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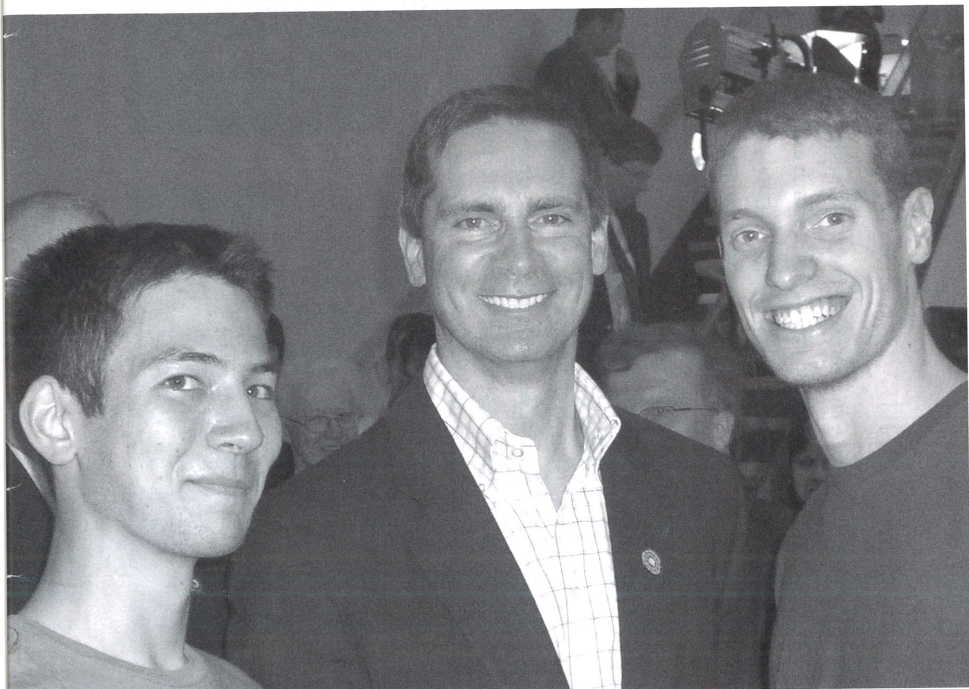
CHRONICLES



Queen's
UNIVERSITY

AUGUST 2007

Premier McGuinty visits the department



The Chemistry Department was honoured to welcome Premier Dalton McGuinty during his stop in Kingston on June 12, 2007. The Premier announced that the government is building a stronger, greener economy by providing a one-time grant of 21 million to create a new Advanced Research and Innovation Institute at Queen's University

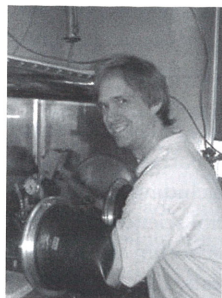


Q-CH_eM CHRONICLES



AUGUST 2007

A Spotlight on Faculty: Dr. Philip Jessop



Homecomings should be sweet. For Dr. Philip Jessop coming home was a little more difficult than sweet. Philip was returning to Canada, his home country, to start his tenure as a Canada Research Chair in Green Chemistry in the Department of Chemistry. Having loaded the lab and household belongings into two trucks and a van, Philip, Ph.D. student David Heldebrant, David's girlfriend Elizabeth and Philip's family, Lori, David and Michael,

headed out from UC Davis in California to Kingston. If you are travelers you probably know what's coming. After 3000 km without incident, the group hit the Canada/US border at the 1000 Islands Bridge. Everything was in order, well almost everything. The only thing missing was a letter from Queen's allowing David into the country. Then of course there were the rats. Not rats for the lab, but pet rats. David and Elizabeth had a fondness for the cute little things. But where were their pedigree papers? That's right, pedigree papers. Leaving David, Elizabeth and their rats in Alexandria Bay, Philip and family headed through customs and on to the Chemistry Department. There was an urgent need for a letter from Graduate Studies confirming David was registered at Queen's. Philip arrived just after noon, still with a smile on his face. Where could he get a letter? Did we mention it was the Friday before the July long weekend? Phone calls were made, the letter was written and someone was located to sign the coveted document. We are happy also to report that David, Elizabeth and their pets were finally allowed into our fine country the following morning. Welcome to Canada!

It's been four years since the homecoming and luckily things have only gotten better! David has completed his Ph.D., returned to the States and he and Elizabeth are proud parents of little Abigail born on June 5th, 2007. Philip has done alright for himself as well. He was promoted to full Professorship on July 1, 2007, was awarded a Canada Research Chair in 2003 and received the Canadian Catalysis Lectureship Award in 2004. This summer he is co-chairing, along with Keith Marchildon of DuPont Canada, an international conference on greenhouse gases and is preparing a new book on Supercritical Fluids with Walter Leitner of the University of Aachen.

