

The Civilian

One Department, Two Great Programs: Civil and Mineral Engineering / Issue 12 / December 2011

Lassonde Mining Building

Our New Design Studios are Second to None

Fond Farewells

Profs. Barry Adams and Phil Byer Retire



welcome

Classes of CIV/GEO/MIN 8T7 and 0T2 – we'd love to continue our outstanding success of CIV/GEO/MIN winners for the Mid Career and Early Career Alumni Awards! Please contact us if you or one of your classmates would make a great nominee.

We have some upcoming retirements. Professor Barry Adams and Professor Phil Byer have both decided to retire on December 31! Please join me in extending to them our congratulations. I hope that they don't plan to go too far as we anticipate using their expertise for some time to come. Professor Will Bawden is in the last year of his phased retirement plan. He was the Director of the Lassonde Mineral Engineering program for over a decade, bringing excellence and strength to the program. I expect that he'll remain as or more busy in retirement. Thank you for your dedication, Will.

A small sample of some of the exciting research going on:

Professor Brent Sleep is leading an inter-university collaborative team in a \$3.2M research project! The objective is to develop ways to treat some of the over 30,000 brown field sites in Canada that contain hazardous chemicals, such as chlorinated solvents and hydrocarbons.

Professors John Hadjigeorgiou and Paul Young of the Lassonde Institute for Mining are working with Professor Peter Kaiser of Laurentian University and other researchers on a \$2.2 Million project to develop wireless underground systems to help investors and engineers process minerals with increased speed and safety.

Did you hear Professor Doug Hooton, NSERC/CAC Industrial Research Chair in Concrete Durability and Sustainability, on CBC? He was interviewed by Connell Smith on the durability of concrete in salt exposure.

Our structures group is launching a new Centre for Resilience of Critical Infrastructure! This exciting initiative is gaining momentum – you'll hear more in future Civilians.

I'm very excited to say that we are finally kicking off the fundraising campaign for Survey Camp. Keep an eye out for a special mailing.

I am looking forward to seeing you all again at our CIV-GEO-MIN Alumni Dinner on February 10th, 2011!



Cover: Students gather in our newly opened design studios in the Lassonde Mining Building. See the story on page 3.



Brenda McCabe
PhD, PEng

Associate Professor & Chair
Department of Civil Engineering



Lassonde Mining Building Opens Brilliant New Space

New loft style studios will change the way undergraduate education is delivered in our Department.

The approximately \$9 Million renovation of the newly rededicated Lassonde Mining Building at the University of Toronto is now complete and our newest facility is open!

The project, which was funded by Dr. Pierre Lassonde, Goldcorp, The Government of Canada and the University of Toronto, saw the massive unused attic portion of the edifice on College Street completely revamped and an addition placed atop its shining new rooftop.

Students can now enter the building via a gently sloping accessible ramp from the West side. The door will take them to the new atrium, a five storey vertical shaft built from the historic red brick of the building's exterior.

A glass-sided elevator, secured

via electronic chips distributed to all our students in their early classes, will take students up the shaft while providing them with a view reminiscent of a heritage mine site.

This is underscored by the careful placement of minerals and mining tool specimens resting behind glass cases that overhang the elevator shaft and pass by the car as it travels upward.

Once at the top, graduate students will gain access to the suite of state-of-the art private offices that line the north wall of the main wing.

Undergraduate students will find an airy studio with room for a whole host of collaborative projects.

The entire space is lit largely with

first up

ambient sunlight, owing to the bank of lightly etched sunroofs on the South facing slope.

Ultra-low-energy LED lighting helps when the Sun cannot provide.

Where once there were massive wooden beams spanning the unusable rooms at waist-height, now there are but memories: reclaimed wood from the trusses was made into flexible furniture that can be rearranged to suit any educational style.

Above, the beams now supporting the roof have been reinforced with steel girders.

The historic signatures for which this space was famous – some signatures dating back to the 1940s – have been preserved either in their original space or on a special tribute wall on the East side – an ode to our alumni and their lasting presence in these quarters.

Entering the North and South wings of the facility, students will gain access to one or more of 10 modular learning pods that each

sit approximately 10.

Movable walls that slide on tracks can be positioned to close off pods for private lessons, meetings or classes, and in a moment the walls can be opened up to combine pods into larger learning environments.

