

# INTERFACES

CHEMICAL ENGINEERING AND APPLIED CHEMISTRY, UNIVERSITY OF TORONTO



## *Chems on Bay Street*

How chemical engineering graduates  
are transforming the financial sector.

*Volume 5, Number 2 Fall 2007*

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To turn caring into action, we need to see a problem, see a solution, and see the impact.

*Bill Gates  
Harvard University  
June 7, 2007*

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I am proud of the creativity and ingenuity of our graduates. Our alumni take the fundamentals learned in our Department and apply them in both practical and innovative ways. In the process, they broaden traditional notions of engineering and help to advance society.

In this issue of *INTERFACES*, we turn our attention to one area where chemical engineers are gaining new prominence: the banking and financial sector. Be it developing new mathematical models, transforming bank processes, or evaluating environmental risks, our graduates are helping to innovate some of Canada's oldest institutions.

We also welcome the arrival of our newest faculty member, **Professor Yuri Lawryshyn**. He will help advance the work begun by **Professor Joseph C. Paradi** in the field of financial engineering. Professor Lawryshyn, who earned his PhD from this Department in 1997, has held senior management roles at Trojan Technology Inc. and holds advanced business degrees from the Richard Ivy School of Business at the University of Western Ontario and the Schulich School of Business at York University.

We note the departure of dear colleagues of this Department. At the end of February, we learned **Professor Diran Basmadjian** had died. He was a member of the Department for over 30 years. A month later, **Professor Ronald Missen** passed away. He too had a career that spanned over 30 years and included senior administrative positions within the University.

Not all of the departures were sad ones. We took pride in the appointment of **Professor Kimberly A. Woodhouse** to the position of Dean of Applied Science at Queen's University. An outstanding educator, we know that she will bring enthusiasm and fresh insight to her new role. We also congratulate **Jacquie Briscoe**, who many of our alumni know as the friendly face of the Department's graduate office, on her retirement following a 34-year career at U of T.

It is our alumni to whom we devote this issue. People like **Angela Shama** (Chem 7T9), who now leads the Ontario Society of Professional Engineers, and **Dr. Jeffrey Karp** (PhD 0T4), who is a notable researcher and instructor at a joint Harvard and M.I.T. institute, provide powerful evidence of the strength of our Department. We also join in celebrating the many other alumni who are being recognized for their important contributions.

With this issue, our tenth, you will notice some changes to *INTERFACES*. We want to ensure that this publication is reflective of our alumni—it is your magazine! To help us, we would invite your feedback by completing a brief online survey (<http://survey.chem-eng.utoronto.ca>) or contacting us. We welcome your ideas, your news and your interest.

As always, I invite you to join the Department in its worthy efforts.



DOUG REEVE

*Professor and Chair,  
Department of Chemical Engineering  
and Applied Chemistry*



## Leaders of Tomorrow expands Faculty-wide

The LEADERS OF TOMORROW program, which began in Chemical Engineering in 2002, has expanded across the Faculty of Applied Science and Engineering. Supported by a million dollar award from the University's Academic Initiative Fund, the program will include activities within each engineering department as well as some Faculty-wide events.

The program was established by **Professor Doug Reeve** and expanded by **Professor Greg Evans** to provide students with "an engineering education that is a lifelong foundation for transformational leaders and outstanding citizens." Activities have included workshops on dining etiquette, networking, leadership development and conflict resolution, as well as lectures from current industry and civic leaders.

With the program's expansion, it will now also have a curricular component. **Dr. David Colcleugh** (Chem 5T9, MAsC 6T0, PhD 6T2), the former president and C.E.O. of Dupont Canada Inc., has been hired to serve as the Faculty's first Leadership Development Professor. Starting this fall, fourth-year undergraduate students and graduate students can enroll in *APS501: Leadership and Leading for Groups and Organizations*. Topics covered include leadership theories, ethical leadership and thinking processes.

Supporting this expanded initiative are **Annie Simpson** and **Veena Kumar**, staff of the Faculty's Leadership Development Office. Both will support Colcleugh in the delivery of APS501, in addition to supporting co-curricular events across the Faculty and within departments. In the past year, they have been active in providing seminars and workshops to students from across the Faculty. They will also be assisting with the Faculty's mentorship program, which matches alumni with current students seeking guidance.



(L to R) Annie Simpson, David Colcleugh and Veena Kumar.

## Chem labs on the move

This September second-year Chemical Engineering students have a new home for their analytical and organic chemistry labs. After decades in the Wallberg building, home to Chemical Engineering, students will enjoy newly renovated space in the chemistry department's Lash Miller building.

The new space, which was extensively renovated over the summer, combines two separate labs into one large lab that is arranged into a series of six "pods," each one providing space for 16 students. The new space has more fumehood facilities on each bench, with each student sharing a hood with one neighbour. This allows students to do more work at their own workstation, with more safety.

"The previous space was showing its age. Our new space will fit more people and allows for more flexibility," said senior lecturer **Chris Ambidge**. With the move, one-third of the labs taught to Chemical Engineering undergraduates will be in newly renovated space. The Department is developing plans to renovate the remaining labs, with particular emphasis on the Unit Operations Lab.

## Chem team raises over \$5,000 for Heart and Stroke

Clad in lab coats and hard hats, graduate students, faculty and staff from Chemical Engineering rode a 30-person bicycle through the streets of downtown Toronto on July 18, 2007. Shouting, “Who are we? U of T!,” the event was part of a national fundraising campaign in support of the Heart and Stroke Foundation.