Research in the Jessop group has taken off, thanks in no small part to one small and infamous molecule, CO₂. You would think that CO₂ is bad news, with so much worry about global warming these days. However, there is a silver lining; CO₂ is now the world's cheapest reagent! You'd be surprised how many uses can be found for this gas. For example, with the help of CO₂, the group has developed the world's first switchable solvents, meaning solvents that change their properties whenever you want them to. The first version, which switched from low to high polarity

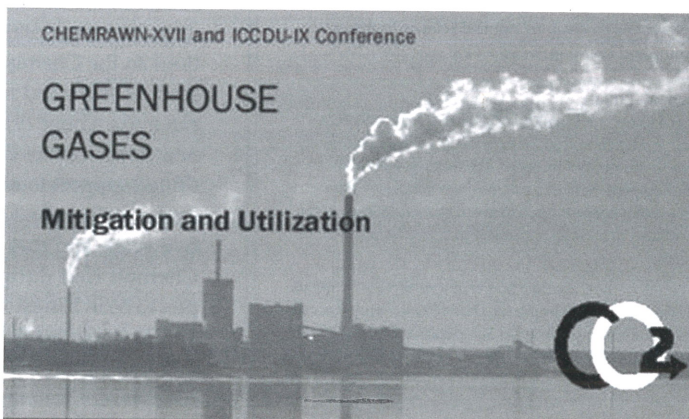


Philip's group currently includes Yi Cui, Philip, Lam Phan, Andrew Carrier, Andrew Bucholtz, Aimee-Lee Luco, Brendan Flowers, and Stephanie Luco

when flushed with CO₂ gas (and switched back when flushed with air), was developed by grad student Li Xiaowang and published in *Nature* in 2005. New examples are being developed by Lam Phan.

Switchable surfactants were developed by grad student Yingxin (Sindy) Liu and published in *Science* in 2006. Surfactants are molecules which will allow oil and water to mix (in emulsions). Switchable surfactants allow oil and water to mix only when we want them to! The oil and water will mix as long as the switchable surfactants are "switched on" and the oil and water will separate when the surfactants are "switched off." Imagine cleaning oil from dirty equipment using soap and water. Once you're done your equipment is clean, but now your water has oil in it. If you could tell the soap to stop working, then your water and oil would separate. Then your equipment AND your water would be clean. Guess what switches the surfactants on. It's CO₂. Air switches them off.

Other research in the group includes asymmetric synthesis (again using CO₂), catalysis in green solvents, and hydrogen storage for fuel cell applications. The group is welcoming many new members this fall.



2006-2007 DEPARTMENTAL HIGHLIGHTS

June 2006

Bob Lemieux is appointed as Acting Head for a term of one year.

July 2006

The Department welcomes our newest staff member, Susan Thomson-LaFosse. Susan is the new departmental Operations Assistant.

Hugh Horton is appointed Associate Head for a term of one year.

A paper by Sindy Liu and Philip Jessop on switchable surfactants is accepted by the journal *Science*. These new molecules are "switched on" to work as surfactants by the presence of an atmosphere of CO₂ but they are "switched off" (so that they no longer work as surfactants) by air. Sindy has shown that when they're "on, they stabilize emulsions and allow emulsion polymerization" when they're "off", they don't stabilize emulsions and they actively demulsify crude/oil water mixtures.

The annual Departmental BBQ is held on Friday July 7th. We wish our former Head of the Department, David Wardlaw bon voyage as he begins his tenure as Dean of Science at the University of Western Ontario.

August 2006

Gary van Loon's textbook is used all over the world! An ACS booklet is promoting a sale of a set of books from Oxford University Press and highlights *Environmental Chemistry: A Global Perspective*, written by Gary vanLoon and SJ Duffy.

September 2006

Stan Brown is the Recipient of the Prize for Excellence in Research awarded by Queen's University.

The Department celebrates the 50th Anniversary of the First PhD Thesis in Chemistry on September 15th. Our special guest is Dr. Harry McArdie the 1st PhD recipient. Our other guest speakers include Dr. Wayne Schnarr ('77) Dr. Don Weaver ('86), Dr. Chris Barrett ('98) and Dr. Graham Gibson ('06).

The Queen's Chemistry Innovation Council 4th Careers Luncheon for Undergrads is held Thursday, Sept. 21. The luncheon featured presentations by Barry Robins from Davos Chemicals, Bonnie Lampe from Gamble Technologies and John Molloy from PARTEQ innovations.

The QCIC Annual General Meeting is held on September 22.

