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# CLASSROOM ENGAGEMENT Mike Silagadze (BASc '07, Elect), left, and Mohsen Shahini, a Waterloo Engineering graduate student, are the founders of Top Hat Monocle, a company that has developed learning software for smartphones, laptops, iPods and even older cellphones to help students interact with their professors. [see page 3]

PHOTO: Bryn Gladding

WATERLOO ENGINEERING



FROM THE DEA

As I look out my window I see engineering students walking to class – some carrying books, others knapsacks, all sporting late summer clothing. In January 2012, our first 15 students from our UAE campus will also be heading to class here in Waterloo but they will be wearing winter coats, hats and boots, most for the first time.

The arrival of our UAE students is something we've been preparing for since 2009 when our campus opened in Dubai in collaboration with UAE Higher Colleges of Technology. We've been offering programs in chemical engineering and civil engineering since the launch of the campus and in 2010 the university also started offering programs in IT management, and finance and risk management.

After two years of studying in Dubai, our UAE engineering students will complete their final two years in Waterloo. Beginning in January, they'll join the 3A chemical and civil engineering classes on our main campus. Like all Waterloo Engineering students, they are in full co-op programs. I am certain each of our third-year civil and chemical engineering students will benefit greatly from getting to know one another and sharing experiences both inside and outside of the classroom.

Something else our chemical engineering students will be able to benefit from is Engineering 6, the new home for most of our chemical engineering department. On October 28, the doors will officially open to the impressive five-storey, 120,000-square-foot building. If you are on campus that day, I invite you to join us at the grand opening of Engineering 6.

By early next year, we expect our nanotechnology students and researchers to occupy the new state-of-theart Mike and Ophelia Lazaridis Quantum-Nano Centre. The building will house Waterloo Engineering's unique nanotechnology research, teaching programs and facilities for nano-scale device fabrication as well as the university's Institute for Quantum Computing. In its new location, IQC will continue to build a strong community of quantum information researchers.

While contractors work to complete our new buildings, we are finalizing Vision 2015, our new strategic plan. As outlined in Waterloo Engineering's 2010 Annual Report, our Vision 2015 aspiration is to be a truly world-class school of engineering. Put simply, we will work to be the top choice of prospective undergraduate and graduate students, employers, faculty, staff, industry government and community partners from Canada and around the world.

To achieve our aspiration, each Waterloo Engineering academic and administrative unit has been developing its own strategic plan. By the end of this month, all our units will have been visited by the international experts we have invited to critique our plans and benchmark our achievements relative to other engineering institutions. This process will culminate with the publication of Waterloo Engineering's overall plan by the end of this year. Then the hard, but rewarding work of implementing Vision 2015 will begin.

At the end of this month, our alumni reunion will take place for classes celebrating anniversaries that end in either a five or a zero. As in previous years, our reunion coincides with the university's campus-wide homecoming weekend that offers a wide variety of events for all ages. I look forward to personally greeting you at reunion or one of Waterloo Engineering's many upcoming events.

Sincerely,

Adel 5. Sedn

ADEL SEDRA

Dean, Faculty of Engineering



The first UAE engineering students will join the 3A chemical and civil engineering classes at the Waterloo campus starting in January 2012



PHOTO: Bryn Gladding

Top Hat Monocle founders Mohsen Shahini, far left, and Mike Silagadze, far right, watch employee Anson Mackeracher (BASc '10, Comp), centre, engage with students who are using the company's software on their laptops and smartphones.

# HATS OFF TO Stu

For many, the words top hat and monocle may conjure up the image of Mr. Peanut, the advertising mascot for Planter's Peanuts. But for thousands of students across North America, Top Hat Monocle means something else – the company that produces an innovative eLearning application.

And that's exactly the connection Mike Silagadze (BASc '07, Elect) and Mohsen Shahini, a Waterloo mechatronics engineering doctoral candidate, want university and college students to make. The two are the founders of Top Hat Monocle, a Waterloo-based company that launched monocleCAT, an interactive learning platform, a year ago this month.

MonocleCAT allows students to participate in a quiz, questionnaire or interactive demo at their desks using a smartphone, older cellphone, laptop or an iPod. "The idea is to put to use devices students already have in the classroom to help them engage with their professors," says Silagadze.

While the name of the company is unusual so was the launch of Top Hat Monocle, which happened before there was a concrete business idea in place.

After graduating from Waterloo, Silagadze worked for a local start-up but had dreams of venturing out on his own. Shahini arrived home from school one day in March 2009 to find the living room of the apartment he shared with Silagadze turned into an office, complete with computers and co-op students. Shahini, joking that he didn't have much choice but to join the new business, arranged to take a semester off from school.

It was Shahini, an award-winning Waterloo Engineering teaching assistant, who came up with the idea of the mobile

application. "I had taught a calculus course in which I had a hard time figuring out what my students were thinking. I wanted to get them actively involved rather than just passively observing."

After designing a prototype, the pair approached a number of professors for feedback. One of those professors was Waterloo Dean of Engineering Adel Sedra, who had taught Silagadze in his third year of engineering. Silagadze and Shahini came away with pilot funding from Sedra and some sound advice that included selling monocleCAT subscriptions directly to students, rather than licensing their software to colleges and universities.

That advice has paid off – 20,000 to 25,000 students across Canada and the U.S. as well as in Africa are now using monocleCAT, up from about 5,000 a year ago. And at \$20 per semester, or \$38 for a five-year subscription, the cost is affordable for students.

"Student participation has been overwhelming," says William Melek of mechanical and mechatronics engineering, one of many University of Waterloo professors who use monocleCAT in their classrooms. "It has helped students visualize concepts which are normally difficult to understand."

Last December, the 12-employee company 'graduated' from the Accelerator Centre, a business incubator in the university's David Johnston Research + Technology Park, and moved into an office on Bridge Street in Waterloo.

While Shahini's one semester away from the classroom turned into several more, he's scheduled to graduate next month with his PhD in mechatronics engineering. Silagadze also doesn't rule out returning to Waterloo some day to pursue graduate studies in electrical engineering. "It's something I've always wanted to do," he says.

#### **FACULTY NEWS**

#### **CONVOCATION HONOURS**

During Waterloo Engineering's two spring convocation ceremonies on June 18, doctor of engineering degrees were presented to George Baird, an acclaimed academic, architect and theorist; Robert Magee (BASc '78, Chem), a leading business executive; Jamal Deen, a McMaster University professor and senior Canada research chair in information technology; and John Keating, the chief executive officer of COM DEV. Retired Waterloo electrical and computer engineering professor Victor Quintana was honoured with the title of distinguished professor emeritus.

Omar Ramahi, a professor of electrical and computer engineering, was one of four university faculty members presented with the Award of Excellence in Graduate Supervision at convocation. Ramahi is praised by past and present students for, among other things, his mentorship and ability to encourage the best from his students.

Also recognized during engineering's convocation ceremonies were three of the four winners of this year's Amit and Meena Chakma Award for Exceptional Teaching by a Student. The students honoured were Justin Eichel, a systems design engineering graduate student, and Adam Neale and Mehrdad Pirnia, who are both electrical and computer engineering graduate students.

PHOTO: Chris Hughe

## PROFESSOR AND ALUMNI NAMED TO 40 UNDER 40 LIST

Slim Boumaiza of electrical and computer engineering was honoured as one of the Waterloo Region Record's 40 Under 40 for 2011. Boumaiza leads the university's Emerging Radio Systems Group, which encourages the early involvement of undergraduate students in its research activities. Alumni Kurtis McBride (BASc '08, SD), Eric Vieth (BASc '07, Elect) and Joseph Fung (BASc '07, Comp) were also part of this year's list.

TIGHE AWARDED NEW SUSTAINABLE PAVEMENT CHAIR

Susan Tighe (MASc '97 and PhD '00, Civil), a professor of civil and environmental engineering, was named the new Norman W. McLeod Chair in Sustainable Pavement Engineering. The \$1.5 million endowed chair, launched by the Centre for Pavement and Transportation Technology last January, will focus on advanced pavement research, collaborative projects with industry, and graduate student teaching and supervision.

#### STUDENT TEAMS CHALK UP FIRSTS

The university's Nanorobotics Group took top spot in the international Mobile Microrobotics Challenge in Shanghai – the first undergraduate and first Canadian team ever to do so. Waterloo's microbot, which measured a half-millimetre in width and a hundredth of a millimetre in height, was the only one at the competition to successfully manipulate microscale triangles into a tightly packed formation.