The team was organized by graduate student **Tamas Fixler** (Chem 0T5, MASc Candidate). A volunteer with the Heart and Stroke Foundation, Fixler decided to start his own team to increase participation in the Big Bike event. Plus, he added, “...it seemed like a fun thing to do.” The Department raised over \$5,000, which exceeds the local team average of just over \$3,000.

The bike, which is almost three metres wide and 10 metres long and weighs about 900 kilograms, was escorted by two police cars as it toured Toronto’s financial district. The team plans to ride again next year and will be challenging other U of T departments in the spirit of friendly competition.



The Chem team before the big bike ride.

## Grad students tour China

A delegation of 12 graduate students from the Pulp and Paper Centre toured China from May 6–20, 2007. The 15-day tour included visits to academic institutions, paper mills and the Great Wall of China. Students traveled to Beijing and Shanghai as well as the Jiangsu, Nanjing and Shandong provinces.

Graduate student **Luke Pestl** (MASc Candidate), who was one of the organizers of the trip, explained that the rapid growth of the pulp and paper industry in China made it a rich opportunity for visiting students. “From 1990 to 2003, China’s annual production of paper and paperboard went from 13.7 million to 43.0 million tonnes,” said Pestl. Students had the opportunity to see some of the world’s most advanced equipment, including mills that have set world records for production.

Planning will soon begin for the next tour. Previous tours have taken students to locations in Canada, the United States, Scandinavia, Japan, and Brazil.



Pulp and Paper Tour in China.



## Department established teaching awards

At the 22<sup>nd</sup> Annual Chemical Engineering Dinner on March 23, 2007, the Department presented the first of what will be annual awards to recognize teaching excellence. The two awards, which recognize teaching in small and large class settings, are named after Professors Bill Burgess and Diran Basmadjian respectively. Receiving the Burgess Award for small classes was **Professor Vladimiro G. Papangelakis**, while the Basmadjian Award for large classes was presented to senior lecturer **Paul Jowlabar**.

The awards arose from a committee struck by the Department to look at teaching effectiveness. Chaired by **Professor Charles Jia**, the committee is part of Chemical Engineering's actions to improve student experience. "Teaching is one of the primary ways we relate to students. If the quality of teaching is not good, their experience will be poor," said Jia. The teaching awards aim to recognize the efforts of good teachers, but also to provide examples to others.



(L to R) Vlad Papangelakis and Dean Cristina Amon



(L to R) Doug Reeve and Paul Jowlabar.

The selection of the recipients was based on student responses in course evaluations and a focus group that was convened by Chem Club President **Pratap John Mathews** (Chem 0T7). The awards are just one of the by-products of the committee's work, which also host seminars and workshops throughout the year.

## Allen appointed Engineering Vice-Dean Undergraduate

Chemical Engineering alumnus, **Professor D. Grant Allen** (Chem 8T1) was appointed to a three-year term as Vice-Dean, Undergraduate for the Faculty of Applied Science and Engineering on July 1, 2007. He replaces **Professor Greg Evans** (Chem 8T2), also a faculty member and graduate of Chemical Engineering, who returns to his teaching and research full-time. Prior to his appointment, Allen was serving as Chemical Engineering's Associate Chair and Graduate Coordinator.

## Yip Interim Director of IBBME

**Professor Chris Yip** (Chem 8T8) has been appointed Interim Director of the Institute of Biomaterials and Biomedical Engineering (IBBME), a multi-Faculty unit that is a unique partnership between U of T's faculties of engineering, dentistry and medicine. Yip, who is also a member of the Chemical Engineering faculty, will provide strategic leadership to advance the IBBME's position as a leader in bioengineering research and in teaching undergraduate and graduate students.

## Woodhouse named Queen's engineering dean

**Professor Kimberly A. Woodhouse** became Dean of the Faculty of Applied Science at Queen's University in Kingston, Ontario on July 1, 2007. She is the first woman to lead Queen's engineering faculty and is currently the third female dean of engineering in Canada. Despite her new duties, Woodhouse will continue to supervise and mentor students at U of T as an adjunct professor.



(L to R) Lauren Flynn, Kim Woodhouse and Alison Brown.



Jacquie Briscoe displays her retirement watch.

## Briscoe retires

Following a 34-year career in the Department, graduate student counsellor **Jacquie Briscoe** has retired. Briscoe, who was profiled in the last issue of *INTERFACES*, is looking forward to being a full-time grandmother and spending more time with her family. She was honoured by graduate students, faculty and staff at a reception on May 25, 2007.

Joining the Department is **Pauline Martini**, who is the new graduate administrator. Prior to her arrival, Martini was the graduate program coordinator in Civil Engineering and has worked for U of T's Faculty of Nursing and in student services at Carleton University.

## Shama named CEO of OSPE

**C**hemical Engineering alumnae **Angela Shama** (Chem 7T9) is the new Chief Executive Officer of the Ontario Society of Professional Engineers (OSPE). She will assume responsibility for all OSPE operational activities and leading OSPE's advocacy efforts.



Prior to joining OSPE, Shama was head of the 22,000-member Ontario Association of Certified Engineering Technicians and Technologists (OACETT). Shama has also served as the Director of Business Development for the Colleges of Ontario Network for Education and Training.

INTERFACES asked Shama a few questions...