October 2006

Single Thread Theatre Company delivers *Henry V* by William Shakespeare, from October 11 to the 21st. The show takes place on the terrace of Chernoff Hall. This is the theatre company's third presentation in Chernoff.

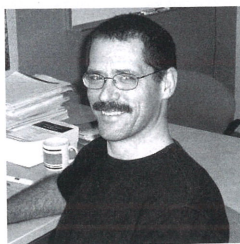
Anne Petitjean and Derek Pratt of the Department of Chemistry are awarded Early Research Award (ERA) by the Ontario Ministry of Research and Innovation (MRI).

Bill Newstead receives the Applied Science First Year Teaching and Learning Award for the year 2005-2006.

November 2006

Richard Oleschuk is awarded \$286,000 from NSERC's *Idea 2 Innovation* program to develop a novel technology or use in proteomics research. The funding will finance further development of a microsphere nanospray emitter, a device that enables researchers to more fully exploit the capabilities of mass spectrometry as a tool for proteomics analysis.

On behalf of the Canadian Society for Analytical Sciences and Spectroscopy (CSASS), Dr. Diane Beauchemin coordinates a one-day workshop on *Sampling for the Analytical Laboratory* which is held at Chernoff Hall on Thursday, Nov.30, 2006.



Message from the Head

BY BOB LEMIEUX

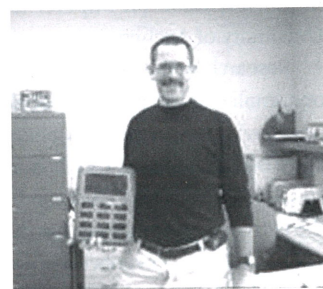
It's been one year since I wrote my first column for the Q-Chem Chronicles as Acting Head, and I now have the privilege of writing the same column as Head, having been appointed for a five-year term effective July 1, 2007. The past year as Acting Head has been an amazing learning experience, full of excitement, new challenges and proud moments, including being present at the 2007 CSC Awards Banquet to see three of our faculty members receive national awards (see column on page 8). Perhaps one of the most important things I have learned over the past year is the growing importance of developing partnerships at different levels: with other academic departments, with industry and government agencies, and with our alumni. Because today's research-intensive science departments are expected to grow and prosper in a climate of limited resources, it is vital that we think outside the box and be proactive in establishing new partnerships that will contribute to the long-term vitality of our department.

Traditionally, most academic departments at Queen's have operated more or less as 'research silos' with relatively little interaction between them. Breaking down those barriers through the development of multidisciplinary research initiatives has many benefits, including the ability to take advantage of new funding opportunities. Chemistry, being the "central science", stands to benefit from many such initiatives, but one must first create the appropriate forum at Queen's to bring researchers together who have complementary expertise and interests. Last December, a research retreat jointly hosted by the departments of Chemistry, Biochemistry and Pharmacology & Toxicology was held for the first time and resulted in a collective awakening that was unprecedented at Queen's, according to many participants. Since then, a working group has been building on the momentum stemming from the retreat by focusing on cross-disciplinary areas such as Drug Delivery, DNA Damage, Protein Function and Drug Discovery, and Chemical and Biological Analysis to identify research strengths and synergies, and how these could be leveraged towards new funding and partnership opportunities. Other initiatives in partnership with the Faculty of Health Sciences are designed to ensure the sustainability of our major instrumentation infrastructure (see Rick Boswell's column).

On another partnership front, the Queen's Chemistry Innovation Council has been very effective at promoting the department in industrial and governmental circles, and I want to take this opportunity to thank Jan Oudenes (CEO, Alphora Research) for his leadership and support as Chair of the QCIC. Over the past year, we have been actively recruiting new Council members, including Lorenzo Ferrari (Head of Product Research, Lanxess), Rick Friesen (Head of Medicinal Chemistry, Merck Frosst), Louis Lamontagne (CEO, PainCeptor Pharma) and Dan Wayner (Director General, Steacie Institute, NRC). The annual QCIC meeting will be held on Friday, November 2, and the Career's Luncheon and QCIC Dinner will be held the day before. At the dinner event, we will welcome back Dr. Suzanne Fortier, President of NSERC, as our guest of honor and after-dinner speaker. The annual QCIC meeting is always a great opportunity to keep Council members up to date on various developments in the Department, to help bring in line some of the department's academic and research activities with the demands of the private and government sectors, and to identify new approaches to innovate and stand out at the national and international levels.

Last, but not least, the partnerships we develop with our alumni play a key role in helping the department maintain its strength and competitiveness. Whether it is through generous contributions to the Chemistry Gift Trust or the Undergraduate Equipment Fund, the establishment of student prizes and scholarships, or by promoting the department in your own sphere of work, you can make a huge difference. Many challenges, and also many new opportunities lie ahead of us, and we will need your continued support to remain one of the leaders in chemical education in Canada. I hope to meet many of you over the next five years, and that you will take the opportunity to stop by Chernoff Hall during Homecoming, or whenever you happen to be in Kingston.

