

PEO secures funding to develop access website

By MICHAEL MASTROMATTEO

As part of its ongoing efforts to increase access to the engineering profession, PEO has teamed up with the Ontario Ministry of Training, Colleges and Universities to develop an innovative website aimed at providing internationally trained engineering graduates with enhanced information about licensing and working conditions in Ontario.

The site will also provide networking opportunities, and allow internationally trained engineers to begin the licensing process prior to arriving in Ontario.

Minister of Training, Colleges and Universities Mary Anne Chambers announced on October 26 that the ministry will provide \$2 million over two years to allow PEO to develop the new website. She described the website as an example of PEO taking a leading role among major regulators in promoting greater access to the professions for new Canadians. The ministry estimates that up to 10,000 international engineering graduates (IEGs) will use the website each year.

Described as an Internet "portal," the website is expected to go online this summer. It will include four main components:

- an interactive fact sheet guiding users through the P.Eng. licensing process by way of a series of customized, pertinent questions;
- a self-assessment and competency-matching tool allowing individuals to determine how their education, knowledge and experience match the requirements for engineering licensure in Ontario. This component will also measure applicants' competence in related occupations and will provide a sense of equivalence to existing academic credentials;
- a series of resource and training links providing users with access to PEO resources, such as application guides and practice examinations, plus links with resources and training opportunities offered by related organizations; and
- an online coaching and mentoring feature, which will provide applicants

with more direct access to PEO member volunteers who will offer guidance and networking assistance to international engineering graduates as they pursue a professional licence.

"Through the innovative use of Internet technology, this endeavour will allow access to interactive information, assessment tools and Canadian contacts that will be of significant help to internationally educated engineers on the path to licensure in Ontario," said Kim Allen, P.Eng., registrar and chief executive officer of PEO. He added that the Internet portal initiative is especially significant in light of the fact that about one-third of PEO licence holders received their training outside Canada.

PEO has been at the forefront among major regulators in working to integrate internationally educated professionals into the local workforce. In addition to this latest initiative, PEO has developed a provisional licence that enables IEGs to gain valuable work experience in Canada under the supervision of a licensed engineer. One of the biggest obstacles faced by IEGs in qualifying for a professional engineer licence is the lack of local work experience.

It's estimated that some 40,000 IEGs have immigrated to Ontario since 1999. In 2003, PEO received more than 2000 applications from IEGs and granted 105 provisional licences.

PEO and education ministry officials believe the new Internet portal will prompt a 25 per cent increase in self-identified immigrant engineers applying for a professional licence in Ontario. The portal is also expected to generate a 50 per cent increase in the number of provisional licences granted to IEGs, while reducing by at least 10 per cent the amount of time required for internationally educated engineering graduates to complete all steps towards full licensure.



Ontario Minister of Training, Colleges and Universities Mary Anne Chambers (second from left) met with PEO President George Comrie, P.Eng. (left), OSPE Chief Executive Officer Sharon Glover, P.Eng. (second from right), and PEO Registrar and CEO Kim Allen, P.Eng., following Chambers' October 26 announcement that the ministry is funding an Internet portal designed to help international engineering graduates begin the licensing and registration process in Ontario.

During the October 26 media conference, the minister introduced five IEGs who have overcome licensing barriers to work in their chosen field in Ontario. The group included PEO Councillor and Chair of the Experience Requirements Committee Ravi Gupta, P.Eng., Roberto Floh, P.Eng., Rabiz Foda, P.Eng., Halil Kizilcay, P.Eng., and Gurmeet Bambrah, EIT.

Eric Brown, P.Eng., director of information and technology services for PEO, said the association plans to put together a project team to assemble the content and develop the technical components of the new Internet portal. He said the portal will initially feature the online fact sheet, labour market information and online mentoring and coaching program. The more complex self-assessment and competency-matching tools for internationally trained engineering applicants will be added to the site at a later date, probably in late 2005 or early 2006.

"Much of the information needed to build the self-assessment and competency-matching components will have to be gathered from PEO staff and our volunteers in the Academic Requirements and Experience Requirements committees," Brown said. "Our challenge from an information technology perspective is to capture all that knowledge and present it logically and effectively on our site."

PEO outlines access initiatives at CAPE forum

By MICHAEL MASTROMATTEO

In an October 16 forum organized by the Council for Access to the Profession of Engineering (CAPE), PEO Registrar and Chief Executive Officer Kim Allen, P.Eng., outlined several areas in which PEO is working with other stakeholders to streamline the process for licensing qualified international engineering graduates.

The forum included the release of CAPE's discussion paper *Recasting Equity*, which offers a critique of Canada's recent immigration and labour policies, especially in terms of their failure to utilize the skills, experience and education of new Canadians.

