

2010 november

a monthly publication of the
department of chemistry
university of alberta

chemNEWS

BUILDING UPDATES

Jill Bagwe

Chemistry West 5N Renewal Project

The U of A's Engineering and Infrastructure gave a presentation to Advanced Education and Industry Canada on the pressures of the fifth floor renovations of Chem West on the research teams on the fourth floor. In response, these agencies have allowed an extension of the KIP grant specific to the effects of the construction on the fourth floor of the Chemistry West / Biological Sciences KIP project. This will partially alleviate disruptions of the research groups on the fourth floor, but will not eliminate them.

The case was also made successfully to Industry Canada that extending the project will also allow a larger scope of work within the available budget, extending to major renovations of the 4th floor. Design discussions are now underway to develop laboratory space for theoretical chemistry and instrumentation labs using the new Master Plan floor plate. The department will develop a plan to decant the third and fourth floor occupants over several months, coordinating with the move to CCIS. This is an exciting and unexpected development that will result in the department realizing further modernization much sooner than we had envisaged.

Building Envelope Project

This project was first mentioned in September's newsletter and its purpose is to re-point and re-seal the brick, install new windows on the west side of Chemistry West and re-pour the crumbling concrete ledge at the ground level. Monies for this project stem from Knowledge Infrastructure Program (KIP) funds which must be spent by March 31st.

In speaking with the Project Manager, Michael Madsen informed me that the project was awarded to Delnor, who has an intimate knowledge of our building as it is this company who is doing the CW5N renovations. The materials were ordered about two weeks ago with an estimated delivery time of 6 to 8 weeks. Once the materials arrive, Delnor will hoard the outside of the building and begin the process of replacing windows and treating the brick and mortar – likely to begin in January 2011.

Important Dates & Events

- November 11:** Remembrance Day – University Closed
- November 12:** Furlough Day (NASA only) – University Open with Limited Services
- November 15:** Department of Chemistry Professional Development Series presentation "How to Set Boundaries and Be Assertive" (see attached)
- November 30:** Department of Chemistry 2010 Winter Social at the Faculty Club (Papaschase Room) from 3:00 to 6:00 pm. Tickets required for admittance (see attached).

Did You Know?

38% of Alberta's top 50 not-for-profit companies are managed by University of Alberta alumni.

From UofA Facts

Contributions Welcome

This newsletter belongs to the department of Chemistry. So submissions of interest to our department are welcome.

Submissions can be up to 1000 words and are subject to editing. Send your submissions to: newsletter@chem.ualberta.ca

Please send submissions by the 20th of the month to ensure they can be featured in the next month's newsletter.

ANNOUNCEMENTS

CONGRATULATIONS TO....

The second annual **Celebration of Chemistry** was held Thursday, September 23rd! At this event, the Department of Chemistry handed out its inaugural staff recognition awards. Three categories were created and the award recipients received certificates and framed art of pewter Inukshuk.

The **2010 Outstanding Teaching/Research/Technical Services Support** prize was awarded to **Dr. Margaret Sisley** in Chemistry Stores. This award recognizes staff that, through research or teaching, consistently makes a contribution to the success of Chemistry. In addition to demonstrating her diligence and positivity within the department, Margaret revamped an undergrad experiment that used platinum wiring. By introducing a new approach, she recovered what was previously thrown out which resulted in savings to the department of \$5,000 per year.

The prize for **2010 Outstanding Administrative Support** was awarded to **Mrs. Laura Pham** in the General Office. This award recognizes those who foster innovation, provide outstanding service, and demonstrate positive leadership. One of Laura's many accomplishments was the creation of a performance appraisal template, which could potentially be used for NASA staff university-wide.

Mr. Ryan Lewis, another member of the Chemistry Stores team, won the **2010 Chemistry Booster Award**. As a driving force behind what has been called Chemistry's best-ever annual golf tournament, Ryan has contributed immensely to a friendly, efficient and upbeat work environment. Among other feats, Ryan has used his mental inventory of fixtures on campus to furnish a faculty office on a shoestring.