The Department of Chemistry would like to congratulate Bob on receiving the 2007 Chemistry Graduating Class Award for Excellence in Teaching.





Message from the Manager

BY RICK BOSWELL

Once again, the past year has brought many changes to the Chemistry Department and to Chernoff Hall. One of the decided advantages of managing this department is the ease with which change occurs to the building and its infrastructure.

With respect to infrastructure, the renovation of space for our newest faculty member, Jean-Michel Nunzi, was completed in November. This was a relatively minor renovation that was completed ahead of time and under budget. We also saw the installation of a Varian 600 MHz NMR Spectrometer in our NMR facility. This project was significant because the NMR, which is under the stewardship of Dr. Steven Smith of Biochemistry, was relocated to our facility from the Biosciences Complex, thus amalgamating all the NMR resources on campus into one state-of-the-art facility. It is also noteworthy because this amalgamation of resources is likely to be the trend for future sustainability, and it started here, in Chemistry!

As I am writing this, we are in the midst of installing a chilled water loop system into our instrument rooms in the research wing. As the density of instrumentation increased over the past few years, with no apparent end in sight, there was the need to increase cooling capacity to accommodate more instruments. This also has the added benefit of decreasing air requirements, and so we intend to use those savings to add two fume hoods in a research lab that is currently under-serviced. Plans are also being developed to renovate the Mass Spectrometry facility to accommodate additional instruments and provide additional cooling.

We have had a great year with respect to staffing renewals. We were able to hire Susan Thomson-Lafosse to look after our stores operation, which allowed Pam Bandy-Dafoe to move up into the general office to focus more on accounting and book-keeping. The additional resources were much needed. We were also able to hire Dr. Yi-Min She to manage our Mass Spectrometry facility. This is a continuing appointment, which demonstrates the level of commitment the department and the Faculty of Arts and Science has made to research infrastructure. I would very much like to take this opportunity to thank Jie Sui for managing the Mass Spectrometry facility from August 2006 until Yi-Min came on board in early February. She literally did the work of two people, kept our facility operating, increased sample throughput and revenue and did it all with a great amount of grace! Jie is very much an asset and a credit to the department.

No doubt there will be further changes in the next year, and we welcome the challenges that come with change.

Special announcement



Erin Johnson, Queen's doctoral student in computational chemistry, has been awarded the National Science and Engineering Research Council's (NSERC) Andre Hamer Prize for research done at the National Research Council to refine existing computer models for analyzing chemical reactions and to develop new models that are more accurate and efficient. She was honoured by Dr. Suzanne Fortier, President of NSERC with \$10,000 and silver medal prize at the Montreal Science Centre on June 11, along with five other top Canadian postgraduate science students. Ms.

Johnson was selected for her early achievements and career potential in research, as well as for her interpersonal and leadership abilities. The prize is awarded to the most outstanding candidates in NSERC's master's and doctoral scholarship competitions

Please Welcome Our Newest Professor



Dr. Nick Mosey will join the Department of Chemistry at Queen's on January 1, 2008. Currently, Nick is an NSERC Postdoctoral Fellow in the Department of Mechanical and

Aerospace Engineering at Princeton University, where he develops electronic structure methods for treating strongly-correlated electron systems and uses chemical simulation methods to study failure mechanisms in materials. He earned his Ph.D. in Theoretical Chemistry and Scientific Computing from the University of Western Ontario in 2006, and obtained a B.Sc. in Honors Chemistry from UWO in 2001. His honors include receiving the 2006 Howard Alper Postdoctoral Prize as the top applicant for an NSERC Postdoctoral Fellowship, the 2007 NSERC Doctoral Prize for having his Ph.D. thesis ranked among the top two in Canada in the natural sciences, and the 2006 Paul de Mayo Award for the top Ph.D. thesis from the Department of Chemistry at UWO. Nick's research interests include the development and application of theoretical methods to the study of complex chemical problems. In particular, he is interested in developing techniques to accurately study large chemical systems, and applying these techniques, along with established chemical simulation methods, to problems related to materials science, surface chemistry and wear.

Alumni Contact Information

Do we have your current, correct mailing and contact information? Do you have a new email address? Let us know. We would really like to locate and/or hear from all of our "extended family" of alumni. Please feel free to write/email/call and give us details of where life has taken you since your days in the Department!

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Tales from the undergrads ...