### **Q: Currently, what is the most pressing issue for engineers in Ontario?**

**A:** There are several issues of concern to engineers in Ontario, which is why there is a need for an advocacy body such as the Ontario Society of Professional Engineers. These issues include energy supply, safe water, environment and climate change, labour imbalance, and so forth. This latter issue (labour imbalance) is one that especially affects engineers in Ontario most directly, as it involves employment. With the increase in recent years of internationally trained engineers arriving annually in Canada, growing evidence suggests that the demand for engineering jobs, particularly in Toronto, is outpacing the supply, resulting in engineers either becoming unemployed, under-employed or working in areas not related to engineering. OSPE believes that all prospective entrants to our profession, whether by education or immigration, deserve access to accurate, up-to-date regional and discipline-specific labour market information to assist them in their job search. That is why

OSPE is part of the Engineering and Technology Labour Market Study being conducted jointly with Engineers Canada, the Canadian Council of Technicians and Technologists (CCTT), and Human Resources and Skills Development Canada (HRSDC). In addition, OSPE has recently changed its bylaws to enable all graduates from institutions recognized as offering programs accredited by CEAB to join OSPE in order to benefit from our career centre, professional development courses, and our job board, which is one of the largest for engineers in Canada.

### **Q: What are your priorities as the new CEO of OSPE?**

**A:** My priorities as CEO of OSPE include increasing the visibility of this advocacy group both within our profession as well as to governments and business in order to continue enhancing the image and influence of engineers. As our primary function is advocacy for all engineers, we must continue to work with like-minded organizations to achieve common goals. These organizations include Professional Engineers Ontario, Engineers Canada, our counterparts in other provinces including Réseau des ingénieurs du Québec, Consulting Engineers Ontario, and so forth. We also want to increase the awareness of our profession and OSPE and PEO to young people. This we will do through active participation with Engineering Societies and engineering students in all the accredited universities in Ontario.

### **Q: How can engineers become more involved in developing public policy?**

**A:** Engineers can become more involved in developing public policy by joining OSPE and becoming a volunteer. We represent the voice of Ontario's engineers, and are always looking for more voices so that we can be heard more loudly and more clearly. In addition to volunteering for an OSPE committee or working group, members can also join our Political Action Network (PAN)



to have their voices heard at a more grassroots level. Each of our PAN volunteers is well briefed on key issues, and meets with their MPP every six months to represent OSPE's, i.e. engineers', concerns. In this way, we know that our voice is being heard on multiple fronts and for multiple issues by the Ontario government.

## Drakich named new Blues volleyball coach

Chemical Engineering alumnus **Ed Drakich** (Chem 8T5) has been named the head coach of the U of T Varsity Blues men's volleyball team. An Olympian and former national team member, Drakich becomes the first full-time coach of the Varsity Blues men's volleyball program.



After graduating with honours from Chemical Engineering, Drakich began his university coaching career in 1986–1987 as an assistant coach with the University of Calgary Dinos. He helped direct the team to two Canada West finals and a national bronze medal in 1988. He has also coached the Scarborough Solars and Seneca College's men's volleyball team. As an athlete, Drakich's represented Canada in a total of 215 international beach volleyball matches, including the 1996 Olympic Games.

## Karp joins faculty at Harvard-MIT

**Dr. Jeffrey Karp** (PhD 0T4), who studied under **Professor Molly Schoichet**, has been named an instructor of medicine and health sciences & technology at the Harvard-MIT Division of Health Science and Technology. The Division, which is home to interdisciplinary biomedical engineering



and physician scientist training programs, is a partnership of Harvard University and the Massachusetts Institute of Technology. In addition to his teaching responsibilities, Karp is the director of the Advanced Biomaterials and Stem-Cell-Based Therapeutics Laboratory at Brigham & Women's Hospital.

Karp's research aims to create advanced biomaterials and devices for therapeutics through a highly multidisciplinary approach. A major focus of the group is the study and development of polymers and stem cells for addressing the greatest limitations in engineering replacement tissues and organs.

## Chem alumni return for reunion

Celebrating their 50<sup>th</sup> and 25<sup>th</sup> anniversaries respectively, 30 members of the Chemical Engineering Classes of 1957 and 1982 were on hand June 2, 2007 for a lunch in their honour. Hosted in the Chem Undergraduate Common Room, graduates and their guests were treated to a trip down memory lane. Led by class leaders **Ted Cross** (Chem 5T7) and **John Voss** (Chem 8T2), a toast was offered to Skule™ before current students led alumni on a tour of the Wallberg building.



Members of the Class of 5T7 (Back row, L to R: Robbie Robinson, Francis King, Ron Kirschner, Kurt Weitz. Front row, L to R: Bohdan Wojciechowski and Ted Cross.)

# Chems *on* Bay Street

By Liam Mitchell

**I**t's mid-August and for the past two weeks, rising credit fears in the United States have sent global financial exchanges on a rollercoaster ride. Following each climb and fall has been **Dr. Angie Elkhodiry** (PhD 0T6), an associate director at Scotia Capital in Toronto.

When we speak, the rocky weeks have left her weary, but undeterred. Her job now is an extension of her doctoral thesis, which she completed in Chemical Engineering under the supervision of **Professor Joseph C. Paradi**. She argued that the equity market provides enough

information to be able to predict what happens in the credit market. As a result, many of her colleagues have turned to her for an explanation. "Although the answer may not come as fast as my bosses might like, or be 'good' news, (my) model has performed well," she says.

Elkhodiry is one of a growing number of Chemical Engineering graduates who are applying the lessons they have learned to the banking and financial sectors. Drawing on process engineering, mathematical modeling and engrained problem-solving skills, they are helping to innovate Bay Street and beyond.





Before the arrival of J. C. Paradi (Chem 6T5, MASc 6T6, PhD 7T5), the term financial engineering was not a part of the lexicon in engineering at the U of T. A three-time graduate of the Department, Joe (as he is known to everyone) had gained considerable success in the private sector. He founded Dataline Inc. in 1969 as a publicly traded company that specialized in providing leading-edge shared computer services to the banking and financial sectors. He also established Parcorp Ltd. in 1972, an investment management, international trade and high level consulting company.