The walls doubly serve as floor to ceiling movable chalkboards.

The outer walls of each pod are equipped with banks of state of the art computers, as well as a large display monitor that can be used to show videos, access the internet, or make presentations from a laptop or portable device.

The middle of each pod contains a series of moveable, connectable tables that can be used to conference or meet with a design team.

Above all this sits the Goldcorp Innovation Suite, a brand new space that sits like a gem atop the old roof structure of the building.

Overlooking the cityscape on all sides (and the photovoltaic panels on the south side of the building),

2



Skylights fill the once dark attic with a natural ambient glow.

the Suite boasts advanced videoconferencing facilities that link students up with companies and institutions all over the world in a professional boardroom setting.

This new facility will revolutionize the way we can deliver the undergraduate Civil Engineering and Lassonde Mineral Engineering Programs as well as advance the nature of our top-notch graduate research.

We encourage you to come take a look at the marvelous impact of this wonderful gift. ♦

3



Civilian Online

Read more on our website
www.civ.utoronto.ca

New events and features
added all month long



1 The formerly dark attic space that was once blocked by waist-high trusses and wooden beams is now opened up into a bright and airy loft area.

The open area can be used to host design seminars group meetings or educational lessons.

Along the right side of the photo, a bank of graduate student offices provide semi-private, secure space for advanced research.

2 Part of the retrofit that makes this project environmentally friendly is the inclusion of new insulated skylights, which dramatically increase the amount of natural ambient light and reduce the need for electronic lighting options.

Direct, intense sunlight is avoided through the use of lightly frosted screens over the openings.

3 The North wing of the space is made up of a series of pods that can be connected or separated as the educational needs dictate.

The movable walls double as chalkboards.

Each pod contains a series of connectable work tables as well as an outer ring of workstation computers. A large presentation screen illuminates any discussion.

4 The massive old beams of wood that once kept the roof atop the Mining Building are now seamlessly integrated with a new set of steel girders.

The enhanced strength allowed us to open up the space dramatically.

5 Furniture provided in the space may be reminiscent for some alumni: it was made from the salvaged beams removed after steel reinforcement.

We have spotted signatures and notes scrawled across some beams dating as far back as the 1940s.

We have preserved as many of the signatures in the space as possible.





Remembering Dorset

From the 1940s to the 1990s, approximately 50 years of Civil Engineering students attended this camp. Help us honour the great memories by sharing your own!

The Camp at Dorset was a staple of the Civil Engineering program from the late 1940s through to the early 1990s, when it was decided that it would be more efficient to operate entirely out of the Gull Lake facility.

Though it is no longer in active operation, the memories of Dorset remain alive and well in our Alumni community – indeed, about half the class reported there during its 50-year lifetime! We want to honour those memories, and we'd like to build a Dorset memory wall as part of the Gull Lake campaign starting this winter.

So, whether you remember Dorset for its good, plentiful food (including fresh pies, we're told!), the kind forestry staff, the swimming or the canoes, let us

know your Dorset memories.

Perhaps you were there when the 7T3s dangled someone over the edge of the fire tower to get their name proudly painted on the side; perhaps you remember floating a VW out into the lake; or perhaps you look back proudly at your reputation for being at the camp that worked hard and did well.

We want to hear about it all.

From Sue Joel (CIV6T5):

I was at the Dorset camp with the A to L part of my civil engineering class; the guys were in the main bunkhouse while I, the only woman in the class, had a room in the quarters of the female kitchen staff.

The Forest Ranger School was

built by the Province of Ontario in the early 1940's to train rangers in forest management and firefighting.

It was a lovely site on a small lake with a large acreage, and not nearly as rough as the other camp at Minden.

Mind you, it did have its drawbacks, the principal one being that the Dorset area was completely dry and you had to drive the 50 km or so to Minden if you wanted to go drinking.

Which we did. Frequently.

I have fond memories of celebrating my 21st birthday drinking beer with my classmates in the Dominion Hotel in Minden.

Some of the guys thought it was not as classy as the Rockcliffe, but I always liked the Dominion better.

We worked pretty hard in our six weeks at survey camp but nobody minded. It was the highlight of our four years in Civil and I always felt sorry for those in the other engineering disciplines who didn't get to go to survey camp.



