

New agreement paves the way for national P.Eng. mobility

by Karen Hawthorne

Canada's provincial and territorial regulatory engineering associations signed an historic agreement in June to eliminate virtually all interprovincial barriers to the free movement of licensed engineers between jurisdictions.

The Inter-association Agreement on Mobility of Professional Engineers within Canada streamlines the registration process by ending the requirement for engineers to be licensed for five consecutive years in one jurisdiction before they can relocate to another jurisdiction and be fully licensed without going through the second jurisdiction's entire admissions process. It will make it faster for engineers to become licensed in more than one province or territory.

The agreement reflects a key goal of the profession's accreditation system, says Daniel Levert, P.Eng., president and CEO of the Canadian Council of Professional Engineers (CCPE), calling it a "milestone" for the profession. "The agreement firmly establishes the principle of mobility within our profession, and sets an exam-



PEO President Pat Quinn, P.Eng., and Laurie Macdonald, P.Eng., then CEO and registrar, (seated) sign the new interprovincial mobility agreement for professional engineers, assisted by CCPE President Daniel Levert, P.Eng., (far left) and then CCPE Chair William Sutherland, P.Eng. (far right). The agreement was signed by the 12 provinces and territories on June 18 in Yellowknife during CCPE's annual meeting. *Photo: KHJ Photography*

ple for other professions in Canada to follow," he says.

Formerly, graduates of accredited engineering programs were considered to have met the academic requirements for entry into the profession in any of the provinces or territories. But they had to be registered in one jurisdiction for at least five

years before they were automatically considered to have met the experience and examination requirements in another jurisdiction. With the agreement, engineers who have been accepted for registration in one jurisdiction will immediately be considered to have met the academic, experience and examination requirements for registration and licensing in the jurisdictions of their choice.

"Our profession has long recognized the desirability of improved interprovincial mobility for engineers relocating to a new jurisdiction, as well as for non-resident engineers," says Levert. "This will help the profession to regulate multijurisdictional projects, regulate foreign engineers undertaking engineering projects within Canada, and fulfill our statutory obligations to protect the public."

However, the agreement does not override the mandate of the profession's regulatory associations to review the qualifications of all applicants for registration and licensing within their jurisdictions. Applicants could be required to demonstrate their qualifications through examination or the submission of supporting documents, if a jurisdiction chooses to require it. All applicants must also follow the continuing competence requirements of the jurisdiction in which they register. See sidebar for further information on conditions for interprovincial registration.

On the move

Conditions for interprovincial registration

Any professional engineer registered with an association will be accepted for registration in another jurisdiction, provided the applicant:

- ✓ is a professional engineer in good standing with the home association;
- ✓ has not been disciplined or has no disciplinary action pending;
- ✓ agrees to provide any information and allow the home association to release information on the above;
- ✓ agrees to permit any association to provide all information that the host association normally requires to complete its files; and
- ✓ agrees to meet the continuing competence assurance requirements of the host association.

Designing for dollars: engineering and architecture students team up for contest

by Susanne Frame



University of Toronto architecture students Carolina Chan and Michele Au, and engineering student Alex Chan, hold their winning design for the first annual Yolles Protégé Design Competition. *Photo: Jewel Randolph*

For the first ever Yolles Protégé Design Competition, engineering and architecture students at the University of Toronto teamed up to devise creative and structurally sound designs for a community centre at North York's Clanton Park.

The winning team was announced this spring: architecture students Carolina Chan, Michele Au, and engineering student Alex Chan pocketed the \$6,000 first prize. The design, which goes on display in September at U of T's school of architecture, was judged on such criteria as creativity, aesthetics and elements of collaboration. A second-place team of Gene Ascenzi and James Sheffield from the school of architecture, and engineering student Anya-Lila Bobert, received \$2,000 for its entry.

The competition was spearheaded by Morden Yolles, P.Eng., university lecturer, and one of Toronto's foremost structural engineers, who studied civil engineering at the University of Toronto in the 1940s. He says he never met a single architecture student during his training—something he wanted to change for the next generation of engineers.