Waterloo Engineering students are becoming pros at accepting honours at the annual Hydrogen Student Design Contest. This year, Waterloo's team won the contest's grand prize. It was the fifth award Waterloo Engineering has won in the six-year history of the event sponsored by the U.S. Department of Energy, Praxair, Honda, and Proton Energy Systems. The team, made up of chemical engineering students Kirby Skinn, Lisa Tong and Nicholas Hartmann, architecture student Anna Beznogova and advised by chemical engineering professor Michael Fowler, were challenged to plan and design a residential hydrogen fueling system.

The Faculty's junior design team took top spot at the Canadian Engineering Competition held this past March in Montreal. Team members Kornel Niedziela and Shari King of mechatronics engineering and Adam Thagard and Marc-Andre Simard of systems design engineering were given four hours to design and build a prototype of an amphibious vehicle that could make it through grass, sand and turbulent water.

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University of Waterloo Chancellor Prem Watsa (left presents Omar Ramahi of electrical and computer engineering with an Award of Excellence in Graduate Supervision at spring convocation.



"It's a great opportunity for my students to learn realworld environmental issues."

# PUTTING THE CLEAR BACK IN CLEARWATER

Black, gooey, tarry and toxic. That's how Neil Thomson, chair of civil and environmental engineering, describes coal tar - the byproduct substance found beneath the earth's surface at old manufactured gas plant (MGP) sites.

Thomson and a team of three graduate and undergraduate Waterloo environmental engineering students are working on a pilot scale project to determine if a contaminated Clearwater, Florida MGP site can eventually be cleaned up using chemical oxidants without resorting to shovels and bulldozers.

Why choose Clearwater?

"It's fairly shallow, has nice sand and is ideal for a pilot scale experimental site," says Thomson.

Coal tar is a byproduct of coal gas production. Back in the first half of the 20th century, the U.S. and Britain used high heat, steam and solvents to distill coal. The resulting gas was then piped to homes for heat, lighting and cooking.

Unfortunately, the process also created toxic coal tar, which now resides underground at MPG sites. According to the local Tampa Bay newspaper, Clearwater has been assessing the contamination since the early 1990s. Today, the coal tar dissolved plume seems to be migrating toward the department of health building south of the site.

From left, Michelle Cho, Neil Thomson and Angela McIsaac, all of civil and environmental engineering, are working on installing monitoring wells and taking soil samples in Clearwater, Florida.

Thomson himself has been studying soil and groundwater cleanup for 22 years, and has done extensive lab, field and modeling work. But Clearwater represents a chance to go in and deeply explore and research an authentic, complex site.

"It's a real historical site where things have spilled for years. It's an unknown," he says.

Although the project itself is set to take five years, the process that took him from coming up with the idea to launching it was much faster. In May 2010, Thomson met a lawyer who was looking for ways to clean up MGP sites in Florida. A phone call ensued and, by November, Thomson proposed the project. By December he wrote a proposal and the project was funded in February 2011.

The following month, Thomson and Angela McIsaac, an environmental engineering master's student, headed to Florida to install monitoring wells and take soil samples. McIsaac is helping to design a pilot-scale treatment strategy and assess its performance.

The treatment involves flushing the coal tar with an oxidant and then waiting for years while the area reaches a new equilibrium. Testing too soon could produce misleading results.

McIsaac (BASc '10, Enviro) is excited about the project's possible scope and impact.

"With my undergraduate studies in environmental engineering, this provides me with the opportunity to apply my specific skill set and knowledge base to a full-scale project," she says.

Thomson is also looking forward to moving beyond a controlled field site with his team. "It's a great opportunity for my students to learn real-world environmental issues," he says.

#### AWARD-WINNING SPIRITS

#### San Francisco is known for many things: Steep hills. Silicon Valley. Alcatraz.

But for John Vellinga (BASc '91, SD and MSci) and his wife Katherine Koszarny Vellinga (BASc '92, SD), it's the city where their Zirkova Premium Vodka won a Gold Medal at this year's San Francisco World Spirits Competition, considered the most prestigious in the industry. Zirkova competed against 1,000 entries from 61 countries.

That's not the sole win for the couple who run Multiculture Bevco Inc. out of Oakville, Ontario. Not only did they win the *Dragon's Den* Armchair Dragon Contest, run by the popular CBC reality television show, they netted a Best Buy award from the Beverage Testing Institute in Chicago in 2010.

"Those awards put together validate everything we're going after," says Vellinga. "We're about having superb quality vodka at a ridiculously low price."

But how exactly did two alumni go from systems design engineering and management sciences to creating premium vodka?

Koszarny Vellinga, who likes to joke she's now a vodka baroness, landed a job at Procter and Gamble in Canada after graduation, before the couple moved to Ukraine in the late 1990s. There they started a successful consulting firm to help companies navigate the new business landscape.

"The Iron Curtain had fallen and all the rules of the game had changed," she says. "There were a lot of companies that were production oriented, but didn't have marketing."

One of their biggest clients happened to be the Slavutich Brewery. While Vellinga helped with statistical process control, Koszarny Vellinga put a quality system in place. Returning to Canada in 2002, they started to dream about importing the beer. After looking into the project, they realized they could do one better - create their own vodka brand, distill it in the Ukraine, and sell it in Canada.

The risk paid off. The company's two brands, Zirkova, and the slightly pricier, but smoother martini-friendly tipple, Slava, are sold in Ontario, Manitoba, Saskatchewan and Alberta. There are plans to sell them in the U.S. and Ukraine

"We're the little guy on the shelf, the entrepreneurial brand - but a lot of the big brands started that way," says Koszarny Vellinga.

Although the brands launched in 2005, Vellinga is still used to fielding questions about how engineering and vodka connect. Even the leadership skills he developed as a Waterloo Engineering Endowment Fund founder, and president of both the Engineering Student Society and the University Federation of Students, have had an impact on the company's success.

"People say, 'You're an engineer and now you're selling vodka.'
But you know what? There are data analysis, logistics and packaging engineering involved," he says. "So much of what we learned at school and on our work terms apply to what we're doing now."

"So much of what we learned at school and on our work terms apply to what we're doing now."



Katherine Koszarny Vellinga (BASc '92, SD) and John Vellinga (BASc '91, SD and MSci) won a gold medal at this year's San Francisco World Spirits Competition for their Zirkova Premium Vodka.



"Find someone great to work for. There's so much to learn from having a great mentor." Architecture graduate Omer Arbel (BES '98, BArch '00) is the founder of OAO, an award-winning architectural and design practice, and is also the creative director of Bocci, an industrial design manufacturer.

# BUILDING CONNECTIONS BETWEEN DESIGN AND ARCHITECTURE

Perhaps the most fascinating aspect of Omer Arbel's work is its sheer size and scope. The Waterloo School of Architecture graduate's projects range from designing the interior of Ping's Café, a Japanese restaurant in Vancouver, to the medals for the 2010 Winter Olympics.

Based in Vancouver, Arbel is the founder of OAO, an award-winning architectural and design practice, and is the creative director of Bocci, an industrial design manufacturer. In Arbel's world, the division between architecture and design doesn't exist. He has worked on luxurious private residences and accessibly priced electrical wall units that sell for \$15. And if he can't build it, he relies on a large collective of global experts, craftsmen, suppliers and engineers. Arbel might be in contact with felt mills in Denmark, glassblowers in Murano, and electrical component manufacturers in China.

Once, when he was working with a new type of concrete for an architectural project, he turned around and used the ultrahigh-strength material to create an extremely thin chair.

His innovative ideas helped him win the 2010 Ronald J. Thom Award for Early Design Achievement from the Canada Council for the Arts. The \$10,000 prize, presented every two years, is given to an emerging designer in Canada.

Arbel has been breaking down barriers as far back as his years at Waterloo. Rather than sequester himself to the studio, he says his professors encouraged him to get out onto the campus and absorb other disciplines.

"I received a really good liberal education at Waterloo," he says, mentioning he read widely and constantly as a student. "I also had full access to a pretty fantastic wood shop and got to make so much with my hands."

In fact, he encourages today's students to open themselves up to real-life learning. Apprenticing with a forward-thinking designer now will reap huge career and creativity benefits later.

"Find someone great to work for," says Arbel. "There's so much to learn from having a great mentor."

#### **DESIGNING FOR FITNESS**

A workout machine for users with lower-body disabilities and an iPad app to monitor workout progress are just two inventions recent graduates have contributed to the fitness industry and improving our health.

In 2010, when Will Bucholtz (BASc '11, Mech) and Xiaoxian Zhou (BASc '11, Mech) chose their fourth-year design project, they wanted to make it count for more than good marks. So they turned to physiotherapists, kinesiology students, engineers and the experts at K-W Access-Ability, which offers information and programs to people with disabilities.

Their goal was to find out if people with physical disabilities could use a new piece of fitness equipment.