Also presented at this event were the inaugural Alumni awards. These awards were created to celebrate the accomplishments of our many strong and creative graduates. Two will be given each year: one for postgraduate and one for undergraduate.

CONGRATULATIONS TO....

Dr. Margaret-Ann Armour was the recipient of the **Ph.D. Distinguished Alumni Award** at the Celebration of Chemistry. Dr. Armour currently holds the position of Associate Dean, Diversity at the Faculty of Science. Margaret-Ann was cited for her prominence of women in science and highly respected work on management of teaching laboratory waste management.

Dr. Mel Comisarow B.Sc., University of Alberta (1963) received the Department's **B.Sc. Distinguished Alumni Award**. Dr. Comisarow is currently a professor emeritus at the University of British Columbia. He developed Fourier Transformer Mass Spectroscopy.

Noteworthy awards and recognition over the past year for faculty include:

- ◆ **Jillian Buriak - elected Fellow of the American Association for the Advancement of Science**
- ◆ **Robert Campbell - Martha Cook Piper Research Prize; renewed Tier 2 Canada Research Chair in Bioanalytical Chemistry**
- ◆ **Derrick Clive – Canadian Society for Chemistry's RU Lemieux Award**
- ◆ **James Harynuk – Alberta Innovates New Faculty Award**
- ◆ **Wolfgang Jaegar – 2009-10 Humboldt Research Award; inducted into Royal Society of Canada**
- ◆ **Liang Li – Gerhard Hertzberg Award of the Canadian Society for Analytical Sciences and Spectroscopy**
- ◆ **Charles Lucy – UofA's Rutherford Award for Excellence in Teaching**
- ◆ **Arthur Mar – Klawe Award for Excellence in Teaching Large Classes**
- ◆ **Eric Rivard - Alberta Innovates New Faculty Award**
- ◆ **Jon Veinot – NSERC Accelerator Grant**
- ◆ **Fred West - Faculty of Science Award for Excellent Teaching**

CONGRATULATIONS TO....

The Department is delighted to announce that Mr. Mark Miskolzie has been appointed as our NMR Laboratory Supervisor, effective November 1, 2010. Mark has a long association with the department, having first earned his BSc(Specialization) in 1999 and then his MSc in Physical Chemistry (supervisor: Dr. George Kotovych) in December 2002. From January to June 2003, he worked as a Research Assistant in Dr. Kotovych's lab and in July 2003, he took up the position as the NMR Service Lab Coordinator under the tutelage of Dr. Albin Otter. During that period, Mark earned a reputation as a dedicated and proactive employee with extremely strong technical skills coupled with a courteous and professional attitude. These characteristics made Mark an obvious successor to the position. Given his long association with the NMR Facility, the department is very fortunate to have hired Mark and is confident he is the right person to take on the challenge.

WELCOME TO....

Mr. Sylvain Bernard, a Research Assistant with Dr. Hall. Mr. Bernard will be transitioning to a Post-Doctoral Fellow (PDF) position very soon.

Dr. Rajesh Pillai, a Post-Doctoral Fellow (PDF) with Dr. McCreery.

Dr. Graham Murphy, a Post-Doctoral Fellow (PDF) with Dr. West.

Dr. Glen Shoemaker, a Post-Doctoral Fellow (PDF) with Dr. Klassen.

Dr. David Dietrich, a Post-Doctoral Fellow (PDF) with Dr. Vederas.



Photos courtesy Jill Bagwe, Karen McKinley and Mackenzie McKinley
Innuksuk Photo courtesy
<http://www.travelblog.org/Photos/4737316>

Innuksuk in Butte, Montana



Photos from the Second Annual Celebration of Chemistry Award winners:
Dr. Margaret Sisley, top left;
Mrs. Laura Pham, top middle;
Dr. Mel Comisarow, top right;
Dr. Margaret-Ann Armour, middle left;
Mr. Ryan Lewis, bottom right.