"We live in separate boxes," Yolles says, of the relationship between architects and engineers. "It's always befuddled me, since we work so closely. But it is changing." Contact among students in both faculties early on is crucial for the collaboration that's necessary in the workforce, he says. Yolles hopes the contest will be incorporated into engineering and architecture curricula next year, as part of thesis work for fourth-year students.

This year's competition was sponsored by Yolles and the Toronto Arts Council.

PEO gets into high tech

To explain the benefits of and requirements for P.Eng. licensing to industry and practitioners in nontraditional areas of practice, PEO will be at the Canadian High Technology Show, to be held October 5-6, 1999 at the Toronto International Centre, Arrow Hall, 6900 Airport Road, Mississauga. Aimed at electronics professionals, the show will feature over 300 manufacturers and distributors, as well as workshops, seminars, and technical information and product sessions.

Seminar presenters will include PEO President-elect Peter DeVita, P.Eng., president, DeVita Associates, and Dr. David Parnas, P.Eng., director, software engineering program, McMaster University. The PEO presentations will cover the impact of software engineering on public safety and related PEO initiatives.

For more information and free registration, call (416) 491-7565, or see www.reedexpo.ca/hightech. Be sure to visit PEO at booth 641.

advertisement

Engineering students pitch winning design for North America's oldest ball park

by Karen Hawthorne

Engineering students at London's University of Western Ontario are battling 1000 in the city's historic ball park—when it comes to designing a new grandstand.

Fourth-year civil and environmental engineering students Katie Henderson, Jason Jelinek, Pearl Lee, Anthony Mancusi and Martin Turek earned top grades and the first prize of \$2,500 for their design of a grandstand with a cable-stayed roof for Labatt Memorial Park. The major component of a design course at Western, the project was entered in this year's City of London design competition for the university's civil and environmental engineering students.

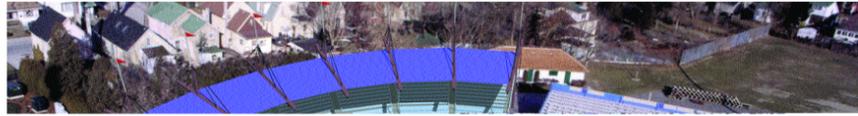
The city asked the engineering students to develop creative solutions for two design projects in London: a new grandstand for Labatt Memorial Park and a new facility to deal with storm water in the Dingman Creek area. Five groups of students participated in the contest from January to March, consulting with experts on the faculty and local engineers, architects and landscape architects to develop their designs, which offer the city preliminary ideas and options.

Labatt Memorial Park has hosted baseball games since 1876, making it the oldest active baseball facility in North America. Three of the student groups chose the challenge of designing the 5500-seat replacement grandstand, which had to suit the residential "aesthetic" of the neighbourhood, demonstrate value and come in at a reasonable cost.

The \$1.2-million cable-stayed roof design offers a simple, effective structure, with cables extending to pylons above the roof.

"We had to take into consideration that the surrounding neighbourhood has older houses and no tall buildings, so we kept it low-key and elegant," says Katie Henderson, a winning team member now on her work-term at Western's wind tunnel testing facility. "It was a really good experience to work as a group on a real-life project."

In the Dingman Creek area, there's a high volume of storm water, and untreated runoff is discharged into the creek. The student group that won the competition's second prize of \$1,250 designed a retention lagoon



University of Western Ontario engineering students won first prize for this design for the Labatt Memorial Park grandstand, in a competition sponsored by the City of London.

and wetland treatment solution. Called "White Oaks Wetland," the project was designed by Faizal Karmali, Ian MacPherson, Vikas Girdhar, Rick McComb and Christine Anagnostis.