Adventures of a summer undergrad, NSERC Style...

by Zac Hudson

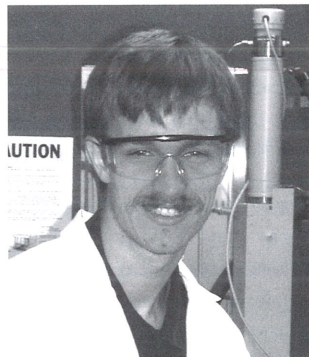
I began my undergraduate studies at Queen's three years ago, and have since found my place here in Chernoff Hall as a chemistry major. I found spectroscopy fascinating, the experiments challenging, and that as my organic chemistry professor once put it, "a good synthesis is like listening to jazz." After my second year I was fortunate enough to work as a summer student in the lab of Dr. Robert Lemieux, and by August I felt like Benny Goodman in a lab coat. I was also lucky that the planets were aligned favourably that summer, so most of my experiments making liquid crystals went as smoothly as could be.

This summer, however, I learned that if a good synthesis is like listening to jazz, a good spectroscopy experiment sounds a lot like Led Zeppelin! Drop by the laser lab of Dr. Hans-Peter Loock, and you'll often hear my fellow undergrad Jon Saari jamming away on the first prototype of the light-driven photonic guitar. Earlier this summer, we were also fortunate enough to give Ontario Premier Dalton McGuinty a demo when he dropped by the department (that handsome devil on the right hand-side in the cover photo is none other than yours truly). As for my research, I'm currently working on laser spectroscopy of air pollutants. In a nutshell, it's three parts physics, three parts chemistry, two parts magic and one part luck. I'm convinced there are spectroscopy gremlins lurking in the lab, changing voltages and crossing wires with panther-like stealth. However, while some days I feel like the lasers and I need relationship counseling, it's been a great learning experience and the work environment couldn't be better. Besides, someone's always around to bail me out when I'm in danger of breaking something expensive. Good ol' postdocs. Well, as they say, nothing beats experience, and the experience I've gained from my summers in Chernoff Hall will certainly come in handy as I look towards grad school in 2008.

Those gremlins won't hide from me for long.



Zac Hudson



Andrew Bucholtz

The continuing summer saga from a SWEP student's point of view...

by Andrew Bucholtz

This summer, I am researching into various methods of hydrogen storage, with potential fuel cell and automotive applications. It involves testing various liquids for the ability to be reversibly hydrogenated and dehydrogenated. The end is to find a liquid with many useful properties that could be hydrogenated in a factory and used to fill a vehicle's gas tank. The liquid would then undergo a dehydrogenation reaction, producing hydrogen gas in the process, which could be used to power the vehicle. This project is jointly supervised by Dr. Philip Jessop of Chemistry and Dr. Boyd Davis of Mining Engineering.

I have always had a considerable interest in chemistry, but the opportunity to do meaningful and applicable research this summer has taken it to another level. After I finish my undergraduate degree, I am hoping to go on to graduate school, likely here at Queen's. Originally, I had planned to specialize in inorganic or analytical chemistry, but my work in Dr. Jessop's lab has given me a significant interest in green chemistry as well.

My current position is funded by the Department of Mining Engineering through the Summer Work Experience Program (SWEP). I particularly wanted to experience a research environment this summer, so I applied for every one of the 12 or so SWEP positions that were available to students in the chemistry program, regardless of which department had posted them. This led to me meeting Dr. Davis. Upon hearing of my background in Chemistry, he hired me to work in Dr. Jessop's lab on their joint project this summer.

A typical day in the lab for me starts around 9 in the morning. I usually arrive, remove one reaction from our heating plate, and put on another. The extended time frame needed for the reactions I work with required that I usually run one overnight and one during the day. I then work up my product and analyze it in the departmental NMR facility to check how much of the compound has been dehydrogenated.

What makes my experience truly valuable is the other knowledge I have gained from it. I actively participate in our weekly group meetings, where we discuss the progress of each group member's research, as well as recent literature publications. These meetings have definitely increased my knowledge of and my interest in other areas of chemistry.

The best part of the job is the people, though. The various undergraduate and graduate students in our lab are a lot of fun to work with, and my supervisors are very helpful and knowledgeable. Our group is very cohesive, and we often do activities outside the lab, such as bowling, barbecues, and even pub crawls.

In short, this research position has been a terrific experience for me, and I would highly recommend summer research to any student interested in chemistry.

DID YOU KNOW...

You may designate your bequest to the Department of Chemistry?

Your bequest regardless of its size is welcome and appreciated. Your gift will help the Department of Chemistry meet the challenges and opportunities ahead. To learn more about how your bequest, charitable annuity, or gift of life insurance can help educate the next generation of chemistry professionals, please contact: **Jane Scanlon, Office of Planned Giving, Queen's University, Kingston, ON, K7L 3N6. Tel 1.800.267.7837, Fax 613.533.6762 Email jane.scanlon@queensu.ca**

What's New?



