



Queen's
UNIVERSITY

Building Partnerships

LINKING CIVIL ENGINEERING FACULTY, STUDENTS, ALUMNI & INDUSTRY

Fall 2001

HEADLINES

The Civil Engineering Department is experiencing great change brought on in part by the recent retirements of well-renowned professors. In keeping with the excellent reputation of Queen's and the Applied Science Faculty, the Civil Department embarked on a hiring expedition! This year we are welcoming to our staff, **IAN MOORE**, from The University of Western Ontario. He is the first tier one Canada Research Chair in a Civil Engineering Department in Canada. The Chair is in Infrastructure Engineering and brings with it an award of 1.4 million dollars. **RICHARD BRACHMAN**, assistant professor at the University of Alberta has also joined the department, with expertise in the geotechnical area. **COLIN MACDOUGALL**, from the University of Western Ontario, who specializes in the structures field, is our newest and youngest addition to the teaching and research faculty. We look forward to an exciting future with these young and enthusiastic newcomers.

Of course, these distinguished researchers do not come alone. We have had an influx of new graduate students, post-doctoral fellows, and visiting professors. This means SPACE is at a premium. To use an old 50's phrase, "the joint is jumping"!

A brand new initiative in the Faculty of Applied Science has just been given the go-ahead. The **Integrated Learning Centre** will be built behind Dupuis Hall. The concept and philosophy behind the Integrated Learning Centre is based on the multidisciplinary nature of the engineering profession. Engineers now work within diverse facets of industry and society, and it is our responsibility to educate our engineering students accordingly. Halsall and Associates, with many Civil Alumni on board, will play a major role in the design, development, implementation and construction of this "live building". George Sweetman, Sc '85 (Geological Engineering), has been appointed to manage this new area. You can go to the Integrated Learning web site to find out more. <http://ilc.queensu.ca>

Our fourth annual Industry Open House, held in January 2001, was a great success thanks to all the Civil Engineering Companies who supported our venture. You can be sure we will repeat this get together in January 2002. We have already had requests for information from companies who were unable to attend last year. There are some pictures and a short article for your information and enjoyment.

The Civil Engineering Forum, now called the Robert and Joyce Jones Speaker Series, thanks to the generous support of the Jones family, continues with its very successful Thursday presentations and pizza!

The job network was so popular with our industry partners this year, we had to tell some companies that there weren't enough students to go around! Next year we will have more students, and we will be welcoming back all those companies with whom we have been doing business plus a variety of new companies. As word of mouth grows and as our students move out to the work place, they do not forget Civil, and we are grateful for that.

BILL KAMPHUIS, who has been with the department since 1969, has retired. We wish him and his wife Nellie all the best. The ski hills are going to be really busy now! But I'm sure we will see him from time to time. Civil seems to do that to everyone – you don't ever quite leave. You will be missed Bill!

So change is a good thing. We look at our lives from a different perspective when new people come onto the scene. Bruce Barton, author and advertising executive, said, "When you're through changing, you're through".

Doree Tunde

FOLLOWING OUR GRADS!

JAMES KEIRSTEAD TO STUDY IN ENGLAND

JAMES KEIRSTEAD, Civil 2001, has won a British Chevening Scholarship, awarded by the British High Commission, to pursue studies at Lincoln College, University of Oxford. He has received the highest level of the award, meaning that almost all of his expenses will be covered while he pursues studies for an MSc in Environmental Change and Management. James leaves Queen's with the C.W. Marshall Memorial Award, given to the student graduating in Civil Engineering who has demonstrated notable proficiency in the field of structural engineering during third and fourth years. He will begin his studies, which will consist of coursework, a thesis, and fieldwork throughout the United Kingdom, on September 30, 2001. Until then he is busy in Ottawa, working for a small engineering firm that primarily designs energy efficient heating ventilation and air conditioning systems.

Where can you go with a Civil Engineering Degree? How about volleyball in Germany? This is where **DAVID KANTOR'S** interests have taken him, and it has been an interesting trip!

David is a Civil '96 grad, but his career in volleyball started much earlier, at age 8. By the time he was in grade 10, David had been recruited by the West Side Volleyball Club in Oakville. Throughout high school he played for the Ontario Provincial team while pursuing his academic interests in math and science, as well as a wide variety of subjects including woodworking, music, and languages. When it came time to choose a university and a course of study, he wanted to choose a path that would enable him to apply his skills in math and science, particularly in the environmental area, "The key word here is "apply". I didn't want just to study math and science, but to use my knowledge to contribute to society. I found out later that engineering at Queen's is not called engineering, it is called Applied Science. Perfect!"