"Everyone we talked to was excited," says Zhou, adding that today's motorized wheelchairs are easier to maneuver than older hand-push models. However, that ease comes with a price: less exercise.

"People don't need to move anymore. That's a serious health problem and not many people are addressing it," he says.

The two got down to work with the guidance of Jim Baleshta, a Waterloo mechanical design engineer, who supervised the project. Together, they designed and built a specialized machine that resembles a wheelchair but is housed on a stationary frame. Users push the wheel with their arms to move their legs. Not only does the piece of equipment give a good cardiovascular workout, it increases blood flow in the lower body.

Jason Angel, a University of Waterloo master's student researching tourism and accessibility, was one of the first people to give it a whirl. Although there were still a few kinks to work out, Angel says he was thrilled how well the prototype worked – and the possible price. While most specialized exercise machines are about \$2,000, it's possible Bucholtz's and Zhou's model could cost between \$600 and \$700.

"I want to remain active for as long as possible. It's important to break out of a sedentary lifestyle and keep moving," says Angel.

Since Angel tested the machine it has been donated to K-W Access-Ability, while current engineering undergraduate students make final changes to it. And although Bucholtz and Zhou have mostly moved on – Zhou is launching a start-up marketing company and Bucholtz works for a power corporation –they're thrilled by the feedback and media attention so far.

"It was cool to be part of something that would actually be beneficial and not just sit on my shelf in the basement!" says Bucholtz.

"One of the most amazing things about Waterloo is the nice pairing of industry and experience."



Will Bucholtz (left) and Xiaoxian Zhou designed a workout machine for people with disabilities.



Waterloo graduate student Jason Angel was one of the first to try out Will Bucholtz and Xiaoxian Zhou's workout machine and was thrilled with how well it worked.

"Not everyone has the time or commitment to go to the gym or hire a personal trainer," Ly says. "We want to make fitness more accessible."

And users seem to want the same thing. Today, through word-of-mouth alone, Skimble's Workout Trainer is rated a top free iPhone and iPad app for health and fitness.

Skimble is now ready to take its next leap forward. The company was chosen to be part of the inaugural Rock Health accelerator program this year. The program, which brings together the health care and technology industries, will not only give Skimble office space, but access to funding, infrastructure, branding, communications and legal support. It's affiliated with the Mayo Centre for Innovation and Harvard Medical School.

Ly says Waterloo Engineering not only gave her the technical skills she needed but, with co-op and the ability to travel the world in her field, she has been able to create a network of helpful connections and a healthy entrepreneurial drive.

"One of the most amazing things about Waterloo is the nice pairing of industry and experience."

#### TECH-ERCISING WITH SKIMBLE

Maria Ly (BASc '06, Comp and MSci) has also found a good fit in the health and wellness industry. A rock climbing enthusiast, Ly is the co-founder of Skimble, a start-up mobile app company in San Francisco.

Ly fell in love with California while on a co-op term there. After working with Google, Flurry and Cypress, she decided to break out and start her own company. Interested in tracking her progress as a rock climber, she created a computer tool that would do the job for her. That simple program was the seed for Skimble.

"I always knew in the back of my mind that I would build a start-up that would blend my two passions – high tech and rock climbing," she says.

Together, Ly and business partner Gabe Vanrenen created their new Workout Trainer app and they continue to look for ways to develop it further. Listening to a virtual personal fitness trainer, users are guided through multimedia exercises with timed, step-by-step instructions. They can also check out instructional photos and videos or even create their own workouts and share results on social media sites. All progress is tracked, of course.

Alumna Maria Ly is the co-founder of Skimble that tracks fitness workouts and much more.



#### MBET TEAMS PUSH THE FUTURE FORWARD

Waterloo Engineering's Master of Business Entrepreneurship and Technology (MBET) teams are cleaning up at competitions in more ways than one.

Take CHAR Technologies, a team that included MBET students Sanna Choudhary, Tai-Lee Chen, Annika Martins, Pierre-Marc Pepin and Andrew White, for example. In March of this year, it was awarded the grand prize at the 2011 IBK Capital-Ivey Business Plan Competition.

Its award-worthy business concept was an environmentally friendly method for cleaning biogas and eliminating highly corrosive hydrogen sulfide.

"There was no good way to do it until our research came along," says White.

The judges, all entrepreneurs and venture capitalists, thought so too when they gave the team top honours, a cheque for \$25,000 and the opportunity to compete at the Venture Labs Investment Competition at the University of Texas in Austin.

Although they didn't come home winners from the second competition, White credits MBET for the team's Canadian success.

"The program was absolutely key for us going to the competition and winning," he says. "In a little over four months, we were able to pull together a winning plan and presentation."

White, who has undergraduate and graduate degrees in chemical engineering from the University of Toronto, says the business plan was based on work he'd done for his graduate degree in engineering. He chose to enrol in Waterloo's MBET program because he wanted a degree that would help him with the start-up commercialization phase of business.

#### **INNOVATOR CHALLENGE WINNERS**

Michelle Berelowitz, another MBET student, was also looking for a hands-on, forward-thinking program that would help take her ideas to the next level and commercialize them. She says the one-year program packs in a lot.

"It's a very intense year. I can say that working a 60-hour week will actually be like a vacation in comparison!" she says, laughing.

All that hard work paid off though. Berelowitz was part of team ROKUR All, which took top prize at the 2011 RBC Next Great Innovator Challenge. The challenge the team tackled: Come up with an innovation that would be critical to Canadian financial services in 2015.

ROKUR All, whose members included Berelowitz, Krishna Nuthi and Wei Wei, won for its We Care Portal, an online solution that enables caregivers to help elderly or ill seniors with their financial needs. Berelowitz's own mother-in-law inspired the idea.

But ROKUR All, which walked away with a cheque for \$20,000, wasn't the only MBET team to be shortlisted for the competition. Mighty Moguls won second place and \$10,000, while third-place Tycoons of Tomorrow went home with a cheque for \$5,000.

Berelowitz says she's convinced that MBET's focus on real-world solutions and innovation motivates teams to develop business ideas that have an impact.

"We're working to build our own businesses, push technology and push the future forward," she says.

"MBET was absolutely key for us going to the competition and winning."



and Michelle Berelowitz won the RBC Next Great
Innovator Challenge for an online solution that enables
caregivers to help seniors with their financial needs.



#### **ETHICAL OCEAN MAKES WAVES**

When the Ethical Ocean team taped the 2011 season finale for CBC's popular *Dragons' Den*, a venture capitalist reality show, little did they know they would walk away with funding – and a T-shirt slogan.

While most of the "Dragons" were enthusiastic about the online ethical start-up, Kevin O'Leary (BES '77, Man-Environment), an entrepreneur and venture capitalist, wasn't convinced. In a heated debate, he lambasted the eco-friendly company, calling it "a stain on the face of capitalism."

Yet rather than slink away from the exchange, the Ethical Ocean team bought boxes of fair trade, organic T-shirts and had them printed up with the words "A stain on the face of capitalism."

"We put them on our website – and they sold like hotcakes!" says Jonathan Fishbein, the company's co-founder and chief technology officer.

Fishbein, who has an undergraduate degree in software engineering and a master's degree in systems design engineering from Waterloo, came up with the idea for "We shouldn't have to live a consumerist life and an ethical life. We can live the two lives together."

Two Waterloo Engineering graduates are making a difference with Ethical Ocean, an online company that offers a wide range of ethical products from running shoes to soccer balls to hair products.

the company in the last months of his graduate work. Mike Spendlove, who has a degree in systems design engineering, became part of the team too. They met at school through the Engineering Society and their work with Engineers Without Borders. After a year of development, they launched Ethical Ocean on Earth Day 2010.

The premise is simple: Consumers generally want to buy organic, fairly traded and eco-friendly goods as opposed to those made in sweatshops or exposed to harmful chemicals. At Ethical Ocean, online shoppers buy anything from wine bottle carriers made from material reclaimed from a local brewery, to a water-powered alarm clock. Most products are no more expensive than what you would find in a mall.

"We shouldn't have to choose between a consumerist life and an ethical life. We can live the two lives together," says Fishbein.

That idea has caught on. The team closed its first round of financing by raising \$500,000. In June 2011, the team boarded a plane for San Francisco after they were chosen for a prestigious pitch competition in Silicon Valley. Fishbein says word is catching on that market research pegs ethical consumerism as a \$39-billion market in North America.

Fishbein took his last engineering co-op term off to start his first company and says he still uses what he learned in his fourth-year engineering entrepreneurship course. His years as a student with Engineers Without Borders and as an employee after graduation, helped develop an impressive network – Don McMurty, past vice president of sales and marketing at RIM, and Patrick Pichette, CFO of Google, are on the Ethical Ocean advisory board.