Profs. Barry Adams & Phil Byer are Retiring

The two Professors have touched the lives of countless students over many years. Here are the thoughts of just two on the occasion of their retirements.

"Barry Adams ruined my life. He taught me how to think!"

This is how I started a recent tribute to Professor Adams at a conference held in his honour this past September. While it was meant to lighten the mood, there is also quite a bit of truth behind it.. Well, perhaps not the "ruining" part, but the point is this: how I view and approach the world today has been greatly influenced by Barry.

Although I originally approached Barry to work on an undergraduate thesis with him in the field of stormwater management on the basis that it was one of his areas of specialization, it was such an enriching experience that it was a simple choice to work on a Masters degree under his supervision and a very, very difficult choice to not pursue a Ph.D. but rather enter practice. Interestingly, the general topic of the proposed Ph.D. research was water utility privatization, a trend that Barry was well ahead of the curve on and which now is one of my areas of keen interest in professional practice.

Barry rewarded hard work and effort with extremely diligent and thoughtful reviews which, combined with the simplest of explanations for what appeared to be complex problems, made the learning experience truly special. I look back upon my time in graduate school very fondly for it afforded me the luxury of time and opportunity to explore and think. I suppose in some respects, I never really "left" school and I attribute much of my continuing efforts at UofT to the experience I had with Barry Adams and many of the other people in that community which I am happy to be a part of. I look forward to many more years of friendship and collaboration post-retirement.

From myself, and on behalf of the many, many students that Barry has influenced over the past 35+ years, I offer my heartfelt thanks and best wishes.

Fabian Papa (CIV9T5, MASC 9T7)

A distant 18 years ago, I visited the University of Toronto to decide if I wanted pursue my PhD here in Civil Engineering. I remember meeting many people those few days but of course, I spent much of my time talking to Phil, who would be my potential supervisor. He had arranged a full day of activities - including lunch on Spadina (!) - for me to get a sense of what the department and its people were like. When I returned home to Edmonton a few days later, he called to follow up. It was Phil's sense of care that impressed me. What he might not know is that when I stepped on the plane to depart from Pearson Airport, I already knew that I would be returning to study at UofT.

I remember the four years I spent under Phil's tutelage as some of the best years I have ever had, and some of the key years that really helped shape who I have become. Phil has been a teacher, a supervisor, a mentor, and a very good friend. My own students appreciate how I treat them, and I attribute much of how I act as a professor to how Phil treated me. You learn from example, and I had - and continue to have - one of the best examples there is.

Many people make the mistake of equating a doctorate with intelligence and therefore wisdom: many have the intelligence, but wisdom is another matter entirely. It is wisdom that garners genuine respect and true admiration. On that note, thank you for everything Phil, and congratulations on a memorable, well-respected and wise career.

Edwin Tam (PhD 9T8)



Five Winning Alumni

Once again our alumni took home the lion's share of the Engineering Alumni Association Awards at the annual gala held earlier this fall. Here are this year's honoured alumni.

Hall of Distinction

The Hall of Distinction is an assembly of extraordinary alumni, selected for membership by their peers for their lifelong accomplishments.

These are graduates whose performances have ultimately defined what is most exemplary in our graduates and in our profession. The careers of the members stand as examples and add a sense of reality to the aspirations of successive generations of Engineering students.

Located in the Sandford Fleming Building, the Hall is a familiar daily presence in the lives of students and is often visited by alumni and their families.

Michael Butt (CIV6T3)

Throughout his career, Michael has championed change in industry through the leadership roles he held in several organizations.

As an undergraduate at U of T Engineering, while Michael participated on the engineering football team and boxing, he also delved into what would be his first of various entrepreneurial ventures — starting and running his very own construction company.

Upon graduation, he joined Mitchell Construction in Toronto. Recognized for being tremendously business savvy, he was transferred to Bridgetown, Barbados, to set up their

Caribbean Group of Companies. Just two years later, he was promoted to Managing Director.

By 1969, he set up operations in South Africa. Ten years later, he started the Buttcon Limited. By bringing strong business and engineering expertise to his operations, his company grew into a \$100 million per year entity, and continues to expand today. The company has completed many high profile projects, such as the Queen's Park restoration, Casino Niagara as well as numerous institutions, including U of T.