David had already spent some summers at Queen's training with the Provincial Volleyball team, so it seemed the right choice. "Queen's was the perfect atmosphere to play volleyball and study engineering." Moreover volleyball coach Brenda Willis was aware of the many hours required in the study of engineering, and understood these "off-the-court" needs. According to David, combining these two disciplines led to the development of excellent time management skills. "What I have now, as a result of my years at Queen's, is very good time-management skills, and an everlasting desire to keep my life well-rounded. Studying engineering also gave me invaluable problem-solving skills that I use daily, even though I am not working as an engineer."

While David has spent a considerable amount of time pursuing his career in volleyball, he did spend one summer working at O'Connor Associates Environmental Inc., an engineering firm founded and still operated by Civil Alumni, Mike O'Connor (Sc'68, Geology, PhD'76, Civil), John Agar, (Sc'73, MSc'78), and Doug King, (Sc'70, MSc'75). However, his life took another direction when in August 1996, his agent called to say there was a volleyball team in Holland interested in him. Since then he has been playing professional ball in Europe (There is no pro league in Canada) fall, winter and spring. Summers are spent in Winnipeg playing with Team Canada. Last year the team just missed qualifying for the Sydney Olympics, a great disappointment after four years of hard work. Since 1996, David has played for teams in Holland, Belgium, Spain and Germany.

Currently David is playing in Duren, Germany, where the volleyball team is the most popular sports team in the city. Being Canadian on this team has a special significance, "There is a special connection between Duren and Canada. Back in 1973 a team from Canada (University of Calgary) came to Duren to play, and the team from Duren went to Canada later for a tour. Ever since, teams have crossed the ocean between Germany and Canada year after year. Canada holds a place in the hearts of many people from Duren, which contributes to the special atmosphere at our games."

After spending some spiritual time out, David will return to Canada to spend time with family and rejoin the National Team for the summer, but he will return to Germany once more to pursue his dream. Surely his dedication to his sport, and the skills he has developed, will some day serve him well in his pursuit of a career in Civil Engineering.



David Kantor (top row – 6th from right) pictured here with the 1999 Bronze Medal Team Canada at Pan Am Games held in Winnipeg

STUDENT AWARDS

The Department of Civil Engineering at Queen's attracts top-level students from all over Ontario and beyond. Among these outstanding students some have distinguished themselves through extraordinary achievements:

UNDERGRADUATE

MARIA TIMPANO, from Pembroke, Ontario, won the University Medal in Civil Engineering – awarded to the student with the highest average standing in third and fourth years. Along with this honour she won the O'Connor Associates Award – for excellence in the field of Geotechnical Engineering. The C.W. Marshall Award – for proficiency in Structural Engineering went to **JAMES KEIRSTEAD**, from Truro, Nova Scotia. The H.M. Edwards Memorial Award in Transportation Engineering – for proficiency in the area of Transportation Engineering, was awarded to **DAVID SWANSON**, of Midland, Ontario, while **ALEXANDRA DERRY**, from Ottawa won the Edward Hugh McLellan Scholarship in Coastal Geotechniques, awarded to the individual with the highest aggregate standing in the 4th year Coastal and Geotechnical courses. The McMIL Award in Environmental Engineering, for notable proficiency in environmental engineering with emphasis on waste management went to **BERNARDO DE AVELAR PEREIRA CALDAS**, from Recife, Brazil

The Frank J. DeWitt Scholarships – based on academic performance and a proposal addressing an innovative idea to enhance the quality of the Civil Engineering Undergraduate Program were awarded to **KATHY ARRIAGADA**, Aurora, Ontario, and **MELISSA BUELOW**, Maple Leaf, Ontario. **KRISTEN SPLINTER**, from Ottawa, Ontario won the Ansley Scholarship – awarded to a student entering fourth year, and based on academic excellence and contribution to the betterment of campus life through interest in the student chapters of the profession, Engineering Society, campus activities and community affairs.