ANNOUNCEMENTS – cont'd

Congratulations to all 65 participants of the **Chemistry 2010 Curling Bonspiel** hosted by the **Chemistry Graduate Students Society (CGSS)**. This year's Halloween themed tournament was held on Saturday, October 30th at the Granite Curling Club. The winning teams were as follows:



1st Place: Hack-'n-Slashers – Mike Serpe, Al Chilton, Eric Rivard, and Ryan Lewis



2nd Place: Sister Wives – Jessica Boyd, Lydia Chen, Justin Geisel, and Vincent Yang



3rd Place: Ice Warriorettes & the 40-Pound Rock – Brenna Brown, Lydia Glover, Azeret Zuniga, and Rhett Clark



Best Costume: Dead Chemists' Society – Steve Dempster, Adam Malcolm, Kyle Wells, and Marie Barnes

CONGRATULATIONS TO....

Lydia Chen (Dr. Le): passed her Ph.D. candidacy exam on September 3, 2010

Dan Lehnherr (Dr. Tykwinski): passed his Ph.D. final exam on September 13, 2010

Curtis Rieder (Dr. West): passed his Ph.D. final exam on September 13, 2010

Hongqiang Liu (Dr. Vederas): passed his Ph.D. final exam on September 15, 2010

Josh Wasylcia (Dr. Harrison): passed his Ph.D. final exam on September 17, 2010

Ledi Wang (Dr. Harrison): passed her M.Sc. final exam on September 20, 2010

Nena Nguyen (Dr. Le): passed her M.Sc. final exam on September 28, 2010

Usha Hemraz (Dr. Fenniri): passed her PhD final exam September 29, 2010

Amr El-Hawiet (Dr. Klassen): passed his PhD candidacy exam September 29, 2010

Do You Have an Idea...?

...for a cost-saving measure or revenue-generating plan? We now have a new e-suggestion box.

Email: suggestions@chem.ualberta.ca

Healthy Workplace Tip

Avoid SAD

As the temperature drops and the days get shorter, we become more susceptible to seasonal affective disorder (SAD). Those who work long hours are more likely to suffer from this seasonal depression. Therefore, it's important to get some sunshine everyday. If it's too cold to go outside, make sure to take some breaks in well-lit areas during each day.



New Xerox Photocopiers in the Mail Room

Laura Pham

After a false start in the spring, our new photocopiers finally arrived this past month. The University of Alberta's preferred vendor, Xerox, selected two models that will capture all of the features of our existing copiers and more. The one, highly demanded, feature that is not yet installed on our new Xerox 4127 copier is the *copy set numbering* or *batch numbering* function. Xerox is currently working on a software modification to achieve this feature on the larger of the two copiers. They are aware of the urgency of this feature and have provided us with a temporary solution which will be communicated to everyone in more detail once a delivery date has been confirmed.

Upon their arrival, our IT Analyst, Shelley Garrett, was able to plug our new copiers into the network and complete all the scanning and printing configurations. As with our Canon copiers, a four-digit user ID code is required to access and use the copiers. Everyone's current user ID codes were transferred over during the initial configurations and if anyone is experiencing any issues, they can contact me.

A training session for each of the new photocopiers was also held soon after their arrival for all of the administrative staff. Anyone wishing to be provided with a tutorial for either of the copiers is welcome to approach me. There is also an instruction booklet for the do-it-yourselfers on each of the copiers outlining how to perform some of the basic copying and scanning functions.

The Department has committed to a four-year lease agreement with Xerox expiring on October 31, 2014. Given that 4.2 million copies have been run through our old, large-capacity Canon copier and it was found to be consistently breaking down this past year, these new, replacement machines will be a welcome addition to our administrative tools.