During an economic summit in 1984 that aimed to bring together government, universities and industry, he found himself seated next to **Professor Michael E. Charles**, who was Chair of Chemical Engineering at that time. The two talked about how engineers could play a much larger role in the business world. The conversation culminated in Paradi joining the Department on an adjunct-basis and started to participate in the teaching of entrepreneurship for engineers. After selling Dataline in 1987 and leaving the firm after 20 years in January 1989, Paradi returned to U of T as a faculty member, primarily because his former customers now were willing to support research in the application of technology to the financial and telecommunications industries.

As a condition of joining the Faculty, Paradi insisted on teaching a course in entrepreneurship and small business management to students from all engineering disciplines at U of T. Enrollment demand was so high that a qualifying exam was soon introduced and the program will have seven or eight classes in this academic year.

Through the substantial funding attracted from industry, Paradi was appointed the Industrial Chair in Management of Technology co-funded by NSERC/SSHRC, TD Bank, Royal Bank and Bell Canada in 1991. He then established the Centre for Management Technology and Entrepreneurship (CMTE), which conducts multidisciplinary research and is home to Paradi's graduate students.

One of his former graduate students is **Denise McEachern** (MIE 9T8, MASc 0T4), who completed her undergraduate degree in industrial engineering at U of T. After beginning her career at Procter and Gamble, McEachern (née Ho) decided she wanted to shift her career towards the banking sector and so returned to study under Paradi. She would later be followed by her future husband **Chris McEachern** (MASc 0T5), who now works at the Royal Bank of Canada (RBC).

A senior manager in CIBC's process engineering department, McEachern is able to build upon many of the processes she learned



(opposite page, L to R) Julio De Jesus, Claire Kennedy, Angie Elkhodiry, Joseph C. Paradi, Sandra Odendahl, Andrea Chan, Denise McEachern and Greg Martinez.

(L to R) Andrea Chan, Kyla Augustine, Cleo and Denise McEachern.



in industrial engineering, such as Six Sigma and Lean Manufacturing, and applies it to the banking sector. In her current role, she is part of a team that seeks to bring efficiency to every level of the bank's retail operations.

**Andrea Chan** (Eng Sci 0T4, MASC 0T6) works alongside of McEachern, as does **Kyla Augustine** (Chem 0T4, MASC 0T6). For Chan, it's the engineering education itself and not the courses you take that are of value. "It really doesn't mater what engineering you did. It's more about the process and approach," she says.

The path that led **Sandra Odendahl** (MASC 9T0) to Bay Street includes stops in almost every small pulp mill in Canada. After completing a chemical engineering degree at the University of Ottawa, Odendahl studied under **Professor Doug Reeve** in the newly established Pulp & Paper Centre. Her thesis focused on pulp bleaching, and upon graduation, she took a position as an environmental scientist at the Noranda Technology Centre. That was followed by a move into environmental engineering consulting, which gave her broad exposure to the natural resources sector across Canada and in Asia.

A colleague Odendahl knew through her consulting work put her name forward for an industry analyst position at RBC. Though she hadn't considered working for a bank, Odendahl was offered the job and decided to return to Toronto. For the next five years she would work at RBC, eventually moving into the field of environmental risk management, and obtaining her Chartered Financial Analyst (CFA) designation. Following two years at CIBC she returned to RBC this September to take on the newly-created position of Director of Corporate Environmental Affairs. She will oversee a team responsible for developing and supporting initiatives related to: environmental

risk management in lending, emerging green business opportunities, and environmentally responsible business conduct.

Like Odendahl, **Dr. Dan Rosen** (MASC 9T1, PhD 9T3) hadn't seen banking on the horizon when he was a graduate student. Under the supervision of **Professor Don Cormack**, Rosen's work had been focused on mathematical modeling. Before he had even completed his master's degree, he was regularly approached with job offers from banks and financial sector companies. "I kept thinking, why do you want me? I know nothing about finance," Rosen says. After completing his PhD, he spent two years as a research associate in Paradi's CMTE before he took the leap and joined Algorithmics Ltd., which provides risk management software to the financial industry.

Following a 10 year career at Algorithmics where his responsibilities grew from being a financial engineer to heading the company's research, products and strategy, Rosen departed in 2005 to start his own company, R<sup>2</sup> Financial Technologies, which delivers valuation, risk and capital management solutions. The company is incubated at the Fields Institute, a mathematics think tank located on the U of T campus. In addition, he continues to be part of the faculty of the University's Master of Mathematical Financial program.

Mathematical modeling was also the route that brought **Dr. Greg Martinez** (Chem 8T0, MASC 8T3, PhD 9T2) into the banking world. After completing his doctorate that focused on gas absorption equations under the supervision of **Professor Diran Basmadjian**, Martinez was asked by a friend who was working for a bank to provide some temporary help crunching numbers. That task proved to be less demanding than anticipated, but provided Martinez with a window on trading. After four months working

for his friend, Martinez started to trade his own account on Toronto's futures exchange.

In the mid-1990s, Martinez responded to an advertisement for a financial engineering position at the Ontario Financing Authority in the mid-1990s. He was hired and spent the next three years helping to manage Ontario's debt. He was then hired by CIBC, who wanted to develop its mortgage market and needed someone with Martinez's skills. He is now the Vice President of Mortgage and Loan Products in the Treasury, Balance Sheet and Risk Management Division at CIBC.