Despite all the interest and success, Fishbein admits launching the company was nerve-rattling.

"I think we needed the most encouragement to launch Ethical Ocean – it was a big risk," he says. "But everyone was so supportive and convinced us we had something good and needed to pursue it."

#### **CLASS NOTES**



#### 1965

**Michael Lawrence Mallon** (Civil '65) is still happily married, has six grandchildren and is enjoying retirement. He's looking forward to his 50-year reunion in 2015.

mmallon@rogers.com

#### 1966

CLASS REUNION - 45 YEARS SEPTEMBER 24-25, 2011



#### **Robin Dodson**

(Elect '66) has been retired for six years. Robin and JoAnne spend their time

travelling to visit their three children and six grandchildren, as well as to more exotic destinations. They are looking forward to Robin's 45th reunion this fall. robin dodson@shaw.ca

**Gerry Mueller** (Chem '66) has been happily retired in Waterloo since September 2006, but continues to serve as an honorary assistant priest at St. Andrew's Anglican Church, Kitchener, and is busy with other volunteer activities and travel. presbyter@sympatico.ca

#### 1967

Horst Appenroth (Mech '67) says "I retired in 2007 after 35 years as a project manager for mining projects first with Kaiser and then Kvaerner, followed recently by part-time consulting work with Fluor. Unfortunately my wife of 40 years died of lung cancer four years ago. I have a son and a daughter and two grandchildren. My part-time consulting work leaves me time for tennis, golf, skiing and trayelling."

**Greer Lavery** (Chem '67, MSci '77) retired as a professor of applied computer science at Ryerson University in 2001 after 34 years. He is now living in Progreso, Yucatan in the winter, at his Haliburton/Muskoka cottage in the summer, and in Clarkson in between seasons

rlavery@rogers.com

#### 1968

**Peter Gevorkian** (Elect '68) has published another educational book on alternative and solar power energy entitled *Large Scale Solar Power Systems Design: An Engineering Guide for Grid-Connected Solar Power Generation*, McGraw-Hill 2011.

Peter Howarth (Mech '68) says "my wife, Maritza Freyslinger (PhD, CPsych, '96), and I have chosen to forego the exorbitant prices and frigid winters of Canada to take up permanent residence in the mountains just south of Guadalajara in southwest México on the north shore of the country's largest lake." peterhowarth@alumni.uwaterloo.ca

**Douglas William Rae** (Civil '68) reports "I am retired. My wife and I sold our resort near Algonquin Park in 2005 and moved to Hidden Valley near the ski hill in Huntsville. I spend my time curling in winter, singing, and enjoying the beauty of Muskoka and Algonquin." raeds@cogeco.ca

#### 1969

John Lackey (Elect '69) says "I should be retired after 40 years in the power transformer business, but I'm having too much fun working and enjoying my retirement home on Lake Couchiching near Orillia." john.lackey@ieee.org

#### 1970



**Tom Boughner** (Chem '70) is currently leadership champion of Tetrahedron Performance Resources. He spent his 39-year working career in six kraft pulp and paper mills in four Canadian forest regions. His positions

ranged from entry level chemical engineer to the general manager level. He now works as a part-time senior forest industry consultant with Ausenco Sandwell Engineering. Tom and his wife Cecille have three children and are the proud grandparents of Chelsea (2003) and Maggie (2010).

**Ron Molyneux** (Elect '70, SD '72) is retired and living in Sparta, south-east of London, ON. He says "we are loving the country life in which horses have become a big part of our lives." ron.cindy@rogers.com

**L. Brian Ross** (Elect '70) is the project manager for the electrical construction of the 3000HP climatic wind tunnel at the University of Ontario Institute for Technology in Oshawa and the renovations to Union Station in Toronto. *l.b.ross@sympatico.ca* 

Alfeo Soligo (Chem '70) has been retired from teaching high school science, chemistry, physics and math since 2000. He lived in Orangeville for 30 years, but recently moved to Fergus, where he formed an oldies goldies band called The Greytones. He has been married to Betty, a Waterloo Lutheran University graduate, for 38 years and has two children: Natalie Soligo, a veterinarian in Caledon, and Matt Soligo, an IT network employee with Burnside & Associates in Orangeville. asoligo@sympatico.ca

#### 1971

#### CLASS REUNION - 40 YEARS SEPTEMBER 24-25, 2011

**Glenn Bromhead** (Civil '71) says "after 32 years at Ontario Hydro, I took early retirement and moved to Vancouver with my wife and son. In the winters, I teach children to ski at Cypress Mountain, and year round I volunteer with the Grouse Mountain Wildlife Refuge where I talk to the visitors about the resident grizzly bears and timber wolves." bromhead@telus.net



Ray Wahl (Civil '71) reports "we are living in Colorado with the mountain range in sight. I traveled to Haiti in April on

a life changing trip to rebuild a church in Lavanneau. Haiti is still a mess with hundreds of thousands living in tent cities and most buildings still in distress. The dust, diesel fumes and filth of Port Au Prince touched my senses and the people touched my heart." raynorwahl@yahoo.com

#### 1972

**Robert Bales** (Mech '72) reports that "after 30 years working in construction and development, I have limited my focus to construction arbitration, and the new field of legal project management." rob.bales@adjudicate.ca

#### 1973



**Douglas R. Lloyd** (Chem '73, '74, '77) has for the third time in the past six years been voted the "most inspirational, most respected chemical engineering professor" by the engineering undergraduate students at The

University of Texas in Austin. He has taught chemical engineering at the university since January 1981.





**Bill McCurdy** (Chem '73, '75) says "in May I participated in a group tour to South Korea. In Seoul, we visited royal palaces,

the Korean equivalent of Upper Canada Village, shopping areas, and an amusement park. In Gyeongju near the south east coast, we visited Bulguksa Temple and Seokguram Grotto, both World Heritage sites. On Jeju Island, I hiked to the top of Songaksan, a dormant volcano. The nine days passed all too quickly!"

wamccurdy@rogers.com

Charles West (Elect '73) has retired from Highland Valley Copper after 29 years. He started as an electrical engineer in 1980 when the company was named Lornex. He loved supervising construction projects and at his retirement he was superintendent of engineering. Charles lives with his wife Edith (Math '73) in Logan Lake, BC. 250-523-9963

#### 1974



**Don Cruikshank** (Mech '74) says "36 years after graduating from Waterloo, I retired as partner and vice president from TMP Consulting Engineers. Since last June, Martha and I have enjoyed a year of travelling to Scotland, Paris,

Guatemala, New Zealand and Hawaii, which included narrow escapes before the Christchurch earthquake and the Japan tsunami! We enjoyed getting back to Waterloo for my 35th-year celebration and reconnecting with friends." don.cruikshank@gmail.com

**Robin Fair** (Elect '74) says "I retired in 2000 but volunteer twice a week as a high school math tutor and science lab set-up person. I have two children, one in Grade 11, a five-time national science fair finalist, and the other in nanoscience at the University of Guelph." calenso@gmail.com



Santosh K. Gupta (Civil '74) reports that since taking early retirement in 2000, he's been volunteering at Professional Engineers Ontario to serve the engineering profession. He's

been appointed to the PEO Council by the lieutenant governor for a second term. santosh.gupta@rogers.com

#### 1975

**Rob Fennell** (Elect '75) recently returned to Enbridge after running a company called Enbridge Electric for a couple of years. Rob and his wife Sheila will celebrate their 25th anniversary this year.

rob.fennell@enbridge.com

#### 1976

CLASS REUNION - 35 YEARS SEPTEMBER 24-25, 2011

Tom Culham (Civil '76) says "I am currently president of Culham Business Solutions, a management consulting company and am working on a PhD at the SFU Faculty of Education. I teach operations management and ethics at the UBC Sauder School of Business. Recently the David Lam Centre honoured one of my papers with the Paul Tai Yip Ng award for best SFU 2010 graduate paper. I will be teaching in Shanghai this year." tculham@telus.net



**David Jefferies** (Arch '74, '76) has joined as principal of the Kingston Office of NORR Architects, Engineers, Planners. He and his wife Gail have relocated to 14 Island Lake in

Hartington, ON. Until 2010, David was the senior managing project architect for the 58-storey EnCana BOW Tower in Calgary and also acted as an adjunct professor to Waterloo's School of Architecture for the 3rd design studio in 2008.

david.jefferies@norr.com

John Rusheleau (Chem '76) says "I've been self employed as a safety and environmental contractor since 2004. From 1985 to 2004, I was employed by BASF Canada. From 1978 to 1985, I worked at Inmont Canada." rusheli@sympatico.ca