Special awards are handed out at the annual Civil Banquet. This year the Civil '85 Award – for contributions to the betterment of campus life through interest in the Engineering Society, Civil Club, campus and community activities while maintaining a satisfactory academic record, went to **SARAH JOHNSON**, Kingston, Ontario, our past Civil Club President. The CSCE Award – for involvement in extracurricular activities and contribution to the betterment of the CSCE Chapter at Queen's was awarded to **FRANCIS YUNG-WIRTH**, from Timmins, Ontario.

SCOTT SHILLINGLAW, Peterborough, Ontario was the Male Athlete of the year, while the Female Athlete of the year went to **ALISON STREET**, from Ancaster, Ontario.

GRADUATE

Every year, graduate students assume the responsibility of being teaching assistants in the undergraduate program. And every year some particularly distinguish themselves: This year's Teaching Assistant Awards went to **BREA WILLIAMS** and **GRAEME SKINNER**.

GRAEME SKINNER, a graduate from University of Waterloo, has also won the Engineering Society Teaching Assistant Award, the Christopher Knapper Award for Excellence in Teaching Assistance from the Queen's University Alma Mater Society, as well as an Ontario Graduate Scholarship. At the 2001 ISIS (Intelligent Sensing for Innovative Structures) Canada conference in Edmonton, **LUKE BISBY** won the \$5,000.00 ISIS Canada Scholarship, **AHMED DEBAIKEY** and **BREA WILLIAMS** won first and second prize respectively in the written ISIS Canada Essay Contest, while Brea won the Oral presentation of the same contest. **JAMIE VANGULCK** has been awarded a Natural Sciences and Engineering Research Council of Canada (NSERC) scholarship as well as a Queen's Graduate Award. **MAGDY EL-EMAM** was the winner of the Ottawa Geotechnical Society graduate student paper competition and **DAVE REYNOLDS**, aside from becoming a parent for the first time (Liam Holden Maxximilian Reynolds was born on March 3, 2001), has accepted a faculty position at University of Western Australia beginning September 1, 2001. **RAAFAT EL-HACHA**, also a new parent to Jasmine, born June 17, 2001, has been awarded an NSERC Postdoctoral Fellowship. He was also nominated for the Governor General's Academic Gold Medal Award and won the outstanding thesis award at the Spring 2001 convocation. He is currently a Post Doctoral Fellow in Civil Engineering at North Carolina State University, USA.

ABOUT OUR FACULTY

DR. ANA DA SILVA, one of the newer members of our faculty, has won the annual faculty teaching award, presented by the Civil Engineering undergraduate student body in recognition of outstanding teaching.

DR. KERRY ROWE, Queen's new VP Research, and a distinguished member of our Civil Engineering Faculty was awarded the **Thomas C. Keefer Medal** for 2000, by the Canadian Society for Civil Engineering, for a paper entitled, "Design and construction of the barrier system for the Halton Landfill". Co-authors were Chris Caers, Glenn Reynolds, and Cliff Chan. This award was presented to Dr. Rowe at the annual CSCE Conference, this year held in Victoria, B.C. Kerry has also been inducted as a Fellow into the Canadian Academy of Engineering. Fellows of the academy are professional engineers from all disciplines, elected by their peers on the basis of their distinguished achievements and their contributions to society, the country and the profession. The Royal Society of Canada, the Canadian Academy of the Sciences and Humanities has also elected Dr. Rowe to its ranks. Fellowship in the Royal Society of Canada is considered Canada's senior academic accolade. We congratulate Kerry for his many accomplishments. Civil Engineering at Queen's is fortunate to have such an illustrious faculty member!

DRS. KEVIN HALL and **BRUCE ANDERSON** from the Department of Civil Engineering will be involved in a project through the Water and the Environment Group to develop rapid test methodologies for bacteria in drinking water. Also involved in the project will be researchers from the School of Environmental Studies and the Department of Microbiology and Immunology. The funding for the project, is \$2.5 million over three years. A significant amount of the funding is being provided by five industrial partners from the Kingston area and by Precarn Associates, a consortium of Canadian firms whose interest is in the use of intelligent systems in new technologies.

Researchers from the Civil Department will also be involved in an international conference on water and health to be held in Ottawa on May 12-15, 2002. The conference, co-sponsored by the Water and the Environment Group, will cover a range of topics including protecting source water, new water treatment methods, continuous monitoring of drinking water, rapid testing for bacteria and parasites, biofilm formation, and faster chemical analyses. Researchers interested in presenting a paper or poster at the conference are requested to submit an abstract (500 words in Word or WordPerfect format) to the Conference Secretariat at cwe@civil.queensu.ca before October 31, 2001.