Ruibing Wang (Ph.D., Macartney) and Xue Wang (M.Sc. Civil Engineering) were married on May 12, 2007.



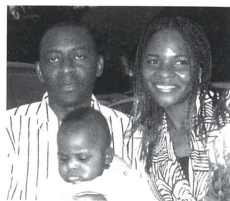
David Heldebrand, (Ph.D., Jessop) and wife Elizabeth had a baby girl, Abigail, on June 5, 2007.



Ed Maracle won the 2006 Staff Appreciation Award! Thanks Ed for your hard work!



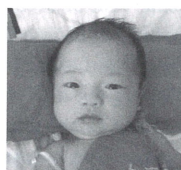
Irina Paci (Ph.D., Cann) joined the Department of Chemistry at the University of Victoria as assistant professor on July 1, 2007.



Gabriel (Liu group) and Antonia Njikang were blessed with a baby boy named Ethan on December 21, 2006.



Dr. Gary vanLoon was awarded the 2007 Teaching Excellence award of the School of Environmental Studies.



Jiguang (Liu group) and Naizhuo Zhang are proud to announce the birth of their daughter Jessie. She was born on June 6, 2006 and weighed in at 3.2 kg.



Finishing 4th in the Smith Falls triathlon, Kim McFarlane, our Fisher Rep is now preparing for the K-Town Tri. Wade, Ben, looks like you guys have some competition!!



On Sunday, April 29, Chemistry's own Wade White (Wang group) and Ben Glasspoole (Crudden group) ran the Kingston Half Marathon. Congratulations guys!



Tyler (our PPS staff) and Holly MacDonald are thrilled to announce the safe arrival of their daughter Zoë. Big brother Ethan is very excited as well



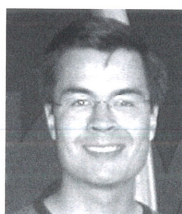
Krista Voigt from the Snieckus group delivered a baby boy on Friday March 30, 2007 named Jonah weighing 7 lbs, 12oz.



Bin Wang (Ph.D., Oleschuk) joined the Department of Chemistry at Marshall University as assistant professor on July 1, 2007.



David Kreller (Ph.D., Horton/vanLoon) joined the Department of Chemistry at Georgia Southern University as assistant professor on July 1, 2007



Scott Hartley (Ph.D., Lemieux) joined the Department of Chemistry at Miami University (Ohio) as assistant professor on July 1, 2007.



Zhaguo Tong (Ph.D., Look) joined the Department of Chemistry at Acadia University as assistant professor on July 1, 2007.



Ken Edwards (our PPS staff) and Sarah are the proud parents of baby girl, Rowen Morgan. She arrived on January 24, 2007, and weighed 9 lbs. 3 oz.

2006-2007 DEPARTMENTAL HIGHLIGHTS

December 2006

The inaugural Research Retreat hosted by the Departments of Biochemistry, Chemistry and Pharmacology & Toxicology is held on December 13th at the Donald Gordon Centre. The retreat is aimed at exploring potential mutually-advantageous research areas which may form the basis of future collaborations and take advantage of future granting opportunities.

Ed Maracle wins the Staff Appreciation Award for 2006

February 2007

Dr. Yi-Min She joins the Chemistry Department as Mass Spectrometry Manager on February 5.

March 2007

The Chemistry Banquet is held on Saturday March 10th. Bob Lemieux receives the *Chemistry Graduating Class Award for Excellence in Teaching*.

April 2007

Gary vanLoon is awarded the 2007 *Teaching Excellence Award* of the School of Environmental Studies.

Cathy Crudden continues to Chair the Strategic Grants Panel "Competitive Manufacturing and Value Added Products" for NSERC.

The 2nd annual *Materials and Nanotechnology Symposium 2007* takes place April 25th & 26th.

35th Southern Ontario Undergraduate Student Chemistry Conference:

Chris White from the Snieckus Group wins 2nd Prize in the Organic Chemistry Session, Jane Pantelev from the Snieckus Group wins 3rd Prize in the Organic Chemistry Session and Marian Dreher from the Look Group wins 2nd Prize in the Poster Session.

The following undergraduate students receive awards at graduation:

Department Medal – Samantha Kwok

Society of Chemical Industry Merit Award – Shannon Bunn

Hypercube Scholar – Kalpa Shah

M. Sullivan and Son Limited Scholarship – Thomas Blackburn and Brian Ballios (tie)

May 2007

The following students win National NSERC awards for 2007-2008:

Chun-Yu Liu (PGSD3), Samantha Kwok (CGSM), Jonathan Webb (CGSD2), Jeremy Praetorius (CGSD3), Erin Johnson (PDF) and Anthony Lee (PDF).

