

Department of Chemistry Newsletter

October Issue, 2023



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

Announcement

Congratulations to:



Eduardo Montalvo Romero (Dr. Gino DiLabio's group) for having successfully defended his PhD thesis entitled "Elucidating the 'on water' mechanism in accelerated reactions in water" on October 19th, and started his postdoctoral research at the University of Alberta.



Chang Liu (Dr. Robert Godin's group) for having successfully defended her MSc thesis entitled "Towards fundamental understanding of interfaces in carbon nitride photocatalytic and (photo)electrochemical systems" on July 27th.

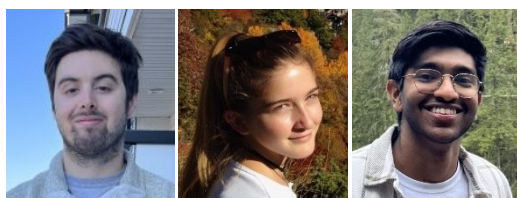


Pawan Sandhu (Dr. Susan Murch's group) for having won the *Best Poster Presentation Award* at the 5th annual conference of the Metabolomics Association of North America, October 23rd–27th in Missouri, USA.

New members:



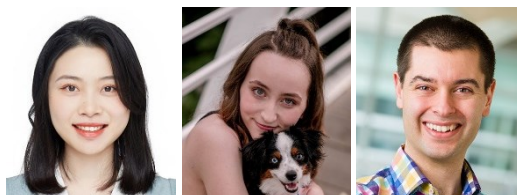
Dr. Parandis Danesghar is joining our Department as a research associate, working on glycomics in Dr. Wesley Zandberg's group. The work is co-supervised by Dr. Kirk Bergstrom (Biology). Parandis is an analytical chemist with a PhD degree from the University of Tehran (Iran).



Rohan Dilip as an undergraduate volunteer to look at the spectroscopy of carbon nitride photocatalysts.

Dr. Robert Godin's group welcomed **Sam Morris-Probert** for a CHEM 448 project on the photodegradation of pentachlorophenol (a wood treatment additive), **Katharina Mazzotti** for her second stint in the group (this time co-supervised by Dr. Isaac Li) with a BIOC 449 project on measuring the optical properties of dyes under force, and

Recent publication



Chang Liu, Stephanie Busse, Jian Liu, Robert Godin (2023). Aminosilanized interface promotes electrochemically stable carbon nitride films with fewer trap states on FTO for (photo)electrochemical systems. *ACS Applied Materials & Interfaces*. DOI:10.1021/acsami.3c09284.

Upcoming and recent events

STEM Outreach Day: November 15th

The event this year will be our second annual STEM Outreach Day. It is coordinated by Dr. Tamara Freeman and expected to be another successful and enjoyable day like last year.

From Tamara: *Last year, UBC Okanagan hosted a highly successful day of STEM-themed outreach activities for over 500 grade-3 and 4 students from School Districts 22 and 23 (see photo!). The desire for such an event from the public was so high that our registration was filled within 15 minutes, leaving a waiting list with twice the number of those who could attend.*

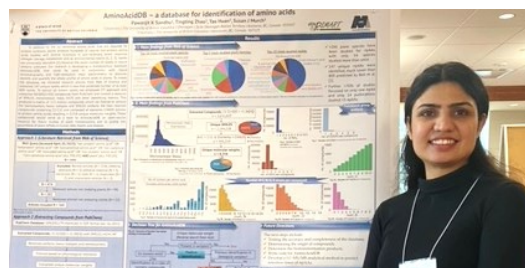


Recent presentations:

Dr. Thu-Thuy Dang gave talks on her research on the biosynthesis of therapeutic alkaloids from medicinal plants at the Leibniz University of Hannover (Hanover, Germany) on October 4th, and at the Max-Planck Institute of Chemical Ecology (Jena, Germany) on October 6th, 2023.

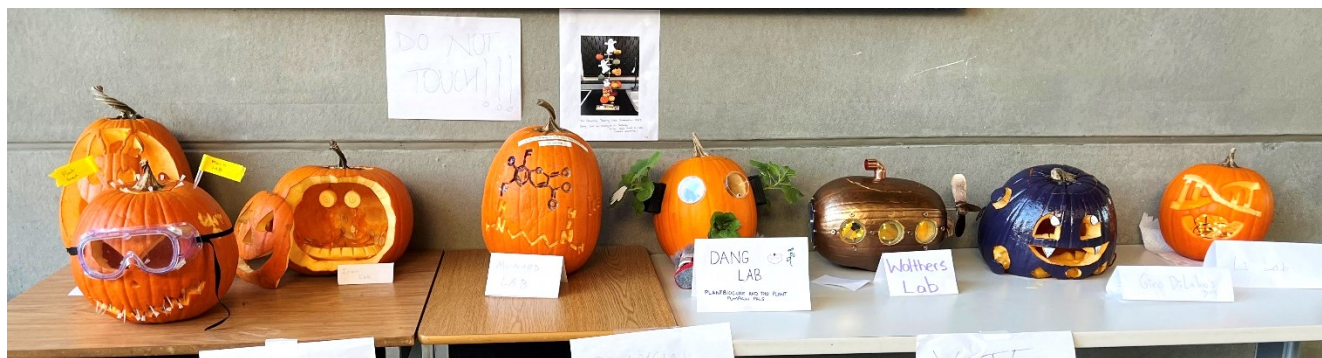
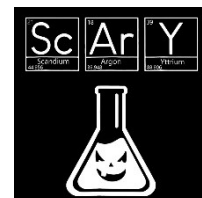
Dr. Thu-Thuy Dang also (virtually) deliver a keynote speech entitled "Plant-based pharmaceuticals: from discovery to products" at the 16th annual Asian Congress on Biotechnology in Ho Chi Minh City, Viet Nam on October 18th.