He is also one of the two founding members of the Canadian Design-Build Institute (CDBI), has served on the Canadian Construction Document Committee, and from 1996 to 2004, he was Chairman of the Board of Directors at Greater Toronto Airports Authority. Michael is proud of his engineering background, as evidenced by his membership with Professional Engineers of Ontario (PEO) for more than 45 years.

**Lloyd McCoomb
(CIV6T8, PhD 8T2)**

Lloyd has consistently distinguished himself as a leader in the engineering profession.

As a young professional, Lloyd made his mark at the World Bank by helping to develop a computer model to optimize road transportation investment in developing countries.

From there, he moved to the Department of National Defence where he carried out a range of engineering assignments at military bases across the country.

In 1973, Lloyd joined Transport Canada's Transportation Development Agency, where he worked primarily in the area of urban transportation.

In 1983, a move to Transport Canada's Air Administration marked the beginning of his foray into the world of airports.

Working in Ottawa and Toronto, Lloyd moved from Director of Statistics and Forecasts to Director General of Airport

Marketing, then Safety and Technical Services and finally to Project Services Manager of Major Crown projects.

In 1994, Lloyd took on his final assignment with Transport Canada as Airport General Manager of Toronto's Lester B. Pearson International Airport, leading staff through their transfer to the private sector in 1996.

From 1996 to 2007, Lloyd oversaw the planning, design and construction of a \$4.4 billion airport modernization and expansion program as Vice President of the Greater Toronto Airports Authority (GTAA).

In 2007, Lloyd became the President and CEO of the GTAA and helped to create the strategic plan for Toronto Pearson to become the North American airport of choice.

Aside from his countless professional successes, Lloyd also served in the Canadian Armed Forces. In 2010, he was appointed Honorary Colonel of 32 Combat Engineer Regiment.





**Denis Mitchell
(CIV6T9, MAsc 7T1, PhD 7T4)**

As an inspirational leader of the structural engineering profession in Canada, Denis has led a 30-year effort to significantly improve the safety and resilience of Canada's built infrastructure.

Denis has demonstrated to the structural engineering profession that, with deep enough understanding of the traditional approach to reinforced concrete design, it can be replaced by design based on first principles.

His approach has met tremendous success and has made a significant difference to industry.

As Chair of the Earthquake Design Provisions Sub-Committee of the National Building Code of Canada and Chair of the Sub-Committee on Seismic Design of the Canadian Highway Bridge Design Code, he is the key structural engineer for the Canadian seismic design

provisions of both buildings and bridges.

When the Concorde Bridge in Laval, Quebec collapsed in September 2006, Denis was appointed the lead structural engineer, providing experimental investigation and expert testimony. His research has also helped to form the basis of design methods, adopted worldwide, that could withstand catastrophic seismic events — from reinforcing floor slabs, to improving the ductility and toughness of concrete infrastructure.

As a civil engineering professor at McGill University, Denis leads a research team that conducts nearly \$800,000 of research per year. For research concerned with public safety rather than potential industry profit, this is an extraordinary level of research activity for a Canadian academic and is a tribute to Denis's vision and leadership.



Malcolm R. McGrath Achievement Award

Davis Doan (CIV0T7) Awarded Posthumously

Throughout his life, Davis worked alongside staff and students to make the world a better place.

The PhD student who passed away on May 20, 2010 after a valiant struggle with cancer was lauded for his inspirational actions that touched hundreds of lives over the years.

Davis was a firm believer in helping others in need and in 2006, founded the student charity group Eyes of Hope. His work aided children living in developing countries and funded the construction of a school in Africa. In a few short years, he mobilized more than two dozen volunteers, raised over \$20,000 for three World Vision sponsorships, and helped to create an internship program for Civil Engineering students with Habitat for Humanity.

His success not only benefited strangers around the world, but also students within the University by empowering volunteers to meet life's challenges head on.

In four short years, Davis' visionary leadership has changed the lives of countless individuals both inside and outside of the University. The mark he left on the world will be remembered for years to come.

2T5 Mid-Career Achievement Award

Nick Caccavella (CIV8T6, MAsc 8T9)

As Senior Vice President at Holcim (Canada) Inc., Nick oversees the Ontario and Western Canada regions of one of the country's largest vertically integrated building materials and construction companies.