At the 22<sup>nd</sup> Annual Chemical Engineering Dinner held on March 23, 2007, students—both past and present—paid tribute to Joe Paradi. He had decided to officially retire and join the ranks of the professors emeritus. Despite this, Paradi will still be an active part of the Department for the foreseeable future.

One of Paradi's talents is fundraising and he has raised over \$8.5-million to date which includes a \$2-million endowment to establish the Chair in Information Engineering. Paradi was appointed to the Chair and the endowment supports a new faculty member, **Professor Yuri Lawryshyn** (Mech 8T9, MASc 9T3, PhD 9T7) who joined the Department in August. After completing his doctorate in Chemical Engineering under **Professor David Kuhn**, Lawryshyn worked for Abitibi-Price Inc. before joining Trojan Technologies Inc., a water treatment company that uses UV to disinfect water and wastewater. During his eight years at the company, Lawryshyn had both business and scientific responsibilities. He helped to develop and take TrojanUVSwift™ to market, before undertaking marketing and sales responsibilities.

He also completed a Master of Business Administration degree at the Richard Ivey School



Yuri Lawryshyn

of Business (Western) and recently completed a Diploma in Financial Engineering from York University's Schulich School of Business.

Lawryshyn joined the Department with the desire to continue his technical research in UV water disinfection, but also intends to devote his time between financial engineering and business process optimization.

Though he could have joined those on Bay Street, Lawryshyn admits that his heart is in academia. "Frankly, there is that warm and fuzzy feeling you get knowing your work is making a real difference to students," he says.

His task now is to develop the next generation of Chemical Engineering graduates who will, like their predecessor, enter the business world and lead it.

## Students

**Liane Catalfo** (Chem 0T8) and **Jeffrey Castrucci** (Chem 0T9) are recipients of the 2007 Leaders of Tomorrow Awards. Catalfo was presented with the Class of 5T9 Award, while Castrucci received the Professor James W. Smith Award. The prizes recognize current students in Chemical Engineering who have shown the potential to become outstanding leaders. Both were honoured at the 22<sup>nd</sup> Annual Chemical Engineering Dinner on March 23, 2007.

**Zoe Coull** (MASC Candidate) has been awarded the Marcel Pourbaix Prize for best student poster in Corrosion Science at the NACE (National Association of Corrosion Engineers) Corrosion Conference 2007, held in Nashville, Tennessee from March 16–20, 2007. Her poster is entitled “Selective Dissolution and Oxidation in Fe-Ni-Cr alloys and its Relationship to Stress Corrosion Cracking in High Temperature Water Environments.”

**Jenny Cai** and **Eric Morris** (both PhD Candidates) won 2nd place in the category of Graduate/PDF Posters at the 2007 Conference of Metallurgists held in Toronto from August

25–30, 2007. Their poster was entitled “Petroleum Coke-derived Sulphur Impregnated Activated Carbon for Mercury Vapour Removal.” Undergraduate students **Daniel Pohl** (Chem 0T7) and **Dania Chehab** (Chem 0T7) won first place in the category of Undergraduate Posters. Their poster was entitled “Fluid Coke Activated Carbon as EDLCs and Associated Limitations.”

**Rebecca Marnoch** (MASC Candidate) and **Professor Levente L. Diosady** were awarded the 2006 Archer Midland Daniels prize of the American Oil Chemists Society for the best paper published by the society in the field of fats, oils and protein processing.

## Faculty

**Professor Doug Reeve** received the John S. Bates Memorial Gold Medal, the highest honour bestowed by the Pulp and Paper Technical Association of Canada (PAPTAC) at its annual conference in Montreal on February 8, 2007. The Bates Medal is presented in recognition of long-term scientific and technological contributions to the pulp and paper industry. Reeve joins former Chemical Engineering faculty members **University Professor Howard Rapson** (1912–1997) and **Professor-Emeritus David Goring**, who are previous recipients of this award.

**Professor Levente L. Diosady** was presented this September with the William J. Eva Award for outstanding contributions to food science through research and science by the Canadian Institute of Food Science and Technology.

**Professor Milica Radisic** was named one of the recipients for 2007 Early Researcher Award by the Ontario Ministry of Research and Innovation. The award of \$100,000 supports recently appointed Ontario researchers who undertake cutting-edge research to build their research teams of graduate students, post-doctoral fellows and research associates. Forestry Professor



Liane Catalfo (Chem 0T8) receives award, surrounded by members of the Class of 5T9.





Milica Radisic

**Ning Yan**, who is cross-appointed to Chemical Engineering, was also named a recipient.

**Professor Mark Kortschot** and **Professor Kimberly Woodhouse** are among the recipients of the 2007 Alan Blizzard Award for collaboration in teaching. They were recognized as part of the team of instructors for the first-year Engineering Strategies and Practice course. This is the first time a team from U of T has won the award, which is sponsored by the Society for Teaching and Learning in Higher Education (STLHE) and McGraw-Hill Ryerson.

**Professor Kimberly Woodhouse** was awarded the Medal for Distinction in Engineering Education by the Canadian Council of Professional Engineers (Engineers Canada). The award is presented for exemplary contribution to engineering teaching at a Canadian university.

**Professor Yu-Ling Cheng** is one of 14 U of T instructors to win the inaugural

Leadership in Faculty Teaching (LIFT) award, which is presented by the Ontario Ministry of Training, Colleges and Universities. The award recognizes and encourages excellence at Ontario's colleges and universities and comes with a grant of \$20,000 over two years to be spent on instructional expenses. Cheng was also awarded the 2007 Faculty Award from the University of Toronto Alumni Association, which recognizes excellence in teaching, research, and professional endeavours

**Professor-Emeritus Olev Trass** was awarded the Order of the White Cross by the President of Estonia on the occasion of the 89<sup>th</sup> anniversary of Estonian independence (February 24, 2007) in recognition of "...service to the Country and the Nation." On the same occasion, Trass was presented with the first gold service medal from the Estonian Centre Council in Canada and was later presented with the President's Order in Toronto from the Estonian Chargé d'Affaire this June.