DRS. BERNARD KUEPER and **KENT NOVAKOWSKI** were co-chairs of the very successful Fractured Rock Conference held in Toronto in March 2001. This three day international conference brought together leading experts and practitioners dealing with contaminated groundwater in bedrock. The main objective of this meeting was to develop practical solutions to the problems related to measuring, predicting, containing, and cleaning up contaminants in complex bedrock environments and to provide input into a science and technology program plan for the next decade. Participants from Queen's University included **KENT NOVAKOWSKI**, **BERNARD KUEPER**, **DAVE REYNOLDS**, **JULIE KONZUK**, and **MARIE GAUTHIER**.

DON'T FORGET HOMECOMING WEEKEND!

Civil Engineering will host its annual Homecoming Open House on
Saturday, September 22, 2001,
from 10 am until noon,
second floor, Ellis Hall.

Faculty and students will be here to welcome alumni and friends.
Come and enjoy some refreshments and renew old acquaintances!

We are looking forward to seeing everyone again.

REFLECTIONS – ONE YEAR LATER

BY KERRY ROWE, PROFESSOR, CIVIL ENGINEERING, QUEEN'S V.P. RESEARCH



My time at Queen's, since arriving in September 2000, has been both exciting and invigorating. Queen's has been remarkably welcoming and there has been a real sense of joining the "Queen's family" both campus wide and, in particular, with the great people in Civil Engineering.

Although the majority of my time is now spent dealing with research issues on a university wide basis – from the humanities to the health sciences – there has been time to be involved in some exciting developments in Civil Engineering. Three of my graduate students (Tatsuo Iryo, Graeme Skinner, and Jamie VanGulck) came with me to Queen's and I have subsequently been joined by four post-doctoral fellows (PDFs: Allen Li, Henri Sangam, Matt Li and Toshi Mukunoki). As a team we have established excellent labs both for computational and experimental research related to soil reinforcement and barrier systems for landfills

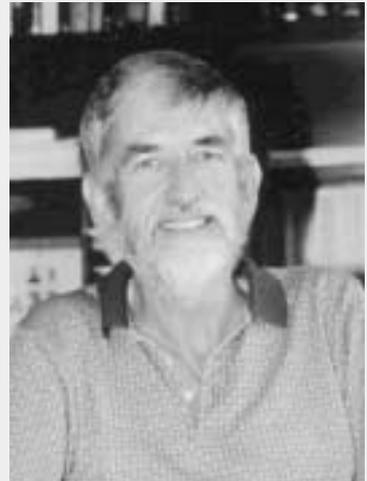
and contaminated sites. These labs complement the excellent facilities for groundwater and geosynthetics research that were already at Queen's.

On the research front, new collaborative research is already under way, in conjunction with Dr. Richard Bathurst, to look at containment systems for contaminates sites in the Canadian North. This work included a field trial and extensive laboratory studies this past summer. This work involves three PDFs and two summer students from Queen's (Christine Cavanagh and Paul Hurst). Grant applications have also been submitted for collaborative research with Drs. Bernie Kueper and Kent Novakowski and this has the potential to provide some very exciting work for the future.

The arrival at Queen's of Drs. Ian Moore (from UWO), Richard Brachman (from U. of Alberta), Jean Hutchinson (from U. Waterloo) and Mark Diederichs (from industry) will add to the already substantial strength in GeoEngineering at Queen's. We are working to integrate the geotechnical, geomechanics, groundwater and geoenvironmental people in the Departments of Civil Engineering, Mining Engineering, and Geology at Queen's, and those in Civil Engineering at RMC into a collaborative GeoEngineering Centre at Queen's-RMC. This centre will offer integrated graduate courses and collaborate on research projects. The process is well underway, and has included the involvement of those soon to arrive. It offers the opportunity to have a program for GeoEngineering graduate studies and research that is extremely competitive at the international level. These are indeed exciting times for Queen's and I am delighted to be a member of such a remarkable team of people.

MOVING ON! BILL KAMPHUIS RETIRING!

It's hard to believe that 33 years of teaching and research have gone by. But now it is time to do something else. I consider myself privileged to have been able to make my living doing what I love. I arrived at an exciting time of university expansion, and now am retiring at a time of equally challenging change in the Civil Engineering Department. It has been a rewarding experience to see Coastal Engineering at Queen's develop from an upstart operation to the world player it is today.