Nick is helping to reshape the construction industry through his passion for sustainable practices.

He actively fosters the principles of the triple bottom line — value creation, sustainable environmental performance and social responsibility — to ensure there is balance between stable economic growth, continual social progress and preservation of the environment.

As a past Chair of the Ready Mixed Concrete Association of Ontario (RMCAO), he championed 'Eco Certification' in 2009, which will ensure that by 2013, all ready-mix plants should be Eco Certified. As a joint initiative with the Ontario Ministry of Environment, this certification will provide customers with assurance that the concrete facility, company and products they have selected were developed responsibly using sound environmental and sustainable practices.

Under Nick's leadership, Dufferin Concrete equipped their entire fleet of more than 400 ready-mix trucks with Enviroguard chute washout systems as a means to recycle materials and water from job sites.





Above: Four of the first five women in Civil Engineering were present to meet their award recipients.

Scholars and Donors Reception

Our annual event allows students the opportunity to thank their donors in person, forging a personal connection that adds tremendous value to all our awards.

On one special evening earlier this fall the Galbraith Building was full of happy students and proud family members and friends.

We were thrilled to be able to host our scholarship donors and their recipients for a special thank you event once again.

While a note or card is a touching way to say thank you to someone who has given much, we find that the kind of personal connection created between donor and

recipient to be simply irreplaceable.

It adds to the value of an award tremendously – the student is able to catch some of the inspiration and passion that prompted the gift, and the donor is able to see before them the immeasurable ways in which their gift has helped a whole slate of others realize their dreams.

Remarks for the night included those from James Sproul (MIN1T3), who explained that the Lassonde



Scholarship he had received from Dr. Pierre Lassonde meant he was able to take a summer job that provided excellent networking opportunities and career skills development that he would never have been able to match elsewhere.

Such a job allowed him to decline a higher paying, but ultimately less satisfactory position elsewhere.

Amalia Kokkinaki (PhD Candidate) delivered a wonderful speech detailing our graduate students' passion for advancing engineering knowledge.

It left the crowd sure that the same passion which drives the donation of an award is carried forward in the work students carry out through its assistance.

In that way, the award not only helps the recipient directly, it also funds the creation of new engineering technology which potentially impacts the lives of people around the world.

Four of the first five women to graduate the Civil Engineering program were in attendance, having been honoured with a series of scholarships named after each of them.

It was a privilege to be able to see them with their recipients, and to see the spirit of discovery passed on between generations. 

Brandon Jacobs (CIV1T5) with Loui Pappas, Vice President, Business Development at Morrison Hershfield and Ruth Johns, donor of the Arthur B. Johns Admission Scholarship.



Prof. Emeritus Richard Soberman and Ana Sasic (MAsc Candidate), the winner of the Soberman Fellowship,

Opposite: A group shot of all the Civil and Mineral Engineering award donors and their recipients.



Working on the Weekend

Prof. Khandker M. Nurul Habib and (Ph.D. Candidate) have discovered that weekend travel demand may pose a larger challenge for greenhouse gas reduction targets than previously thought.

Weekend traffic and its associated emissions are a growing concern for the City of Toronto in light of increases in traffic congestion and pressure to meet greenhouse gas reduction targets.

mobile source emissions have, until now, predominantly been focused on weekday morning travel patterns and the 4-6 PM peak period traffic congestion.

But new research overseen by



Prof. Khandker Nurul Habib.
Below: Toronto traffic on the evening
of Saturday, November 12, 2011.

weekend travel demand should



And it's this question that finds us lacking: the emissions studies conducted in Toronto have focused mainly on the dispersion of pollutants rather than the link between an individual's activity choice and traffic related emissions.

In Calgary, the only city to have included weekend information in their large-scale survey, researchers have found that the number of people using personal vehicles actually **increases** on the weekend from weekday levels.

Studies conducted in Los Angeles also concluded that the emissions patterns associated with weekend behaviour favour the formation of ozone more so than weekday travel behaviour.

In studies such as those occurring in Prof. Khandker's labs, the total travel times reported for each day of the week can be used to estimate the GHG emissions that can be attributed to these trips.

Using emissions factors described in Toronto's 2004 emissions

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Lassonde Institute Colloquia and Courses

The Lassonde Institute for Mining is busy this academic year with Colloquia and Short Professional Development Courses. Learn how you can take part in one of the world's foremost mining Institutes.