Olev Trass

## Alumni

**Professor Michael Sefton** (Chem 7T1) and **Dr. Phillip “Rocky” Simmons** (Chem 6T4, MSc 6T5, PhD 6T8) will be inducted into the Engineering Hall of Distinction on May 31, 2008. They will also be honoured at the Annual Alumni Awards on November 8, 2007. Sefton holds appointments in the Department of Chemical Engineering and Applied Chemistry and the Institute of Biomaterial and Biomedical Engineering at the University of Toronto. He is an internationally-recognized leader of tissue engineering. Among other honours, Sefton was named in 2003 as a University Professor, the highest faculty rank bestowed by the University. Simmons is President and C.E.O. of Eco-Tec Ltd. He transformed the small niche company into an internationally prosperous water treatment business by using technology developed during his thesis work at U of T. Simmons is a member of the Department’s Board of Advisors.

**John Voss** (Chem 8T2) is the 2007 recipient of the 2T5 Mid-Career Award. Presented by the Engineering Alumni Association, the award recognizes a member of that University of Toronto Engineering class celebrating the



Phillip “Rocky” Simmons



(L to R) Joan and Larry Seeley, Doug Reeve, Claire Kennedy and Elliot Lerman.

25th anniversary of its graduation who has earned respect within the profession and in the broader Canadian community, and who has already attained significant achievement and gives promise of further contributions. Voss, President and Managing Director of Aegent Energy Advisors Inc., is a past president of the Engineering Alumni Association and a senior advisor to the Chemical Engineering department.

**Claire M. C. Kennedy** (Chem 8T9) and **Dr. Larry Seeley** (Chem 6T6, MSc 6T8, PhD 7T2) have been named recipients of the 2007 Arbor Awards. The award recognizes committed volunteers who contribute their time and efforts to the University of Toronto. Seeley, the current chair of the Department’s Board of Advisors, received the award for his contributions to Chemical Engineering and materials engineering. Kennedy was recognized for her contributions as Vice President of the Engineering Alumni Association and chair of the Department’s advancement working group.

**Dr. Howard Goodfellow** (Chem 6T4), the President of Teova-Goodfellow and adjunct professor of Chemical Engineering, has been awarded the Engineering Medal (Entrepreneurship Category) by the Ontario Professional Engineers Award. The awards recognize excellence across a broad range of engineering endeavours and will be presented at a gala ceremony on November 10, 2007.



## Baby Chemistry

**Tanya** (nee Murua; Chem 9T7) and **Stuart Lindsay** (ECE 9T6) are pleased to announce the birth of their second daughter, Alexandra Brynn Lindsay, who arrived on April 19, 2007 weighing 7lbs 2oz. She joins big sister Emma.



**Denise** (nee Ho; MIE 8T8, MASc 0T4) and **Chris McEachern** (MASc 0T5) are pleased to announce the birth of their daughter, Cleo McEachern, who arrived on April 17, 2007 weighing 7 lbs 5 oz. This is the couple's first child.



## Bonding

**Tracy Leung** (Chem 0T3) and **Timothy Sham** (Chem 0T2 + PEY) were married on May 26, 2007. The couple met in Plant Design during their fourth year.



**Craig Milestone** (PhD 0T7) and fiancé **Lisa Wise** (PhD 0T7) raced to wedding victory on September 4, 2007. The two competed in a wedding-themed obstacle course against two other couples to win a \$20,000 wedding package. Among the prizes, Milestone and Wise will enjoy use of Ontario Place's Atlantis ballroom and a meal catered by TV chef David Adjei.



Photo: Michael Stuparyk/Toronto Star

## In Memoriam

**Professor Diran Basmadjian** died on February 28, 2007. A respected faculty member of Chemical Engineering and a noted author, Basmadjian produced numerous books and papers on absorption and mathematical modeling.



He is survived by his wife Janet, daughters Kristin and Leslie, grandchildren Sierra and Zohra, and his brother Berdj. An award has been established in his memory. To donate, please contact Liam Mitchell (Tel: 416-978-8770. E-mail: [liam.mitchell@chem-eng.utoronto.ca](mailto:liam.mitchell@chem-eng.utoronto.ca)).

**Professor Ronald Missen** died on March 31, 2007 at Sunnybrook Health Sciences Centre in Toronto at the age of 79. He was a Chemical Engineering professor for 37 years, including five years as Vice-Provost (Professional Faculties). He was co-author of two



chemical engineering textbooks and author or co-author of more than 50 research articles. He is survived by his wife Bobbie (nee Ward), daughters Nancy Beverly, Kathryn Missen, Brenda Missen and Lynne Missen Jolly, sons-in-law Bill Beverly and Brad Jolly, grandchildren Harriet Clunie, Meaghan and Sarah Beverly, and Jenny, Julia and Gavin Jolly, and his brother Edward Missen. An award has been established in his memory. To donate, please contact Liam Mitchell (Tel: 416-978-8770. E-mail: [liam.mitchell@chem-eng.utoronto.ca](mailto:liam.mitchell@chem-eng.utoronto.ca)).