Bernie Sander (MSci '76) says "age 60 lies just ahead but no retirement is in sight quite yet. My company, Innovation Transfer Inc., focuses on employee engagement and idea generation processes. We help Fortune 500 and SME's in both North America and Europe to develop sustainable cost savings programs. PiT-Stop, which stands for problem finding, structuring and solving in teams, is our proven methodology." bsander@innovationtransfer.com

#### 1977

David Powell Bean (Elect '77) says "West Vancouver has been home for 31 years. My career has been as an electrical power consultant working on industrial and municipal power systems and some power stations too. Monica's engineering career has been river hydro technical consulting. Both of my sons are recent graduates of UBC." todpbean@hotmail.com

Hans Berger (Civil '77) has been named president of Lindab Inc., an air-duct manufacturer with U.S. headquarters in Portmouth. Berger started with Lindab after serving 15 years with Butler Europe Ltd., which became Lindab-Butler Buildings Systems, and Lindab Astron Buildings Division. hans.berger@lindab.com

Alar Korgemets (Elect '77) says "we're still living in Canada. Our daughter has moved out and will attend Waterloo in the fall. The offspring of a mathie and an electrical engineer will be an arts major!" korge@golden.net

**Keith Parrott** (Civil '77) retired due to health issues and to enjoy life with his wife Tina Quinlan. He plans to work as a community volunteer when not building his HO scale model train layout or riding his motorcycle across North America.

kbarryp@hotmail.com

#### 1978

**Garry Dosa** (Elect '78) says "for the past decade, I have been busy travelling the world working for an assortment of EPCM consulting firms in the capacity of project manager. I'm excited about life in general, my family and the newest addition to our family - a grandson!" gldosa@shaw.ca

Nihal Jayawardene (Mech'78) reports "after graduation from Waterloo, I went to work for Ontario Hydro in Toronto. My contributions at Ontario Hydro included mechanical design and analysis of various power systems, components and structures; nuclear systems design; and nuclear waste management engineering and project management. I retired from Ontario Hydro/OPG after 30 years. I am currently working as a consulting engineer at AMEC NSS in Toronto and am involved in various nuclear engineering projects." jaywar99@hotmail.com

#### 1979

**Hugh Alley** (SD '79) started First Line Training this year to help firms improve productivity and profitability by improving the skills of first line supervisors. He has built the business based on his experience running a small manufacturing firm. halley@firstlinetraining.ca



**Philip Woodcock** (Civil '79) says "I have had a busy 32 years since graduating from Waterloo. I am married and have a son, 17, and a

daughter, 15. I have been employed by various consulting engineering companies in Montreal over the years, always doing structural design (concrete and steel) for heavy industry. I went back to school and received a master's degree in structural engineering from Concordia University in 1985. Currently, I'm working on an iron ore mine expansion located in Port Cartier, Quebec." pwoodcock@hatch.ca

#### 1980

Gord Britton (Mech '80) is co-founder of INTEGRA Technologies, North America's largest provider of specialty services for critical bolted connections in the energy industry. He created FlangeTrak®, a leak management process and was awarded a patent for the Talon Unibody Hydraulic Nut, which was recently used on a critical deepwater repair in the Gulf of Mexico. Gord is married to Josy Britton, an internationally recognized artist and graduate of Waterloo. They have six children and one grandchild. gbritton@integratechnologies.com



Gregory Guse (Civil '80) works for a company that designs and builds plate metal structures. He has

been the project manager for many of the primary separators that are used in the Alberta Oil Sands in the initial extraction process. gguse@cbi.com

**Derrick Oswald** (Elect '80) rejoined Autodesk Consulting in May, after a few years hiatus as a product designer. Derrick moved to Switzerland in 2008. In his spare time he is learning German and doing Android programming.

derrick.oswald@gmail.com



William Rule (Civil '80) says "I am currently working as a finite element analyst for John Deere tractors in Waterloo, lowa. I use ProE for geometric modeling and ANSYS

Workbench for analysis. My wife Audrey is a professor at a local university and my daughter Amy just started an MBA program." wkrule@gmail.com

Wayne Shaw (Mech '80) says "I retired from Honda of Canada in 2009 after a 30-year career in engineering. I am now working as an SR&ED practitioner for Deloitte, specializing in manufacturing claims –it keeps me out of trouble. Sue and I just celebrated our 30th anniversary and are just finishing a retirement home on Lake Muskoka." wasshaw@rogers.com

1981

CLASS REUNION – 30 YEARS SEPTEMBER 24-25, 2011



Mark Johnston (Elect '81) is director of mergers/ acquisitions & strategic planning for Fluke Networks, and lives in Scottsdale, Arizona.

mark.johnston@flukenetworks.com

Vinit Nijhawan (Elect '81) has been appointed to the Board of Directors of the Massachusetts Technology Development Corporation. Vinit has over 25 years experience building five start-ups, including three as CEO. Currently, he is managing director, office of technology development, and director of enterprise programs at the Institute of Technology, Entrepreneurship & Commercialization at Boston University where he teaches an MBA course on entrepreneurship. Vinit@BU.edu



Stephen Terry (SD '81) married Wendy Osten in Oakville on July 23, 2011. They first met swing dancing six years ago at Glen Echo, Washington DC. They enjoy dancing and rollerblading. www.steveterry.com



**Chuck Williamson** (Mech '81) reports he now owns three Jiffy Lube franchises in Southern Ontario.

shocks@compuserve.com

#### 1982

**Kim Dominguez** (Chem '82) and **Juan Dominguez** (Chem '82) are pleased to announce the birth of their first grandson, Aaron Miguel Dominguez born in April 2011.

**Sue Eastwood** (Chem '82) says "mark your calendars! Our 30-year reunion will be held in Waterloo on September 29 and 30, 2012. We had a fabulous turnout for our 25th reunion, and let's make it even better for our 30th! **Dave Cutler** (Chem '82) has agreed to be a co-class rep with me again. Please feel free to contact me at if you have any ideas for our reunion."

susaneastwood@alumni.uwaterloo.ca

Eiichi Fukuda (Chem '82) says "I have been semi-retired since 2009. On October 1, my eldest daughter will marry in Hawaii. Along with my twin brother we're publishing our third book on English-Japanese linguistic relativity. Sadly, Barbara, my wife of 32 years, passed away in March this year." fukudaeiichi@gmail.com

J. R. Douglas Gravel (Mech '82) says "after six years in Canada, I am once again back in Chile. The lifestyle, the climate and the people here are among the best in the world." Doug.Grave@snclavalin.com

**Bill Spencer** (Mech '82) has been living in Cobourg since 1990 with his wife Andrea, a nurse he met in Oshawa. Their children include Andrew, who is attending Georgian College in automotive management; David, who is entering third year mechanical engineering at Queen's; Sarah, who is starting at University of Guelph; and Taylor, who is in Grade 10. billspencerchev@eagle.ca

#### 1983



**Sven Dickinson** (SD '83) is now a professor and chair of the department of computer science at the University of Toronto. Since his days as an

undergraduate in systems design engineering, his research has focused on computer vision. sven@cs.toronto.edu **Brian King** (Mech '83) recently completed his PhD in administration at McGill, graduating just a few weeks before his eldest son finished his BA at the University of Ottawa. Brian is now an assistant professor at HEC Montréal, teaching management classes in (his rapidly improving) French. Look for Brian on LinkedIn.



George Young (Elect '83) performed in a concert on June 4, 2011 in Napean, ON, with the Northern Stars Chorus. The "Stars"

are an a cappella group registered with Sing Canada Harmony and are part of the Ontario District of the Barbershop Harmony Society. In the photo, George is in front, second from left.

#### 1984



Larry May (Arch '84) says "I worked for an architect in Oakville for 18 years, during which time I had two sons, two wives (not concurrently), one stepdaughter and several

houses. In 2002, I set myself up as a sole proprietor and started a construction company. Construction work kept me busy for six years until I had enough architectural business."