The Lassonde Institute of Mining will be offering a one day course on Mineral Project Evaluation in January 2012.

The course will provide an overview on Canadian and international valuation standards and methods for mineral properties and projects.

This course will be of interest to geo-scientists, mining engineers, qualified persons, corporate executives, government officials, persons from regulatory bodies, analysts and consultants.

Course dates and registration details will be posted on the Lassonde Institute of Mining website:
www.lassondeinstitute.utoronto.ca.

If you would like to receive information on upcoming Lassonde

Institute workshops, courses or seminars send an email to Teresa Miniaci, miniaci@ecf.utoronto.ca and ask to be put on the email list.

Previous Lassonde Institute Colloquia and professional development courses have proven extremely successful this season.

Earlier presentations have focused on topics such as Measuring Soil Pressure, Investigating the Impacts of Underground Mass Mining on Surface Conditions, and Rock Failure Process Modelling and Monitoring.

Lassonde Institute
for Mining

Professional
Development
Course

Mineral Project
Evaluation

January
2012

see
www.lassondeinstitute.utoronto.ca
for more details.



CSCE: Bridges to Hong Kong

Sherif Kinawy (PhD Candidate) and Chandan Pujapanda (MEng Candidate) recently travelled to Hong Kong as part of an official visit to the CSCE Hong Kong Branch.

A CSCE chapter in Hong Kong: it came as a surprise to us as two Civil Engineering graduate students in Toronto.

But we soon realized the nature of the industry in Hong Kong promoted a significant level of professional and academic exchange with Canada.

For one, many of the new graduates who work in Hong Kong have completed their degrees from Canadian Universities.

As we also found out later, several of the professors at Hong Kong Universities had spent some time engaged in academic and professional work in Canada.

This exchange started when Bill Jin from Hong Kong University for Science and Technology (HKUST) approached Professor

Shamim Sheikh to invite the University of Toronto among other Canadian universities to join them for an exchange forum in June in Hong Kong.

We joined Ryerson University in representing CSCE's local Canadian chapters.

Our delegation was overwhelmed by the density of massive construction projects in the heart of downtown Hong Kong, orchestrated by joint partnerships between the local Government and international General Contractors.

In a manner typical of many inquisitive civil engineers traveling to Hong Kong for the first time our goal was to tap into the ingenuity behind the fast paced infrastructure projects there.

During visits to construction sites

we had the opportunity to experience first-hand a few unique techniques and disciplines of civil engineering, such as dredging, land reclamation, slope stability, tunnel engineering, and deep excavation.

We parted with promises to take our collaboration further motivated by the shared belief that students who become engaged in CSCE at an early stage would eventually develop to become more successful professionals upon graduation.

We look forward to future opportunities for collaboration and strongly recommend similar events to other student chapters.

We would like to thank the Department of Civil Engineering at HKUST for their invitation and hosting us during our stay in Hong Kong.

Prof. Will Bawden's Retirement Party

After a long and storied career Prof. Bawden is set to hang up his robes for the last time.

Though he does not officially retire until next year, plans are already afoot for a celebration in his honour.

If you would like to receive further notifications about the planned event for Prof. Bawden, please visit our website at www.civ.utoronto.ca and click on "News + Events."

Anna Dunets Wills (CIV7T6) Wins PEO Citizenship Award

Congratulations to Anna Dunets Wills on winning the 2011 Citizenship Award from Professional Engineers of Ontario!

Anna received her Bachelor of Applied Science degree in Civil Engineering from the University of Toronto in 1976. She worked with Frontiers Foundation over two summers while still a student, honing her engineering skills as a leader of teams that built log and frame homes in remote First Nations communities in British Columbia and Alberta. Those experiences shaped her professional ethics, including her deep respect for the communities in which she works. After graduation, Anna applied her engineering know-how with those ethics in several Southern African urban

and rural communities on the design and construction of infrastructure – roads, drainage, sanitation, water supply – that was sustainable and affordable in capital and maintenance cost.

Letter: Correcting the Record

I was greatly honoured that Civil Engineering has established a scholarship in my name as one of the first five women in Civil, and I was very pleased to be invited to the Scholars and Donors Reception on October 26th.