**Elling Andrew Berg** (Chem 5T7) died on April 12, 2007 in Austria due to a brain tumor. Following his graduation from Chemical Engineering, Elling joined British American Oil Company and remained with that company until his retirement, holding various positions including technical superintendent at the Clarkson refinery. He is pre-deceased by his first wife Mary-Lou (1972), his son Elling Theodore (1998), and his second wife Carla (2006). He is survived by his brother Ola and remembered by his step-daughter Maria.

To contribute to Family News, please contact Liam Mitchell.

Tel: 416-978-8770. E-mail: [liam.mitchell@chem-eng.utoronto.ca](mailto:liam.mitchell@chem-eng.utoronto.ca)



**We're looking for you!**

For the past three years, the Department of Chemical Engineering and Applied Chemistry, in partnership with the Engineering Alumni Association, have spent the summer months trying to find our lost alumni. We want to make sure that all of our alumni are kept informed of what is occurring within the Department today and ensure invitations to our special events are received.

This summer was no exception. We attempted to contact all graduates who convocated in years ending with 3 or 8 from 1933 to 2003. We've reach just over 52% of the

nearly 1,000 chem alumni in this category, but your assistance would be appreciated to help find the rest.

Below are some of the alumni we haven't found. If you can provide us with any information to help locate them, please contact:

Liam Mitchell  
 Manager of External Relations  
 200 College Street, Room 201A  
 Toronto, Ontario Canada M5S 3E5  
 Tel: 416-978-8770  
 Fax: 416-978-8605  
 E-mail: [liam.mitchell@chem-eng.utoronto.ca](mailto:liam.mitchell@chem-eng.utoronto.ca)

Mr. George Brandt	1933	Mrs. Susie Young	1958	Mr. Michael J. Lazer	1983
Mr. R. Keith P. Johnson	1933	Mr. Wabe W. Baker	1963	Mr. Dimitrios J. Skenderis	1983
Mr. A. Gordon Rogers	1933	Dr. Robert W. Betty	1963	Mr. Mark S. Zyskowski	1983
Dr. Angus Graham	1938	Mr. Robert J. Bowen	1963	Mr. Derek Dirsus	1988
Mr. Thomas J. Campbell	1943	Mr. David Currey	1963	Ms. Edith Mayer	1988
Mr. Lloyd S. Dawson	1943	Mr. Welesley A. Williams	1963	Mr. Nicholas J. Popoff	1988
Mr. Bernard T. Johnson	1943	Mr. Vito Barbera	1968	Mr. Bruce P. Powers	1988
Mrs. E. Claire Lamont	1943	Mr. Earl G. Hotrum	1968	Ms. Kathleen Ka Yan Wong	1988
Mr. O. Leslie Turner	1943	Mr. Venkata M. Koorapaty	1968	Mr. Peter Allan Angus Ashe	1993
Mr. Dean Fockler	1948	Mrs. Peggy Simons	1968	Mrs. Carolyn Frederickson	1993
Mr. Kenneth Grace	1948	Mr. Brian E. Waywell	1968	Ms. Hien Le	1993
Mr. Robert Lee Mechin	1948	Mr. Timothy W. Harris	1973	Mr. Jeff Andrew Pitchford	1993
Mr. Graham William Mitchell	1948	Dr. Katica K. Isles	1973	Mr. Man Chu Louis Wong	1993
Dr. Arthur Poynton	1948	Mr. Johannes Michael Kaczynski	1973	Dr. Francesca Apruzzese	1998
Dr. Charles C. Bigelow	1953	Dr. Chester Chin-Chung Wang	1973	Dr. Xudong Cao	1998
Mr. Donald B. Black	1953	Mr. Edward N. L. Whitby	1973	Ms. Shabnam Lahooti	1998
Dr. Vahe Philip Hovnanian	1953	Ms. Jill F. Anderson	1978	Dr. Ryo Okada	1998
Dr. Edgar Lavergne	1953	Mr. Thomas A. Day	1978	Ms. Neelambigai Vinayagamoorthy	1998
Mr. David Gordon Price	1953	Dr. Nick Di Matteo	1978	Mr. Fadi Bachir	2003
Mr. George L. Avon	1958	Mr. Allan D. Roden	1978	Mr. James Hayami	2003
Mr. Francois Guillaume	1958	Mr. T. K. Andrew Yuen	1978	Miss Chi-Hsuan Cindy Tsai	2003
Mr. John Joseph Herbert McGowan	1958	Mr. Geoffrey Archibald	1983	Miss Hai Nien Yong	2003
Mr. S. W. Paul Wyszowski	1958	Mr. William J. R. Hilton	1983	Dr. Xiangyang Zou	2003

**Volume 5, Number 2  
Fall 2007**

**Publisher:** Doug Reeve

**Editor:** Liam Mitchell

**Contributing Editors:** Kathy Weishar,  
Kate Brand and Sonia De Buglio

**Design and Layout:** Dennis Boyes

**Photographer:** Michael Tenaglia (Michael  
T Photography and Design) Additional  
photography: Liam Mitchell, Luke Pestl,  
Michael Stuparyk/Toronto Star

**Cover Photographs:** Dr. Angie Elkhodiry,  
Dr. Greg Martinez, Professor Joseph C.  
Paradi, Sandra Odendahl, Dr. Julio De Jesus,  
Andrea Chan, Claire Kennedy, Cleo and  
Denise McEachern, Dr. Dan Rosen

**Printing Services:** General Printers

**Circulation:** 5,000

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**We invite inquiries, comments  
and suggestions from readers.**

**Please contact:**

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## Thanks to our generous supporters