Over the years I was always enthusiastic about working with students. Every time I faced a new class, I would stop to think, "Some of these students are brighter than I will ever be (and I was right)." New graduate students were always an invigorating challenge – to watch them develop and to be involved with that development has been truly rewarding.

It's funny how, during all of these years, the students have remained the same age! From their eternal youth I have derived energy, and because of their unceasing inquisitiveness I have had to keep running just to stay ahead. It's the students I will miss the most.

My wish for the new young faculty coming on board is that you derive the same enjoyment and satisfaction from your years at Queen's.

CIVIL – IT'S ALL ABOUT CONCRETE

Or, at least that's what many of our students are thinking during Concrete Toboggan and Concrete Canoe season.

Queen's and RMC co-hosted the 2001 Great Northern Concrete Toboggan Race at Old Fort Henry in Kingston on February 3rd. 25 teams took part in the competition, one all the way from University of Stuttgart, Germany, and the others



This year, the Canadian National Concrete Canoe Competition was held at the University of Laval in Quebec City, from May 10th to the 12th. Our Queen's team, aptly named "Neacal", Scottish Gaelic for "Victory of the People", came 3rd overall. An outstanding finish considering our team, made up of 2nd and 3rd year students, was up against some powerful opponents with larger budgets and more experienced team members, including grad students and professors! The team did have some help from **John Winters**, a navel architect and well known canoe designer, and **James Raffan**, a canoe expert, who helped us with our paddling technique. This help, combined with that great Queen's team spirit, led to a second place finish in the racing component of the competition. Team members were: **Aaron Dent**, Captain, **Matt Reid**, **Phil Miller**, **Tim Kivisto**, Design Heads; and **John Cholewa**, **Dave Sajecki**, **Susan Trickey**, **Iris Lui**, **Kristen Splinter**, **Carrie MacFarlene**, **Josh Wiebe**, **Alicia Doucette**, **Paul Hurst**, **Tiago Caldas**, **Hiran Sandanayake**, **Nick Schruder**, **Barry Lai** and **Sarah Johnson**.

Sponsors are all-important to these ventures,

from Canada and the United States. Queen's hosted the teams for the first day, an activity day where teams got to know one another through outdoor soccer and a tower building competition. Day two was spent at RMC where the teams set up their technical exhibits. Day three, race day, was at Fort Henry Hill. The Queen's team placed 9th overall, and their braking system received high marks, first place! First place overall went to the University of British Columbia.

Many individuals spent a lot of time and energy to make this event a success and organizers **Lisa O'Neil** and **Paolo Pavese** would like to thank **Cammie McGraw**, **Jia Shin**, **Melissa Buelow**, **Sunil Kothari**, **Jody Lalonde**, and **Ann Kupecz**, from Queen's, and Ocdts **Meagan Moore**, **Melissa Sawchuck**, **Jeff Allen**, **John Hayward**, **Pascal Blancette**, **Ben Aho** and **Claude Viau** from RMC. The Queen's Team would also like to thank its many sponsors for their continuing support.



and we would like to thank the following companies and individuals for their continuing support. O'Connor Associates Environmental Inc., Master Builders, LaFarge, Halsall Associates Ltd., the Department of Civil Engineering, the Faculty of Applied Science, the Engineering Society, Maritime Testing Ltd., Josh Keatley, Dent Engineering Ltd., John Winters, James Raffan, Blue Circle Cement, and 3M.

The Concrete Canoe and the Concrete Toboggan will be on display in Ellis Hall during our Open House in September, please drop by and show your support.

WELCOME TO OUR NEWEST FACULTY MEMBERS!

DR. IAN MOORE comes to us as an award-winning researcher in Geotechnical Engineering from the University of Western Ontario. Research interests include non-linear soil-structure interaction, and analysis and design of buried infrastructure, polymer structures and shell structures.

While at the University of Western Ontario, Ian served as Acting Chair of Civil and Environmental Engineering and Associate Dean of the Faculty of Engineering Science. Here at Queen's he has been awarded a Canada Research Chair in "Infrastructure Engineering", valued at \$1.4 million and funded by the Federal Government. Queen's Civil Engineering is the first Civil Engineering Department in Canada to be awarded a tier one Canada Research Chair. Ian will also bring with him \$1.0M in funding from the Canada Foundation for Innovation to build a large Geotechnical laboratory at Queen's. This is a collaborative project with Drs Kerry Rowe and Richard Brachman to construct North America's leading facility to test buried pipe infrastructure.

