is a non-invasive source of primary human MUC2 for structural and functional characterization in health and disease. *Journal of Biological Chemistry*. DOI: 10.1016/j.jbc.2024.105675.



M. Dugic, H. Brzobohata, V. Mojr, T. Dolejsova, P. Liskova, **Duy Dinh Do Pham**, D. Rejman, G. Mikusovaab, R. Fiser (2024). LEGO-lipophosphonoxins: length of hydrophobic module affects permeabilizing activity in target membranes of different phospholipid composition. *RSC Advances*. DOI: 10.1039/d3ra07251g.

## Updates and opportunities

### Green Labs Fund

Your laboratory could receive up to \$ 4,000 for making your research activity more sustainable. You can submit your proposals to strengthen UBC's sustainability by reducing environmental impacts of your research activities. The due date is **March 17<sup>th</sup>**.

More information can be found at <https://sustain.ubc.ca/programs/green-labs-program/green-labs-fund>.

### Health, Safety, and Environment updates

The Hazardous Waste System will only be accessible via CWL login after April 30<sup>th</sup>. The old login system will be discontinued. Switching to CWL is painless: the system will ask you to link the old account once you log in with CWL for the first time. Please contact the HSE team or our Department's Laboratory Manager, Ieva Zigg, for more information.

## Recent events

### Workshops and cultural experience in Japan

Jessica V. Zarama (Dr. Robert Godin and Dr. Gino DiLabio's groups) and Dr. Robert Szilagyi, Department Head, recently participated in the *2023 Sakura Science Workshop* at Yokohama City University (Japan) from January 14<sup>th</sup> to 21<sup>st</sup>. They learned about protonic wave function treated with path-integral molecular dynamics and multi-component HF and DFT methods from the Quantum Physical Chemistry research group directed by Prof. Tachikawa Masanori.



Jessica and Robert also presented at the *8th International Workshop on Quantum Chemistry*. They immersed themselves in Japanese culture on the occasion of a visit to Kamakura, one of Japan's former capitals. The trip also facilitated the establishment of academic connections with Yokohama City University, Ubon Ratchathani University (Thailand), and King Mongkut's University of Technology (Thailand) with future benefits to the University of British Columbia's Okanagan campus.

## Recent presentations:

**Dr. Robert Godin** was a speaker at the “*Innovation in Energy Transition: The Question of Storage*” event as part of the Climate Dialogue series presented by the Climate Solutions Research Collective. More information about this and other events of the series can be found at <https://climatesolutions.ubc.ca/news-and-events/events/innovations-energy-transition-question-storage>.

**Dr. Robert Godin** has also been part of the Climate Resilient Kelowna Strategy workgroup. Their efforts were presented in *Engagement Summary & Focus Areas* to the City Council of Kelowna on Monday, January 22<sup>nd</sup>. Recording of the event can be found under Item 5.1 at <https://kelownapublishing.escribemeetings.com/Meeting.aspx?Id=b181b26d-07de-4648-a41c-aa623c35d57f&Agenda=Agenda&lang=English&Item=22&Tab=attachments>.

Throughout her trip to Viet Nam, **Dr. Thu-Thuy Dang** was invited to give talks on her research in the biosynthesis of alkaloids in medicinal plants at VNU–Ho Chi Minh City University of Science, Ha Noi University of Pharmacy, and Phenikaa University in December 2023 and January 2024. Thuy also took the opportunities to briefly present research themes by other faculty members in showing our Department as an excellent place to do research and graduate studies.



**We acknowledge that the land on which we gather is the unceded territory of the Syilx (Okanagan) Peoples. Kukwtsétsemc / kʷu kʷukʷstp !**

If you would like to contribute to, or have any suggestions for, our Department's upcoming newsletter, please contact Thuy Dang ([thuy.dang@ubc.ca](mailto:thuy.dang@ubc.ca)).