Both Chris Lata and Vanessa Little receive NSERC PGSM Awards.

Ontario Graduate Scholarships for 2007-2008 recipients are Matthew Morrison, Istok Nahitgal and Sanela Martic.

Suning Wang receives the 2007 Alcan Award and Stan Brown receives the 2007 R.U.Lemieux Award from the Canadian Society for Chemistry.

Guojun Liu receives the 2007 Macromolecular Science and Engineering Award from the Chemical Institute of Canada.

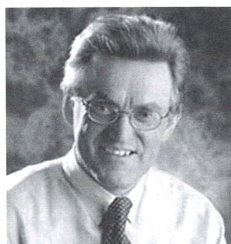
July 2007

Philip Jessop is promoted to the rank of Professor.

Homecoming Weekend 2007

will take place on
October 12, 13 & 14.

Call us or visit
<http://homecoming.queensu.ca>
for updates on the celebrations!



Queen's Chemistry Innovation Council: A Message from Jan Oudenes, Council Chair

The Queen's Chemistry Innovation Council is an advisory council to the Head of the Chemistry Department and continues to promote the interaction between the chemistry department (head, staff, undergraduate and graduate students as well as postdoctoral fellows and research associates), industry, government and our society at large. We would like to congratulate Dr. Bob Lemieux on his recent appointment as Head of the Department of Chemistry.

The QCIC continues to focus on the relationships between academia, industry and government. The renewed emphasis on mat-

ters involving health, safety and environment should further accelerate society's awareness of the importance of science. Particularly we will need to gain greater understanding of many basic issues, e.g., energy (efficiency), materials, health and climate. Queen's University and its students are well positioned to make contributions, small and large, to our society now and in the future.

The visit of Premier McGuinty to Queen's is further evidence of the renewed interest in science and support of Canada's goal of achieving the highest levels of research excellence and establishing world-class centres for research. This is supported by the announce-

ment of a \$21 million contribution to Queen's University, which is working with the private sector to build an advanced research and innovation centre specializing in bioprocessing and biomaterials. Another example of this interest was the presence of the Premier of Ontario at BIO2007 in Chicago.

In summary I believe that the Chemistry Department of Queen's University and its students are well prepared for the future, a future full of interesting challenges and exciting opportunities. We would like to extend our congratulations to all new graduates, wish you a great summer and all the best in your future endeavors.

Honours Degrees

The following students graduated with honours in 2007: Kate Apperley, Thomas Blackburn, Shannon Bunn, Emily Dunlop, Stephanie Ko, Samantha Kwok, Shalyn Littlefield, Peter Mason, Julie Moote, Nicole Ross, Maggie Savelberg, Michael Segal, Kalpa Shah, Eliane Shver, Christopher White, Kimberly Wiegand and Miranda Zielinski.

Congratulations!



Kalpa Shah is presented with the Hypercube Scholarship by Ralph Whitney at this year's convocation luncheon at Chernoff Hall



Advancement News

Alumni, donors and friends play an integral part in the Department of Chemistry and within the University. It's been a really great year for Chemistry thanks to your continued support of student awards and departmental priorities. This enables us to attract some of the best and brightest to the Department of Chemistry and to Queen's University.

The Chemistry Innovation Council and its members forged many new partnerships in our community and right across the country. We were privileged to meet many of you on the west coast this spring and we thank you for making us feel so welcome. Both the Dean, Dr. Alistair MacLean and Principal Hitchcock enjoyed meeting so many of our alumni from Chemistry. The student recruitment events found us engaging with many bright young minds and, as well, having the opportunity to meet so many parents. Together your support has made Chemistry the strong and successful department that it is today. However, to continue providing high quality educational pro-

grams and to allow us to maintain the state of the art facilities we enjoy, and to attract top researchers, faculty and students, we need your support.

Our Chair of the Innovation Council, Dr. Jan Oudenes, rose to the occasion and established a generous gift to the Department and challenged others to match his gift. Dave Thomas from Victoria and Wayne Schnarr from Toronto were two alumni who jumped on board; so many thanks to all of you who came forward.

Homecoming weekend is October 12th through 14th and will see us welcoming back the Class of 1967, amongst many other's returning to celebrate a reunion year. John Latham, Class of '67, has scheduled a tour of Chernoff Hall at 9:30am on Saturday October 13th. We imagine many have not had the opportunity to even set foot in the impressive Chernoff Hall. We also hope to see many of you at our annual Alumni and Friends BBQ on Saturday the 13th from 11:30am to 1:30pm on the terrace of Chernoff Hall

For more information on Homecoming activities and opportunities to support Chemistry, please do not hesitate to contact your Advancement Team.