At the reception I was thrilled to meet three of the other "first five" women: Marcia Lamont Scott (Civ4T7), Marlene Metzger (Civ6T0), and Margaret Kende (Civ6T0). Also at the reception however I realized I had made a huge error and I am writing now to correct the record. In the last Civilian you published my story of my engineering uncles telling me I would never find a job in engineering and me being triumphant because one of the other four women in Civil, Marlene Metzger, helped me get a real engineering job that summer after first year.

When I met Marlene Metzger and Margaret Kende at the reception I realized immediately that I had got the names mixed up and that the woman who had got me the job all those years ago was Margaret Kende. May I apologize to both Margaret and Marlene for this and offer my most sincere thanks once again to Margaret.

Sue Joel (Civ 6T5)



Prof. Will Bawden.

Three Grad Students Win Traffic Bowl Title, 2nd in Worlds

Earlier this year Mohamed Mahmoud, Keith Cochrane and Aarshabh Misra (all PhD Candidates) were in Halifax representing the UofT ITE Student Chapter in the Traffic Bowl at the Canadian Institute of Transportation Engineers (CITE) Annual Conference.

The intense intellectual jeopardy style battle required knowledge, timing, and creativity.

They won, beating the University of Manitoba and University of New Brunswick in a tense final matchup.

They represented Canada at the world Traffic Bowl finals in St. Louis, taking a close second place.

Congratulations, guys!!!

Water Group Receives over \$3 Million from Ontario Research Fund

The Ontario Research Fund has invested \$3,213,700.00 in Prof. Brent Sleep's Research Group to undertake a project that will investigate innovative combined treatment technologies for remediating contaminated groundwater.

Contaminated industrial and commercial sites here and abroad represent a significant economic opportunity.

But redeveloping them is a challenge because current cleanup techniques are expensive and time consuming.

At the University of Toronto Dr. Brent Sleep is developing innovative water treatment technologies to restore these properties, research that will help to put Ontario companies at the leading edge of the fast growing site redevelopment market.

Prof. John Hadjigeorgiou Elected to CIM and RES

Professor John Hadjigeorgiou was recently elected to the Council of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Founded in 1898, CIM is the leading technical

society of professionals in the Canadian minerals, metals, materials and energy industries.

During its Annual General Meeting in Montreal on May 22nd, 2011, the Rock Engineering Society (RES) elected Professor John Hadjigeorgiou of the Lassonde Institute for Mining as its new Chair.

The Rock Engineering Society promotes the development and application of geomechanics within the context of the mining industry in order to support safe and economically viable extraction.

U of T and York U Share \$3.6 Million for Transportation Research

A project led by Prof. Alberto Leon-Garcia in Electrical and Computer Engineering at the University of Toronto has been granted \$3,675,000.00 from the Ontario Research Fund.

This project will involve researchers from York University, IBM Canada, G4 Apps and will also include Prof. Baher Abdulhai and other staff and students from the Transportation Engineering Research Group in the Department of Civil Engineering at the University of Toronto.

Their project will focus on smart infrastructures and applications for connected vehicles and transportation systems. The researchers hope to develop an open applications platform that

will help improve the safety and efficiency of our roadways and help promote sustainable transportation technologies.

Prof. Susan Andrews Wins OWWA George Warren Fuller Award

Prof. Susan Andrews of the Environmental Engineering Research Group was recently named the 2011 recipient of the Ontario Water Works Association's George Warren Fuller Award.

George Warren Fuller Awards are presented annually by the Ontario Water Works Association to the sections' respective selected members for their distinguished service to the water supply field in commemoration of the sound engineering skill, the brilliant diplomatic talent, and the constructive leadership which characterized the life of George Warren Fuller.

Susan's research focuses on water quality and chemistry in water treatment processes and distribution systems, novel and emerging byproducts of potential health concern and UV and solar disinfection methods of drinking water treatment.

Trivia: Prof. Susan Andrews is married to Prof. Robert Andrews, who previously won the George Warren Fuller Award for longtime achievement in 2009. They are the first couple to have won the award in the history of the OWWA!



Students in CIV201 -- Introduction to Civil Engineering, get their first taste of major engineering projects like the Kirkfield Lift Locks.

Stay in Touch

www.civ.utoronto.ca

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