XEROX 5790



Some of the impressive features of this machine include:

- Up to 90 pages per minute (ppm) copying and printing
- Specialized print applications, such as Annotation, Bates Stamping, and ID Card Copy
- 3-Hole punch, staple
- Advanced finishing options that will produce paginated, saddle-stitched and folded booklets, and Z- and C-folded brochures
- Color scans documents to an email account

XEROX 4127



Some of the same features found on the 5790 can also be found on the larger 4127 model in addition to:

- Up to 110 pages per minute (ppm) copying and printing
- A high-capacity feeder
- 2400 x 2400 dpi print resolution

Movember -- It's Back!

Marcel Munroe

This Movember, the month formerly known as November I've decided to donate my face to raising awareness about prostate cancer. My donation and commitment is the growth of a moustache for the entire month of Movember, which I know will generate conversation, controversy and laughter. I'm doing this because 4,400 men die of prostate cancer in Canada each year and one in six men will be diagnosed during his lifetime. This is a cause that I feel passionately about and I'm asking you to support my efforts by making a donation to Prostate Cancer Canada.

To help, you can either:

- Visit this link: <http://ca.movember.com/mospace/159169/> and donate online using your credit card or PayPal account
- Write a cheque payable to Prostate Cancer Canada, referencing my name or Registration Number [159169](http://ca.movember.com/mospace/159169/) and mailing it to: Prostate Cancer Canada, Suite 306 145 Front Street East, Toronto, ON M5A 1E3, Canada.

All donations are tax deductible to the extent permitted by law. For more details on how the funds raised from previous campaigns have been used and the impact Movember is having please visit:

<http://ca.movemberfoundation.com/research-and-programs>

Watts the Big Deal?

Bonnie Gover

"It's all about the kilowatt hours," says Jillian Buriak in her seminar entitled "Using Nanoscience for Photovoltaics: Generating the World's Energy Through Solar." Leading the first of a series of seminars offered by the School of Energy and the Environment, Dr. Buriak was referring to the difference between our current and future energy consumption. I attended the jam-packed seminar on September 15 intending to get a better understanding of solar energy. The topic was being brought up more often in the news and I had just heard that the government was offering money to homeowners who installed solar panels on their roofs. So, wanting to know more over a lunch hour with snacks, I grabbed a seat in the cushy surroundings of the Stollery Development Centre.



Capturing solar energy for, say home use, involves the use of a solar roof panel made up of a photovoltaic (*photo* = light, *voltaic* = electricity) arrangement of linked cells. Just like cells in a battery, solar cells make electricity; however, instead of making electricity from chemicals, solar cells make electricity from sunlight. But the cells themselves can't store electricity like a regular battery can for the days when it's cloudy or for use at night; they need an external source to do that. They need to be hooked up to an external battery or

connected directly to the home's power grid. This system is still expensive but a promising and cheap alternative to the storage issue could involve the use of an electrolyser, water and a fuel cell, say in a basement.

Dr. Buriak spoke about more than solar panels on the roof. She spoke about the "the greatest challenge facing humanity." That challenge is finding dependable, clean, scalable energy sources, particularly because by the year 2050, the need for that energy will have more than doubled from our current global usage. Much of that need will be for the poorer nations of the world that have few, if any, energy sources. Traditional sources (oil, gas, coal) will not be able to meet the global demand, due to expense and impact to the environment.

But solar energy can meet that demand. "The sun is the only viable source of energy that can power the planet," says Buriak. If solar cells could be made cheaper and the storage issue could be adequately addressed, there might just be a way of addressing that global challenge. Exciting possibilities exist. She and her team are working on it.

The City of Edmonton's "seed" money, by the way, was snapped up in a couple of days.

For a list of upcoming SEE seminars, go to www.see.ualberta.ca/SEESeminarSeries.cfm.



BUILDING A MORE EFFECTIVE YOU

*Providing you the tools to
deal with Life's challenges*



Building a More Effective You is a professional development series created specifically for the **Department of Chemistry**. The series will address issues that many of us face in our daily lives including time management, effective communication, stress and depression.

All department members are welcome, so bring your lunch and learn how to handle issues that we face on a regular basis.

Fresh fruit and water will be provided as a healthy snack.