Patty McHenry

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National Award Winners

The Queen's Chemistry Department was prominently featured at the Canadian Society for Chemistry 2007 Awards Banquet held at the Fort Garry Hotel in Winnipeg on May 28 as three of its faculty members received national awards for research excellence. This is certainly the first time in recent memory that such a large number of Queen's Chemistry faculty received national awards in the same year, but it does point to a growing trend: over the past six years, a total of eight national awards have been given by the CIC or CSC to Queen's Chemistry faculty members. This is one of many indicators of the growing stature of our department as one of the national leaders in chemical research. This year, Prof. Stan Brown received the R.U. Lemieux Award from the CSC for his seminal contributions to the field of physical organic chemistry, including work on enzyme models, reversible bromonium ion formation, amide hydrolysis and, more recently, on the development of new catalytic systems for acyl and phosphoryl transfer reactions that have significant practical applications in the safe disposal of chemical warfare agents. Prof. Suning Wang received the Alcan Award from the CSC for her work in the areas of main group and transition metal organometallic chemistry and materials chemistry, especially luminescent organic and inorganic materials and their applications in displays and sensors. Prof. Guojun Liu received the Macromolecular Science and Engineering Award from the CIC for his work in the area of block copolymers and how self-assembly of these materials via nanosegregation can be harnessed to produce a wide array of functional nanostructures including superparamagnetic nanofibers, nanospheres with molecularly imprinted cores and thin films patterned with nanochannels.



Professor Stan Brown



Professor Suning Wang



Professor Guojun Liu

News Release from Snieckus Group

Victor Snieckus, Bader Chair in Organic Chemistry, received the American Chemical Society North Jersey Section Award for "discovery and development of new synthetic methods and technologies applied in the pharmaceutical industry for multi-ton scale synthesis of commercial medicinal and agrochemical agents." Dr. Snieckus is internationally recognized for invention of fundamental organic reactions which have been adapted in corporate and biotech companies in their drug discovery programs, e.g. commercial anti-AIDS, anti-inflammatory, and anti-tumor agents are prepared by using the Snieckus technologies. He received the award at the ACS NJ Conference on May 25, 2007 and presented a lecture *In Search of New Aromatic Synthetic Methods for Pharmaceutical Research and Development*. He also presented similar accounts to research and process pharmaceutical industry chemists at the Scientific Update Conference in Barcelona, April 11-13th 2007 and the Royal Society of Chemistry Conference at the Glaxo-Smith-Kline corporate site, Harlow, UK, May 1st 2007.

TA Teaching Awards

In order to promote and recognize excellence in tutorial and laboratory teaching by Chemistry Teaching Assistants (TAs) in the 1st, 2nd and 3rd years, seven awards of \$500 are presented each year. Awards for the 2005-06 academic year were presented at the TA training day on September 8th, 2006:



William Patrick Doolan
Prize in Chemistry
Jenny Du



Fisher Scientific Teaching
Assistant Award
David Edwards



David Thomas Teaching Assistant
Award
Theresa McCormick



Din Lal Teaching Assistant
Award
Scott Curda



Varian Teaching
Assistant Award
Emily Mitchell



Merck Frosst Teaching
Assistant Award
John Brownie and
Cristen Hucaluk



Seminar Schedule

We are pleased to announce the following speakers have been confirmed for our 2007-2008 Seminar Series. For more information and dates, please visit our website at <http://www.chem.queensu.ca/chemistryN/About/seminarseriesN.asp>

Prof. Dieter M. Kolb, University of Ulm, Germany – **Frost Lecture**

Dr. C. J. Li, McGill University

Prof. C. Aris Dreismann, Technical University of Berlin, Germany

Prof. Paul Berti, McMaster University

Prof. Yunjie Xu, University of Alberta

Prof. Robert H. Crabtree, Yale University

Prof. Michael Eikerling, Simon Fraser University

Prof. Eric J Heller, Harvard University

Dr. Rick Friesen, Merck Frosst Canada & Co

Prof. Masad Dahma, McGill University

Prof. Peter Wan, University of Victoria

Prof. Jik Chin, University of Toronto

Prof. Anne McCoy, Ohio State University, USA

Prof. Gary Leach, Simon Fraser University

Prof. Guillermo Bazan, University of California at Santa Barbara, USA

Prof. David Crich, University of Illinois at Chicago, USA

We thank Lanxess and Dow Chemicals
for their continued support
of our seminar program.



The Department of Chemistry will be hosting the
36th annual
Southern Ontario Undergraduate Student Chemistry Conference
(SOUSCC)
on Saturday March 15th, 2008