#### 1985

**Ian Davis** (SD '85) reports that he and his family - wife Sandrine, three teenage children, two dogs, two cats and one horse - have recently



moved from a fiveacre urban country property close to the centre of Sydney. Ian runs a television group (pay TV and IPTV) in

Australia and does volunteer work. sandrian@bigpond.net.au

**Glenn Givens** (Chem '85) says "I'm still the owner of Givens Control Engineering Inc., celebrating 20 years in business in 2012. I have a wonderful wife and three children and live in Burlington."

ggivens@givenscontrol.com

**Robert Pankratz** (Civil '85) says "since completing an MBA in 2000, I have worked at Manulife, currently in the derivatives middle office."

epankratz@hotmail.com

**Steve Rode** (Mech '85) says "I am president of the electronics group with Autoliv, a global automotive supplier. Dina and I have been married for 27 years and we have four children, Daniel, 21; Aaron, 17; Nathan, 15; and Rachel, 13. We live near Windsor where Dina practises medicine."

srode@cogeco.ca

#### 1986

#### CLASS REUNION – 25 YEARS SEPTEMBER 24-25, 2011

**Richard Dunda** (SD '86) is approaching 20 years at Microsoft, now driving consumer marketing in the operator (telco) channel nationally. He says "I'm also approaching 22 years of being married to Linda and enjoying life in Grimsby. My oldest child Riley was just drafted by the Sudbury Wolves of the OHL in the seventh round of the 2011 OHL Priority Selection."

rjdunda@hotmail.com

Louis Mongeon (Chem '86) says "Manon and I have spent the last three years in upstate NewYork where I have been involved in a major capital project. As my work here is done we will be going back to Canada and settling down in the Toronto area sometime this fall. My work has allowed us to travel to many places during my career including the U.S., the U.K. and France. Our children (Vanessa and Kevin) are both enrolled at University of Ottawa in pharmaceutical sciences. I couldn't convince them to go into chemical engineering at Waterloo." mong1963@hotmail.com

#### 1987



J. David Bradbeer (Civil '87) says "I am currently living in Etobicoke and running my own small real estate consulting and project management company. My latest project, AeroCentre V,

won three major industry awards. Our two boys are growing up fast and the oldest is already looking at universities (but, of course, there is ONLY one option!). Feel free to look me up on Facebook or LinkedIn."

Michael Schweigert (Chem '87) and his wife Sally live in Toronto. Their older son Sebastian is in second year engineering at Waterloo and their younger son Jacob is finishing high school. Michael continues to practise medicine in Toronto, remaining active in the development of information and health quality management systems. He and his family enjoy their second home near Port Severn throughout the year. michael.schweigert@omsoc.org

Andrew Waitman (Elect '87), CEO of Pythian, published an article on Shad Valley, a student enrichment program aimed to inspire creative innovation and entrepreneurship in all young people. Shad Valley started at Waterloo over 30 years ago. You can read the article at: http://www.shad.ca/shad/myweb.php?hls=10321 waitman@pythian.com

#### 1988

**Tom Lee** (SD '88) reports that after two decades at Maplesoft, he is moving on to the next phase of his career as chief education officer at Quanser, a Toronto-based advanced mechatronics and robotics company. He decided it was high time he learned how circuits worked. He's married to Sharon and they have two kids, Eric and Maddi. *tleegm@gmail.com* 

Karl Piirik (Civil '88) says "I have lived in Thunder Bay for eight years now, and am slowly becoming a northerner. I recently returned from a two week on/off road motorcyle tour in Costa Rica, on which my wife Lorella suffered as a passenger through river crossings and the famously rough roads. My oldest son Alex started mechanical engineering at Lakehead last fall." karlintbay@sahw.ca

#### 1989

**Gregory Dalton** (Mech '89) says "I am finishing my doctorate and teaching part time at Laurentian University while retooling TribSys for building the next generation of tribotesters. Philippa is teaching English at Laurentian University and our children are growing rapidly. Aidan is entering Grade 9 and Bridget is in Grade 6. Both are very active, particularly in cross-country skiing and biathlon." *qdalton@tribsys.com* 



**Carl Spiess** (SD '89) says "after graduating from Waterloo Engineering and getting my MBA from Laurier, I worked

as a financial advisor at ScotiaMcLeod. 20 years later, I was still enjoying helping people plan and invest for retirement, but it was time for a great life adventure. With my wife **Jennifer Spiess** (Mech '91) and our three children, we moved temporarily to France where we spent the last year living in Aixen-Provence. I look forward to returning to ScotiaMcLeod in the fall." family@spiess.ca

Jacques Tremblay (Civil '89) has now been calling Houston, Texas his home for more than four years. He's mastered the art of Bar-B-Q and is still enjoying southern hospitality. jacques.tremblay@urs.com

#### 1990

Hal Beck (Civil '90) says "the last 12 months have been very hectic but good, with positive changes professionally. Don't hesitate to touch base if you find yourself in Toronto: home is still at Harbourfront Queens Quay and my office is at Hwy 407and Keele Street."

Sarah Wells (Civil '90, '94) says "I am continuing my career at the Transportation Association of Canada, where I am responsible for our technical programs. I am lucky enough to travel and work with people across Canada. This fall my son starts high school and my daughter will begin her studies at the University of Waterloo."

#### 1991

CLASS REUNION - 20 YEARS SEPTEMBER 24, 2011



**Gregory K. Cook** (Civil '91) was elected to the OSPE board in 2011. He is the president of Cook Consulting Engineers Ltd., based in Aurora. An active member of the Aurora

community, Greg serves on the Aurora Public Library Board and is also involved with local environmental groups. Greg is married to Teresa, whom he met at Waterloo. greq@cookengineers.com

Ingram B. Gillmore (Chem '91) says "I moved



to the mountains after graduation 20 years ago and have been in Calgary ever since. While pursuing a BFA in sculpture

I met the love of my life and quickly settled down with Cindy and our current zoo which includes three dogs and two cats. When I am not playing in the mountains, I run a private junior oil company called Gear Energy Ltd. as the President and CEO."

www.gearenergy.com

#### 1992



Trevor Garrett (SD '92, '95) enjoyed a career in management consulting with Deloitte, travelling

the world doing technology strategy before leaving in 2002 to go into the ministry. After three years as the associate pastors of C3 Church Calgary, Trevor, his wife Amy and their four children are back in Ontario to launch C3 Church Toronto. trev@c3toronto.ca

**Paul Tam** (Civil '92) says "after some years of teaching and research at the University of Hong Kong, I became a priest and am now the assistant parish priest of Holy Cross Church, Hong Kong."

#### 1994



Marcelo Alencar (Elect '94) says "I have published a book on the history, technology and legislation of telecommunications and the fifth edition of my book *Digital* 

*Telephony*. At the beginning of this year, I also published a book on the history of communication in Brazil, the profits of which are going to charity."

sampaio.alencar@gmail.com



#### Pieter de Koning

(Civil '94) will launch his second generation product line this fall. Sold since 2001 as Stronghold Furniture,

his modular shelving provides a visual alternative to conventional shelving.

www.gaspipefurniture.com



**David Gorbet** (SD '94) says "after spending most of the last decade at Microsoft in Redmond, I moved back to the Bay Area with my wife Jennifer and my son Sammy

to take a job as vice-president product strategy with an enterprise software company called MarkLogic. If you want to get back in touch, the best way to contact me is through LinkedIn."

Mario J. Monty (Mech '94) reports "I am living with an exceptional woman and five kids, two of whom were adopted from China. My oldest one is in his third year in engineering. My wife just started a business in which I am also involved."

mario monty@cascades.com



**Derek Tomlinson** (Civil '94) has joined Geosyntec Consultants, Inc. to open its Philadelphia office. Derek specializes in the remediation of sites impacted by dense

and light non-aqueous phase liquids (DNAPL and LNAPL) in the subsurface. dtomlinson@geosyntec.com

#### 1995



Nishad Alani (SD '95) says "you can now find me visiting Starbucks stores in Asia in my new role as vice president,

regional operations based out of Hong Kong. On the personal front, our two little ones Zamil and Kylah keep my wife **Dinar Alani** (Elect '95) and me busy. "

nishad.alani@gmail.com

**Graham Whiting** (Arch '95) is living and working in Waterloo and is principal of a three-person multi-disciplinary design firm specializing in sustainable design. He's married to Kasia Kord, and is father to three kids aged 8, 2, and 7 months. graham@whitingdesign.ca

#### 1996

CLASS REUNION - 15 YEARS SEPTEMBER 24, 2011



#### **Mark Turchyn**

(Chem '96), his wife Lisa and two boys have been living and working on Sakhalin Island in the Russian

Federation since early 2007. Mark is the lead operations engineer for Russia's first offshore oil and gas platform. mark.turchyn@gmail.com

#### 1997



Mohamed Attalla (Civil '97, '00) was appointed as the construction administrator with the Toronto District School Board after completing his PhD in civil engineering.