Ian's research and teaching experience will raise the profile of the Civil Engineering Department at Queen's and bring to our students strengths in teaching and research. We wish him, his wife Susan and their two children, all the best in their new life in Kingston and within the Queen's community.



DR. RICHARD BRACHMAN, formerly an Assistant Professor in the Department of Civil and Environmental Engineering at the University of Alberta, joined the Civil Engineering Faculty at Queen's in July. Richard, who received his Ph.D. in Geotechnical Engineering from the University of Western Ontario, is emerging as a leading expert in the field of soil-structure interaction. He has had specialized practical experience working on six major geotechnical consulting projects and has worked with many world-renowned geotechnical engineers.

Richard will bring with him innovative ideas for the classroom as well, "I continually try to encourage the development of problem solving and decision making skills of the students. I have incorporated the use of in-class demonstrations and case histories to complement the traditional lecture format. I try new approaches for assignments to attempt to expand the breadth of the student's education."

Richard, together with Ian Moore and Kerry Rowe, will indeed contribute to the formation of a top notch Geotechnical Engineering group here at Queen's.



DR. COLIN MACDOUGALL, with a Ph.D. from the University of Western Ontario, and a M.A.Sc. from the University of Waterloo, has joined the structures area of the Civil Engineering Department. Although Colin is a recent graduate, he has already made significant contributions to research and teaching. His main areas of research include, Deterioration of Prestressed Concrete Structures, Fatigue and Corrosion of Prestressing Strand, and Alternative Housing. About teaching Colin says, "I believe that in this world of globalization, climate change, pollution, and loss of place, we as teachers must empower our students to think in new ways.Students should be encouraged to explore the latest research from a variety of disciplines."



INDUSTRY PARTNERSHIP PROGRAM

On January 25, 2001, representatives from 19 Civil Engineering Companies joined us for our 4th Annual Industry Open House.



MORE SUCCESSFUL THAN EVER!

DAVE TURCKE, Head of the Civil Department, began with a brief presentation, followed by talks by Tom Harris, Dean of Applied Science and Kerry Rowe, our new Vice Principal, Research. All stressed the importance and advantages of "Industry Partnering with Academia". Then it was on to the Industry Show and Information Session. Students were exempted from classes so that they could take full advantage of the presence of such a diverse group of businesses and so many potential employers! For almost two hours students talked with representatives of the companies, finding out just how broad a scope Civil Engineering has, and what actually happens in the vastly different world of industry. Many of the students brought resumes and talked about the possibility of summer and/or permanent work. The company representatives liked the idea of meeting the students in person and being able to discuss various aspects of their work with them. They were also

Continued on next page



2001 INDUSTRY PARTNERS

Our Civil Engineering Job Network, now entering its 5th year, is stronger than ever. We would like to thank all those companies who have advertised through our network and who have hired our students. Steve Roberts, Technical Coordinator, Roads and Bridges, from County of Lennox and Addington, recently wrote to say, "Once again, I am pleased to inform you that a student from the Queen's University Civil Engineering program has been hired to fill the County's Technical Assistant position. Queen's students have frequently been selected for this position. Each has performed beyond expectation providing excellent service to the County."

Acres International Ltd.	Inspec-Sol Inc.
Aluma Systems	J.L. Richards
AME (division of ARMBRO)	Klohn-Crippen Mining Group
AMEC	Knight Piesold Ltd.
Anchor Concrete products Ltd.	Lafarge Canada Inc.
Aquafor Beech	Lafarge Pressure Pipe
Archibald Peterson Ltd.	Leo Alarie and Sons Ltd.
ARMTEC	Maccaferri Canada Ltd.
Baird	Malroz Engineering
Bombardier	Marshall Macklin Monaghan
Cataraqui Region Conservation Authority	Ministry of Transportation Ontario
Charles Howard & Associates	NRC
City of Kingston	NSERC
City of London	O'Connor Associates
Cosburn Patterson Mather	Ontario Hydro
County of Lennox and Addington	Ontario Streams
Department of Civil Engineering (Queen's)	Peter Kiewit Sons' Inc.
DBA Engineering Ltd.	Queens Applied Science
Deep Foundations Contractors Inc.	Queen's Science Quest
Dufferin Custom Concrete Group	RMC
Environment Canada (Great Lakes)	Scott Wilson (Hong Kong) Ltd.
Gartner Lee Ltd.	SNC-Lavalin
CeoCor Engineering Inc.	Stantec
Geomatrix	Thompson Rosemount Group
GeoSyntec Consultants	Totten Sims Hubicki
Golder Associates	XCG Consultants
Governor General of Ontario	
Greater Napanee Water Supply	
Halsall Associates Ltd.	



very impressed with the intelligence and maturity of these future Civil Engineers.