The Department of Chemical Engineering and Applied Chemistry wishes to gratefully acknowledge the generous individual financial support provided by our alumni and friends over the past year. We try to ensure that our list is as accurate as possible, but should anyone have been unintentionally omitted, please accept our apologies. Please contact us at 416-978-8770 to correct the oversight

### May 2006 – May 2007

Donald Ainslie  
D. Grant Allen  
Van Angelo  
Wendy M. Angelo  
John R. Ardagh  
Peter J. Aust  
Ivano D. Bandiera  
Duncan H. Barber  
Shirley A. Jenkins Barber  
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Robert M. Hayashi  
Lauri J. Hiiwala  
Kathleen B. Hill  
Anna Ho  
Vahe Philip Hovnanian  
Robert R. Hudgins  
Raymond George Ilson  
Jacqueline Jolly  
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Alireza Khademhossein  
Mark T. Kortschot  
Mei Ling Kwee  
Elias Kyriacou  
James E. Lightfoot  
Helen R. MacDonald  
Jan Malcolm  
Tie Mao  
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Robert Michael Melnick  
Julianne Mendonca  
Norma Menis-Croxall  
Robert A. Michalowicz  
Peter Wayne Midkiff  
Ronald Miki  
Bruce M. Millar  
Ronald W. Missen  
William G. Missen  
Liam H. Mitchell  
Bharat B. Mithel  
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Joan S. Rogers  
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Kimberley A. Rynn  
Peter Schonherr  
Larry E. Seeley  
Wayne C. W. Seto

Kimi Hiro Shikaze  
Molly Shoichet  
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Phillip J. Simmons  
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Stuart F. Smith  
Shirley R. Smythe  
Veena Sologar-Thompson  
Robert Stanfield  
Zoran Stojcevski  
Allan J. Stratton  
Cindy Tam  
Zheng Tan  
Danny Tandra  
Vincenzo Tassone  
Mischa Theis  
Ralph H. Thomson  
Chandrahekhar Tripathi  
William and Kathleen Troost  
John Vint  
Kathleen M. Weishar  
John A. Westwater  
Edward Wheeler  
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Thadeus Eugene Wisz  
Donald C. Young  
Noelle I. Zitzer

*In the next issue, we will  
recognize the corporate donors  
and research sponsors who have  
supported our department.*

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Support the Department of Chemical Engineering  
and Applied Chemistry through an annual donation.  
Call 416-978-8770 for more information.

# Upcoming Events

## Lectures at the Leading Edge

The Department will be offering talks by some of the leading thinkers in chemical engineering and related disciplines throughout the year. Consult our website for complete details. [www.chem-eng.utoronto.ca](http://www.chem-eng.utoronto.ca)



## Alumni Awards Dinner

Among those honoured: John Voss (Chem 8T2), Professor Michael Sefton (Chem 7T1), and Dr. Phillip “Rocky” Simmons (Chem 6T4, MSc 6T5, PhD 6T8).  
**November 8, 2007, 6:00 p.m.**  
Grande Colony Ballroom, 89 Chestnut Street Residence  
89 Chestnut Street

Cost: TBA

Contact Mary Butera for more information  
(Tel: 416-978-4941. E-mail: [butera@ecf.utoronto.ca](mailto:butera@ecf.utoronto.ca))

## 2007 Ontario Professional Engineers Awards Gala

Organized by the Ontario Society of Professional Engineers. Award recipients include Dr. Howard Goodfellow (Chem 6T4).

**November 10, 2007, 6:00 p.m.**

The Carlu, 444 Yonge Street, 7<sup>th</sup> Floor

Cost: Single Ticket \$250 (+GST),

Corporate Tables (10 Tickets) \$3000 (+GST)

Contact Valeria Mueller for more information

(Tel: 416-223-9961. E-mail: [vmueller@ospe.on.ca](mailto:vmueller@ospe.on.ca))

## Skule Spirit before the Toronto Santa Claus Parade

**Sunday November 18, 2007, 11:00 a.m. – 1:30 p.m.**

Hart House, Arbor Room, 7 Hart House Circle

Cost: Free (RSVP required)

Contact Mary Butera for more information

(Tel: 416-978-4941. E-mail: [butera@ecf.utoronto.ca](mailto:butera@ecf.utoronto.ca))

## 23<sup>rd</sup> Annual Chemical Engineering Dinner

**Friday March 14, 2008, 6:00 p.m.**

Grande Colony Ballroom, 89 Chestnut Street Residence  
89 Chestnut Street

Cost: \$100

Contact Liam Mitchell for more information  
(Tel: 416-978-8770. E-mail: [liam.mitchell@chem-eng.utoronto.ca](mailto:liam.mitchell@chem-eng.utoronto.ca))

## Spring Reunion Lunch

(Honouring the Classes of 5T8 and 8T3)

**Saturday May 31, 2008, 12:00 p.m.**

Undergraduate Common Room, Wallberg Room 238  
200 College Street

Cost: Free (RSVP Required)

Contact Liam Mitchell for more information  
(Tel: 416-978-8770. E-mail: [liam.mitchell@chem-eng.utoronto.ca](mailto:liam.mitchell@chem-eng.utoronto.ca))

## Class of 7T8 30<sup>th</sup> Anniversary Reception and Dinner

**Saturday May 31, 2008, 4:00 p.m.**

University of Toronto Faculty Club

41 Willcocks Street

Cost: TBA

Contact Patrick Amiel ([amiel@lorama.com](mailto:amiel@lorama.com)), Joe De Rose ([joedersose@sympatico.ca](mailto:joedersose@sympatico.ca)) or Rod Paterson ([rpaterson@aspaterson.com](mailto:rpaterson@aspaterson.com)) for more information.

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