In March 2011, he was promoted to senior manager, construction and project management, assuming leadership of the school board's 500-person construction department with an annual capital program of \$150 million. He is a fellow of the Canadian Society for Civil Engineering and is serving as the chair of its construction division. *mohamedattalla@rogers.com* 

Pamela Miller (Chem '97) and Neil are busy with work, family and life in Calgary. They have two children: Ryan is in Grade 2 and Paige is in Kindergarten.

pam.e.miller@gmail.com

Steven Peplinski (Mech '97) lives in Calgary

with his wife and two children and works as an engineering manager on a carbon capture and sequestration project. spp\_24@yahoo.com

#### 1998



Brendan Kielly (Chem '98) says "I am currently working back in Newfoundland with my own consulting firm in the offshore oil and gas industry. Since leaving Waterloo I have worked

in London, England; Aberdeen, Scotland; St. John's, NL; and Houston, Texas. I am married to my wife Lauren who was in Waterloo with me for my last year." truehabfan@hotmail.com

#### 1999

Nick Boldt (Chem '99) worked at various positions within IBM around Toronto before leaving in 2008 to join Red Hat, where he works now as a release engineer and productization lead for JBoss Tools and JBoss Developer Studio.

nickboldt@gmail.com

#### 2000



Faisal Hanif (Elect '00) recently joined Juniper Networks as a product manager focusing on data centres, routing, switching and security. Faisal's

experience stems from the networking and optical technologies at Cisco Systems in San Jose, California. Faisal is married and currently lives in the San Francisco Bay area with his wife and daughter. 
fthanif@gmail.com

Michael Hermann (SD '00) and his wife Kara welcomed a baby girl named Kayla Rae Hermann born May 26, 2011 in Los Gatos, CA. Kayla joins her brother Jack, 3. michael.hermann@nuvation.com

**Lesley Phord-Toy** (SD '00) has returned to live in Ontario after a 10-year absence and currently resides in Toronto with her partner. She is part of the core team to start the new Ubisoft Toronto studio which plans to grow to 800 people by 2020.

lyphordt@alumni.uwaterloo.ca

John Matthiesen (Mech '00) married Tina Eidukaitis (BA '00, Cultural Management) in 2007. In 2008, he earned an MBA at INSEAD spending half a year at the France campus and half a year at the Singapore campus. John and Tina's first child, Ethan Finn Matthiesen, was born in November 2010. John is currently working for the start-up Renewable Energy Consulting as partner and president of North American Services.

john.matthiesen@gmail.com

#### 2001

CLASS REUNION – 10 YEARS SEPTEMBER 24, 2011



**Srikant Cheruvu** (Comp '01) reports "I graduated from the University of Michigan Law School in 2009 and started a new job as an associate at the

law firm of Sidley Austin LLP in New York."

Chris Heer (Comp '01) says "after graduating from engineering, I went to law school and now work as an intellectual property lawyer at Bennett Jones LLP, assisting clients with obtaining and enforcing patents and trademarks. This year I married Shauna Ellis (Biology '02). Shauna and I live in the Beach in Toronto."

Marek Krzeminski (Elect '01, '03) says "at the end of February 2011, I released the Complete Game Design video tutorial series on my website http://www.marek-knows.com/phpBB3/viewtopic.php?t=469. Anyone who wants to learn to program in C++, OpenGL, and do game development should check it out!"



Jeff Meister (Elect '01), has worked in software in Toronto since graduating from Waterloo. He completed an MBA at INSEAD in Singapore and

France and has a second degree, a BA, from Waterloo. He's been married to Nancy for two years.

imeister@alumni.uwaterloo.ca

Nitin Mohan (ECE '01, '06) says "after working at AMD for the last five years, I have moved on to Cavium Networks for more exciting career growth opportunities. Cavium Networks is a provider of highly integrated semiconductor processors that enable intelligent networking, communications, storage, video and security applications."

nitin.mohan@gmail.com

**Gerald Tarcisius** (Comp '01, SWE '03) worked at Redknee until 2006 and then completed a MDiv at Heritage Seminary in Cambridge. He married in 2010 and is currently living in Milton. *qtarcisius@qmail.com* 

#### 2003



**Derek Wright** (Elect '03, '05) has been married to **Amy LeRoij Wright** (Elect '03) for six years, and they have a two-year-old son, William.

After finishing his PhD at the University of Toronto in biomedical engineering, Derek began working at Maplesoft in Waterloo. He maintains his ties to the university through teaching sessionals in the ECE department.

#### 2004



Lisa Taubensee (ECE '04) says "since graduating from Waterloo, I have spent almost six years living and working in Europe for Ciena Ltd. in London and Texas Instruments in Germany. My

career has been spent focused on Bluetooth and ISM Band radios. I will be moving back to Toronto with Texas Instruments working as application support for their compiler and tools."

Itaubensee@hotmail.co.uk

#### 2005

Luis Felipe Armenta (ECE '05) is doing research on the new halogen-free dielectric materials in order to influence the industry to use eco-friendly materials. He's leading a team that works in the state-of-the-art R&D of high-speed computational platform's (servers) interconnections. luis.f.armenta@intel.com



Melissa Costella, nee Abercromby, (Civil '05) is expecting her first baby. She will be taking a yearlong maternity leave from her position as the director,

operations and project management at Youth Opportunities Unlimited in London, ON. *melissac@you.on.ca* 

Matthew Millard (SD '05) says "I graduated with a PhD in systems design engineering on the topic of the mechanics and control of human balance. I began a postdoctoral fellowship at Stanford University in mid July." millard.matthew@gmail.com



Ryan Morton (Comp '05) says "on December 31, 2010, I married Nancy Wun, a Waterloo environmental science grad, and we went to

Europe for our honeymoon. While there, we met up with Ryan Ming and Mina Mikhail (both from my class) in England where they are currently working."

**Yu Shen** (Mech '05) worked for two years at the Canadian Space Agency in Montreal after graduation. In 2010, he started work



at Detroit Heavy Truck Engineering LLC in Novi, Michigan as a senior structural design engineer. y6shen@gmail.com

Ron Spreeuwenberg (Chem '05) says after working for Deloitte in Ottawa for three years, he completed an MBA at Harvard Business School. After graduating last year and working in Shanghai for the summer, Ron returned to Canada to work for Deloitte in Toronto. He was married last fall and is in the process of relocating to London, U.K. with his wife.

ron. spreeuwenberg@gmail.com

**Samuel Wong** (Comp '05) says "after three years at Sybase Canada, I relocated to pursue a Juris Doctor and MBA at The Chinese University



of Hong Kong. I am now the head of information systems and operations manager at Time Medical Systems, a multinational medical solution company

which specializes in Magnetic Resonance Imaging (MRI) solutions and systems." samuel.wong@time-medical.com

#### 2006

CLASS REUNION – 5 YEARS SEPTEMBER 24, 2011

Karen Dudzinski (MSci '06) spent the summer commuting to Ottawa, working as a submission coordinator with the Natural Health Products Directorate of Health Canada. She's now in her last semester of a graduate program in the regulatory affairs and quality operations co-op program at Seneca College. karendudzinski@alumni.uwaterloo.ca

Jay Noh (Civil '06) is a director of the Waterloo Learning Centre (WLC) and Canada TEMS academy. Jay established WLC in 2007 with the goal of maximizing the potential of students through a customized tutoring service. In 2009, Jay opened Canada TEMS Academy. It offers unique academic experiences for international students across the globe. wlc.education@gmail.com

#### 2006



**Daniel Urquhart** (SWE '06) married Richard Pye in August 2009 at a ceremony held in Trail, BC. He started a new position this past winter at Christie Digital in

Kitchener and is currently working on the next generation of its VeinViewer (TM) product. daniel@dantu.info

#### 2007



Sultan Alghamdi (Mech '07) says "after I graduated from Waterloo in 2007 with my MEng, I came back to Saudi Arabia and worked with Saudi Basic Industries Corporation, It's

one of the leading petrochemical companies in chemical, metal, fertilizer and plastic. I started as an IT security lead specialist and I am now working as a senior risk specialist in the enterprise risk management department." sultan\_canada@yahoo.ca

**Penny Dorka** (Chem '07) says "for me, the time on campus and after graduation has been fun and I have enjoyed every bit of the journey - its challenges and opportunities. I look forward to connecting with other alumni from my class and sharing success stories." pennydorka@yahoo.ca

Joel Martinez (Civil '07) is living in Baja California, Mexico. He has co-funded a structural design firm called MM Engineers and also works as a professor for the Universidad Autonoma de Baja California. joel.martinez@mm-eng.com



Jessica Sin (Arch '07) says "since graduating in 2007, I spent three years working at the award-winning architectural firm, KPMB Architects. in downtown

Toronto. Since last fall, I've attended graduate school at McGill University in Montreal. I am finishing my Master of Architecture degree this year and will be moving to San Francisco upon graduation." jsin@jessicasindesigns.com

#### 2008



Katelyn Harris (Chem '08) met Andrew Brunskill (Mech '08) in the Village 1 residence in first year. They both earned an MASci (Env) at the University of

Guelph in 2010, were married in July 2011, and now work for consulting firms in Ottawa. katelyn@ecoindustrial.ca



Matthew Weber (Geo '08) says "I worked 960 metres underground as a mining engineer at a potash mine in Saskatchewan for the first year and a half after graduation." ronin\_matt@hotmail.com

#### 2009

Yi Jiang Chen (Civil '09) says "I have been working in IBI Group/Giffels Associates near the Toronto Pearson International Airport since graduation in the position of Transportation EIT focusing on highway/roadway detailed design. I am one year shy of obtaining my PEng licence." vijackychen@gmail.com



Nan Feng (Elect '09) says "I started my career as a hardware engineer last year right after grad school. Recently I was promoted to product

manager of HFC Monitoring System." nan.feng.84@gmail.com

Farid Tabatabaie (Comp '09) is working as a full-time analyst at CPP Investment Board in downtown Toronto. farid.t@gmail.com

#### 2010

**Vadim Bachmutsky** (Mtron '10) is working full-time at Amazon in Seattle. *vadimb@amazon.com* 

**Meghan Hennessey** (MBET '10) says "shortly after graduation, I was selected as KW's Miss Oktoberfest 2010. I attended 150 events,

appeared on radio and television shows, and had the honour of speaking publicly with city mayors and business owners.