NEXT PRESENTATION

HOW TO SET BOUNDARIES AND BE ASSERTIVE

Many people experience the need to set clear boundaries with others, at work and at home; but they have difficulty speaking up in conflict situations or they put aside their own requirements in favor of others' needs. This workshop is designed to assist people in identifying, setting, and maintaining appropriate boundaries and to assure that their own needs are balanced with the needs of others.

Monday, November 15, 2010

Irene Spelliscy, Human Solutions

12:05pm-12:55pm

UPCOMING PRESENTATION DATES

MAKING WORK A QUALITY EXPERIENCE

Monday, December 20

DEPRESSION

Monday, January 17



If you have any questions please contact the Social Environment Committee at: socenvcomm@mcfely.chem.ualberta.ca



Health Promotion and WorkLife Services (HPeWS)

LUNCH & LEARN

November 2010

12:05 – 12:55 p.m.



****Please note that staff and faculty will receive priority Lunch and Learn registration, with others being accommodated if space permits. To ensure a quality learning environment for all participants, registrants are asked to please endeavour to arrive at Lunch and Learns on time to minimize class disruption.****

Supporting the Caregiver

Catherine Rakchaev, Human Solutions

Wednesday, November 3, 2010—Education South 255

Those caring for family or friends naturally focus their energies on the health of their loved one and frequently neglect themselves, whether due to a lack of time and/or energy. The stress experienced by caregivers can have negative consequences on their physical and psychological well-being. This workshop will provide participants with support and resources to help them taking care of their loved ones and at the same time sustain a healthy quality of life.

Professional Dress

Gail McDonald, BGS Enterprises

Tuesday, November 9, 2010—Education South 213

For better or worse, your appearance says a lot about you. People are quick to make an impression of you based on your appearance – even assessing attributes such as competence, motivation, and character before they may have spoken with you.

What message are you conveying with your wardrobe? What is your purpose when it comes to your image? Participants in this Lunch and Learn will have the opportunity to explore these questions and more. Discussion will also touch on work-appropriate clothing and how to begin to make changes to ensure that your intended “message” is recognized by colleagues and clients.

****The first in a three-part Professionalism Lunch and Learn series****

Clothing and Textiles Collection Tour

Viada Blinova, Department of Human Ecology

**Tuesday, November 16 & Thursday, November 18, 2010—
1-15 Human Ecology**

Founded in 1972, the University's Clothing and Textiles Collection is comprised of over 23,000 artefacts with local, national and international significance. Take some time out of your day to explore some of its treasures! Viada Blinova, Collections Manager, will introduce participants to some examples of ethnographic textiles from China and Japan. You will also receive a brief introduction to the current exhibits – Sense and Sustainability and Packing Dolls.

****Please register for only one of these dates. Space is limited!****

Resilience: Learning to Roll with Life's Punches

Irene Spelliscy, Human Solutions

Tuesday, November 23, 2010—Education South 213

Lives of working people have become busier over time and the capacity to cope with and adapt to the pressure has become more important. This workshop provides guidance to help participants develop and maintain resilience by having a hopeful outlook, a healthy lifestyle and engaging in positive self-talk.

Bring your lunch and join us for these informative sessions. Seating is limited—please register at www.learningshop.ualberta.ca. For information about the Lunch & Learn program, contact the Health Promotion and WorkLife Services office: hpaws@hrs.ualberta.ca.



The Department of Chemistry Invites you to our 2010 Winter Social

*On Tuesday November 30, 2010
At the Faculty Club
(Papaschase Room)
11435 Saskatchewan Drive*

Cocktail Reception to start at 3:00 pm and end at 6:00 pm

*There will be a CASH BAR and a selection of non-alcoholic
beverages and hors d'oeuvres served*

** You will not be admitted without a ticket **

*Let's celebrate this holiday season,
it's the perfect reason
So mark your calendars for this date
We can't wait to see you, so don't be late!*

Please confirm your attendance by Friday,
November 19th to karen.mckinley@ualberta.ca

Tickets will be issued once you RSVP as you
will not be admitted without a ticket!