At 4:30 P.M., Dave Turcke wrapped things up and it was off to the University Club for a relaxing dinner before the long trip home.

The popularity and success of this venture has been growing annually, and we look forward to another even bigger event in January, 2002!



The Civil 467 "Industry Based Design Project Course" is an important element of our Industry Partnership Program. Companies provide "real" projects which can be completed within 4 to 5 months. Each 4 member student consulting team is awarded a project for which they must develop a work plan, timetable and budget. Projects related to manufacturing and materials are eligible for awards from Materials and Manufacturing Ontario. This year, the Anchor Concrete Team (**DAVID SWANSON, FRANCIS YUNGWIRTH, JASON CHAN AND MARIA TIMPANO**), won the Outstanding Presentation Award and were invited to MMO's Premier Networking event, Partnerships 2001 on June 21.



MICHEL VAN AERDE MEMORIAL SCHOLARSHIP

In the last issue of the Building Partnerships we told you about the unfortunate passing of **MICHEL VAN AERDE**, a former Queen's professor in Civil Engineering. Mike, who was well known in the Transportation Engineering area, taught here in the Civil Department from 1986 to 1997, and then moved on to become a Professor of Civil and Environmental Engineering at Virginia Tech, and Associate Director of their center for Transportation Research. Many of you will remember him from your time here at Queen's. Jan Voss, one of Mike's former graduate students, (Sci'86, M.Sc.'89), is past president of the Canadian Institute of Transportation Engineers, and has written a letter to tell you about the "**Dr. Michel Van Aerde National Graduate Award in Transportation Engineering**". Here is what he has to say:-

Dear fellow alumni,

It seems like only yesterday that I heard the very sad news of Mike Van Aerde passing away back in August 1999 at the too young age of 39. But somehow, 2 years have slipped by. Last December, I received a Christmas card from his widow Maureen updating me on her life and those of her two children Eric and Stephanie since Mike's passing. I want to take this opportunity to bring you up to date on what I have been doing to help honour Mike's life of accomplishment since his passing. But first a little background for those who do not know me ...

I entered fourth year Civil Engineering in September 1986 wanting to specialize in traffic engineering. This coincided with the arrival of Mike Van Aerde as the new Assistant Professor in Traffic Engineering. Mike's enthusiasm for the field of transportation engineering quickly rubbed off on me and I became one of his first two graduate students after I graduated with my B.Sc. I had the pleasure of assisting in the development of the INTEGRATION model as part of a contract for the Ministry of Transportation & Highways.

In 1989, I graduated with an M.Sc. in Transportation Engineering and began my working career in the private sector, first in Ottawa and then later in Vancouver where I still reside. Mike and I kept in touch over the years and it was with great pride that I saw his INTEGRATION and ITS work receive more and more accolades over time. In my opinion, Mike was one of Canada's most gifted transportation engineering graduates ever and his sudden passing has left a huge void in our industry.

*I am currently the Immediate Past President of the Canadian Institute of Transportation Engineers (CITE). CITE has partnered with the University of Waterloo (i.e. Mike's alma mater) to institute the Dr. Michel Van Aerde National Graduate Award in Transportation Engineering. **It is important to note that although the scholarship is administered through the University of Waterloo, it is available to students at any Canadian University.** There are two primary goals of the scholarship, first, to create a lasting memorial to Mike and his work, and second, to support and promote graduate students pursuing a Ph.D. in Transportation Engineering here in Canada. The fund raising for the scholarship has just started and I would like to invite all of you who knew Mike while he was teaching at Queen's to join me in contributing to both the scholarship and to the memory of Mike.*

If you would like more information about the scholarship, or would like to make a donation, please contact me at (604) 936-6190 or at

jvoss@cts-bc.com. I look forward to hearing from you!

(Donations are "charitable donations" and a tax receipt will be issued.)

Jan Oliver Voss (Sc'86)