"It [the competition] really does simulate real-world information and challenges," says Mike Bartlett, P.Eng., a civil and environmental engineering professor at Western and project coordinator for the competi-

tion. "It has evolved to become the focus of the whole fourth year." Bartlett says the competition teaches students about design considerations specific to London, and links them to local professionals and potential employers.

The 1999 competition marks the third year the city has partnered with the university's civil and environmental engineering department on actual designs.

advertisement

Chapter forum discusses economic impact of global warming

by Karen Hawthorne

Whether global warming is a natural phenomenon, a human-driven occurrence or hype without merit, engineers should look at climate change as a business opportunity, says an international management consultant who spoke at a forum on global warming hosted by PEO's York Chapter in May.

"The global warming debate isn't really relevant," said Brian Young, associate director in the environment, health and safety management practice at the Toronto office of Arthur D. Little, Inc. "The fact is that it's getting warmer around here, and we have to respond to the changes it will have on our raw material supply and how it will impact the marketplace. It's a big concern for industry."

Industry and government dispute the wisdom of making policy changes based on uncertain evidence, Young said. But others argue that, given plausible evidence and possible outcomes, such as forest fires destroying natural ecosystems, droughts hampering food crops, and heat stress and air pollution jeopardizing people's health, the risks of not acting now are too great—and inconsistent with sustainable development. Young said the debate is reshaping the playing field of the global economy, and changing relationships among stakeholders, corporate strategies,

Correction

The June/July 1999 issue of *The Link* ("New PEO registrar on board," p. 1), stated incorrectly that former CEO and Registrar Laurie Macdonald, P.Eng., was resuming her duties as "manager of professional affairs." Macdonald's current title is director, professional affairs, and she is a member of the association's executive staff. Macdonald's name was also misspelled as MacDonald. We apologize for any inconvenience or embarrassment the errors may have caused.



Management consultant Brian Young talks about the business opportunities of global warming at a public forum hosted by PEO's York Chapter.

technology development and management, and the interface between science and policy making.

Actions are underway to address the problem, he added, pointing to the December 1997 United Nations-sponsored Kyoto Conference on global climate change. Participating nations agreed to set binding targets to reduce carbon emissions.

Canada is committed to reducing greenhouse gas emissions—carbon dioxide, methane, nitrous oxide and chlorofluorocarbons—to 6 per cent below 1990 levels by the year 2012, said Bryon Wilfert, MP for Oak Ridges, who addressed the forum on the federal government's plans to deal with global warming.

A national implementation strategy on energy, transportation and public outreach issues is in the works, along with such projects as Millennium Eco-Communities, created in June 1998 to support municipal, school, business and neighbourhood partnerships in developing local action plans. In Richmond Hill, these plans include a Lake Wilcox fish habitat and shore rehabilitation project and assistance to the Canadian Peregrine Foundation in its efforts to raise baby chicks to protect the species. Calgary's wind turbine program that produces electricity for 1000 families is another example.

He said PetroCanada also has a program underway to boost production, while reducing greenhouse gas emissions by 2.8

per cent, or almost 80,000 tonnes, by upgrading equipment and improving operating practices. "The challenge for Canada is to accomplish all this while maintaining economic growth and encouraging innovation and competitiveness in Canadian industries," Wilfert said.

The challenge facing corporate management is to "seize the initiative," Young said, especially for companies with significant greenhouse gas emissions. Emissions controls could accelerate the transition from using fossil fuels like coal and oil, to using natural gas and renewable fuels, resulting in significant changes in operations and technology, which will require research and development, he said.

In the area of transportation, there's an increasing push toward the development of more efficient fuel-powered vehicles, electric or fuel cell vehicles, hydrogen fuels, better public transportation and policy responses like tax credits for energy efficient vehicles. Young also highlighted the shift in the pricing and distribution of energy with the privatization of Ontario Hydro, now Ontario Power Generation, and research into solar and wind power.

"What you need to be looking at now is total energy management solutions, like energy conservation, asset and infrastructure improvements, outsourcing tasks and energy procurement," Young suggested. "Energy is a huge part of your operating costs."