Pawan Sandhu (Dr. Susan Murch's group) presented her work at the Metabolomics Association of North America meeting in Columbia, Missouri (USA) with a poster entitled "AminoAcidDB – a database for identification of amino acids", for which she won the aforementioned award.

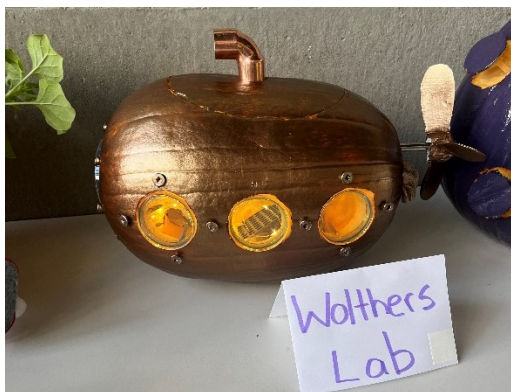


Annual pumpkin carving contest

Members of eight research groups entered the fierce but fun best-Jack O'Lantern competition organized by the Chemistry Graduate Students' Society. And the winner (with the most votes from the Department of Chemistry community) was **Liam Bystrom**, **Long Do**, and **Alexandra McGregor** from Dr. Kirsten Wolthers' group with their gourd submarine.



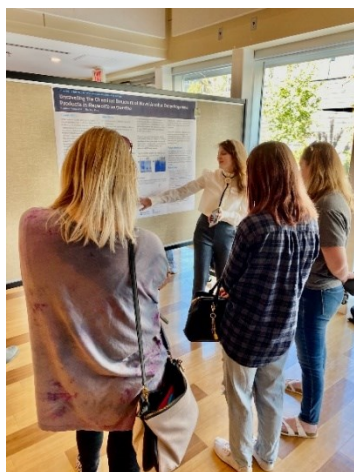
(Image: Dyuti Raghu)



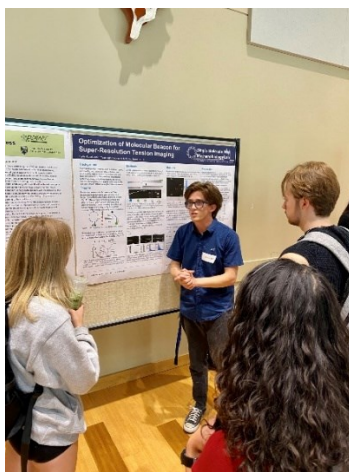
Undergraduate Research Symposium

The I.K. Barber Faculty of Science's 18th annual Undergraduate Research Awards Symposium on September 8th featured posters of the 2023 recipients of the undergraduate research awards (URA/IURA/USRA). Among the 18 presenters are Department of Chemistry awardees: **Anastasia Bernaz** (Dr. Thu-Thuy Dang's group), **Alexis Gauvin** (Dr. Kirsten Wolthers' group), **Joelle Regier** (Dr. Susan Murch's group), **Ryan Riopel** (Dr. Isaac Li's group), and **Megan Schroeder** (Dr. Frédéric

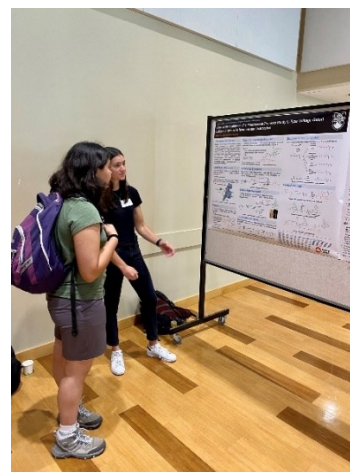
Ménard's group). The abstracts of their works can be found at <https://science.cms.ok.ubc.ca/wp-content/uploads/sites/128/2023/09/2023-URA-Abstracts-final.pdf>.



Anastasia Bernaz



Ryan Riopel



Megan Schroeder

In the news

“Breadfruit has all the makings of a global future food trend”

In a September 30th article, *Forbes* featured Dr. Susan J. Murch's work on breadfruit published on *PLOS One* in 2020 (DOI: 10.1371/journal.pone.0236300) as “the first complete, fully-designed breadfruit diet study” that “heralded the potential of the superfood to be the next big nutritional trend”. Read more at <https://www.forbes.com/sites/daphneewingchow/2023/09/30/breadfruit-is-a-climate-smart-superfood-with-global-appeal/>.



“Turning the taps to clean water from Kelowna to Kolkata”



(Image: Darren Hull/UBC Today)

Research in Dr. Robert Godin's group on photocatalytic arsenic remediation has been featured in *UBC Today* as part of its series on sustainability. The work aims to provide a solution to help remediate arsenic contamination and improve the life of millions of people across the globe. Read more at <https://ubctoday.ubc.ca/stories/october-3-2023/turning-taps-clean-water-kelowna-kolkata>.

We acknowledge that the land on which we gather is the unceded territory of the Syilx (Okanagan) Peoples. Kukwstsetsemc / 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).