Early in 2011, I accepted a position as a marketing coordinator at a software company in Kitchener. Meanwhile, the event management company I co-founded during my studies, Lime Events, is preparing for its first concert series this fall."

Jason Ng Cheng Hin (Mech '10) is currently completing a master's degree in building engineering at Concordia University. jngcheng@engmail.uwaterloo.ca

Abdullah Abbas Sukkar (MBET '10) says "I am working in my start-up with a couple of my colleagues. We are focusing on intelligent business solutions and ERP, as well as providing consultancy in IT related issues." asukkar@uwaterloo.ca



**Aaron Zhou** (Mech '10) says "after graduating in 2010, I began a master's degree at the London Business School in hopes of becoming a consultant. I have just one

more month to go before I graduate and start working in London, England." aaronyzhou@gmail.com

Due to the overwhelming response to our call for Class Notes we weren't able to include all of them in this issue. We encourage you to connect with your classmates through Eng Alum, engineering's alumni facebook site: engineering.uwaterloo.ca/alumni.

#### **IN MEMORIAM**

Sheldon Bainwohl (SD '94)

Emilee D. Bender-Betik (Arch '07)

Alan D. Brown (Elect '70)

Ryan M. Butler (Mech '00)

Michael S. Carroll (Civil '75)

James R. Clunas (Civil '85)

Richard W. Cockfield (Civil '70)

**Graham D. Dadson** (Civil '70)

Joseph Fulop (Civil '67)

Jon Agust Gudmundsson (Civil '76)

Robert L. Hackney (Elect '63)

James E. Hoblyn (Mech '90)

Brian W. Johnson (Civil '68)

Gerald J. Kinnear (SD '81) Henry Kopp (Mech '69)

Henry K. Laskey (Mech '85, '98)

Robert A. Law (Chem '70)

**Donald D. Livingstone** (Chem '70)

Richard J. Martin (MSci '89)

Mario J. Mekinda (Mech '69, '71)

David J. Ramsden (Civil '83)

lan J. Richardson (Mech '85)

Barry F. Roberts (Mech '69)

George Ruddle (Physics '63, '64)

Michael Y. Sy (Elect '80)

Michael P. von Euw (Civil '87)



From left, David Johnson, Karim Lallani and Michele Bristow (all BASc '00, SD) have stayed in touch since graduation five years ago. They look forward to catching up with the rest of their classmates at this month's reunion.

PHOTO: Bryn Gladdi

#### **UPCOMING EVENTS**

#### **CLASS REUNIONS FOR 2011**

**Dates:** September 24 and 25, 2011 for the Classes of 1966, 1971, 1976,

1981 and 1986

Date: September 24, 2011

for the Classes of 1991, 1996, 2001 and 2006

Reunions are a great opportunity to catch up with your classmates, relive memories of your university days and see how the campus has changed since you last visited ... and it's changed a lot recently! This year's reunion coincides with the University of Waterloo Homecoming offering you additional programming and family-friendly activities. Register for reunion events at engineering.uwaterloo.ca/alumni/reunions.

#### **GO ENG GIRL**

Date: Saturday, October 1, 2011

**Time:** 9 a.m. to 3 p.m.

**Location:** Rod Coutts Engineering Lecture

Hall, University of Waterloo

Go ENG Girl is a free annual event hosted by schools of engineering across Ontario for girls in Grades 7, 8, 9 and 10. The Waterloo event includes special guest speakers, an information fair, opportunities to meet current women Waterloo Engineering students, cool hands-on activities and a free lunch. To find out more, contact Rohini Wittke at *rwittke@uwaterloo.ca* or 519-888-4567, ext. 35239.

### ENGINEERING 6 GRAND OPENING CELEBRATION

**Date:** Friday, October 28, 2011 **Time:** 10:30 to 11:30 a.m. **Location:** Engineering 6, University of Waterloo

Be sure to attend the opening of the newest engineering building on campus.

#### ENGINEERING ALUMNI WATERLOO ENGINEERING ALUMNI SKI DAY

**Date:** Friday, January 20, 2012 **Time:** 8:30 a.m. to 4 p.m. **Location:** Osler Bluff Ski Club.

Collingwood

Join us for this annual event hosted by Steve Vokes (BASc '77, Civil). The day includes skiing, timed runs, lunch, and prizes at the après ski at this beautiful private ski club. Register by email to <code>eng\_alumni@engmail.uwaterloo.ca</code> or by phone at 519-888-4567, ext. 37827.

#### CLASS REUNIONS FOR 2012

**Dates:** September 29 and 30, 2012 for the Classes of 1962, 1967, 1972, 1977, 1982 and 1987

**Date:** September 29, 2012 for the Classes of 1992, 1997, 2002 and 2007

Mark your calendar!



#### **CLASS REPS WANTED!**

Register to be a Class Rep for your class reunion in 2011 or 2012 by emailing *eng\_alumni@ engmail.uwaterloo.ca* or calling



#### **GREETINGS ALUMNI**

Along with Dean Adel Sedra, I would like to invite you to attend the grand opening of Engineering 6, our newest engineering building on campus. The celebration, including tours of the building, will take place on Friday, October, 28, 2011. If you aren't able to come to campus that day please let me know and I will be happy to arrange a tour of Engineering 6 at a different time. For a preview of its features be sure to read the October issue of eWEAL.

A new and exciting program is being launched this month called Ask An Engineering Alumni. It is an easy-to-use online program for alumni to mentor our students and offer them advice on a variety of topics including careers, leadership and ethics. If you would like to volunteer as a mentor, please contact me at gosia.brestovacki@uwaterloo.ca or 519-888-4567, ext. 36838.

Bustorachi

For the latest Waterloo Engineering alumni events, visit **engineering.uwaterloo.ca/alumni** 

GOSIA BRESTOVACKI. Senior Alumni Officer

#### **ENGINEERING PHILANTHROPY**

In the fall of 2010, Sandra Murre, CEO and founder of Jordan Engineering Inc., packed her bags for a management retreat in Algonquin Park. The executive team for the Beamsville-based industrial software engineering firm had a plan: Iron out the details for what would come to be known as its "big, hairy and audacious goal."

That 20-year plan? To donate \$1-million a year to charitable organizations.

"We're not a publicly traded company or the government that needs to worry about being elected every few years so we can set a really nice, long vision and then aim for it," she says.

Murre (BASc '95, Chem and MSci) admits she could not have paid for university without Waterloo's co-op work terms. That respect for a dollar's worth prompted her philanthropy in the early days when she started the company from her basement in 1999.

From the beginning, she has followed a unique financial formula. One third of Jordan Engineering's profits before taxes are given to employees in the form of performance bonuses. Another third is funnelled back into the company. The last third is given away.

"So many people are striving for balance. I didn't want to be all about making money, but we do still need to be sustainable," she says.

Over the years the company has pledged money to local and international organizations. Niagara West YMCA has received money. So has the Jordan Engineering Shared Blessings Foundation, which funds cancer

research. Murre is also enthusiastic about Engineers Without Borders, and used its connections and infrastructure to work with an organization that is helping 6,000 honey farmers in Zambia find a market for their product in Europe. Her company has agreed to donate \$100,000 per year in services to keep the processing plant running.

"Giving money away is addictive," she says. If we can share some of our resources, it gives us purpose and this becomes a nicer place to work."

Sandra Murre, CEO, Jordan Engineering Inc.





#### WATERLOO ENGINEERING

#### **WEAL**

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#### **CONTACT US**

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