CAPE is affiliated with the Policy Roundtable Mobilizing Professions and

Trades (PROMPT), which in late September released its *In the Public Interest* policy paper. The policy paper calls for legislative changes to regulators' registration and appeals processes, which PROMPT believes would bring greater transparency and accountability to the ways internationally educated and trained professionals achieve licensing in Ontario.

In September, the Ontario Ministry of Training, Colleges and Universities announced the appointment of Judge George Thompson to lead an independent review of regulators' licensure appeal mechanisms.

"Professional Engineers Ontario has been working hard over the past several years to alleviate the obstacles typically asso-

ciated with licensing internationally trained professionals," Allen told the gathering. He said the high number of immigrants arriving in Ontario who identify engineering as their career of choice makes this demographic a key part of the profession.

It's estimated that skilled professionals and tradespeople made up about 60 per cent of the 100,000 immigrants to the Toronto area in 2003. "Immigrants are the talent pool for building a skilled and diverse work force," Allen said, adding that one-third of PEO licence holders were educated outside Canada.

Allen said that in addition to working with the education ministry, other regulators, community groups and immigrant advocacy organizations, PEO has taken a number of steps to simplify the application and registration process for international engineering graduates. Chief among these is providing increased information about licensing requirements, local market conditions and networking opportunities to international engineering graduates prior to their arrival in Canada (see "PEO secures funding to develop access website," p. 10). International applicants also enjoy enhanced opportunities to have their academic background and technical knowledge reviewed and evaluated throughout the registration process.

As well, Allen outlined recent changes to the *Professional Engineers Act* that allow licence applicants to seek a review of PEO's licensing decisions. The changes give applicants a right to a hearing, conducted by a panel of PEO's Registration Committee, in the event an applicant's request for a licence is turned down. If the applicant is not satisfied with the decision of the committee, he or she may then appeal the decision to Ontario Divisional Court.

"Regardless of these initiatives, the goal of PEO remains the same—to protect the Ontario public by ensuring all professional engineers are qualified for licensing, regardless of where the applicant is from," Allen said.

CAPE's *Recasting Equity* paper, with its metaphor-laden prose, takes aim at over-regulation and "Canadian experience" as unresolved obstacles to immigrants' access

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to the professions. "The structure of regulation has become ever more labyrinthine," CAPE says, "as more professions are drawn into an already massive and unwieldy legal framework. Regulation has become its own worst enemy, insulating professional organizations into a thickly woven cocoon of legislation that prevents its own development. To add to all the confusion in the labour market, the term 'Canadian experience' is continually utilized, when in truth, no one can identify, describe or define its constituent elements."

Advocates for internationally trained professionals have suggested the difficulties faced by new Canadians in having their skills recognized—and in obtaining professional licensing—could soon become a human rights issue.

Be proud, says premier



Honourable Dalton McGuinty, premier of Ontario, was guest of honour at the *Engineering the Healthy City* conference organized by the Ontario Society of Professional Engineers. In his keynote address, the premier thanked engineers for the enormous contribution they've made to Ontario: "From satellites to cell phones, skyscrapers to hybrid vehicles, engineering has made all the advances and conveniences of our modern-day world possible...that's something you should be very proud of every day." The day-long conference was held November 1, 2004 at the Sutton Place hotel in Toronto and featured speakers from the energy, construction and transportation sectors, including Dave Gouling, P.Eng., president and CEO of the Independent Electricity Market Operator, and John Beck, P.Eng., chairman and CEO of Aecon Group Inc., who spoke about the benefits of green buildings.

PEO presents Bill 124/Brownfields cases to AG

By MICHAEL MASTROMATTEO

PEO President George Comrie, P.Eng., met with Ontario Attorney General Michael Bryant on December 6 to continue pressing the regulator's case on recent legislative initiatives of significance to Ontario's engineering community (see President's Message, p. 3).

At issue once again are the *Building Code Statute Law Amendment Act, 2002* (Bill 124) and Regulation 305/03 from the Ministry of Municipal Affairs and Housing, and the *Brownfields Statute Law Amendment Act, 2001* and Regulation 153/04 from the Ontario Ministry of the Environment. PEO has concerns that both acts impose external

certification measures on elements of engineering practice and, as such, threaten to undermine the regulatory authority of the *Professional Engineers Act* (PEA).

Scheduled to come into effect July 1, Regulation 305/03 requires all building-design professionals, including engineers and architects, to pass *Ontario Building Code* (OBC) examinations set by the ministry in order to submit building plans for approval by municipalities. While the bill was originally aimed at streamlining conditions in Ontario's construction industry, some engineers believe it adds significant bureaucracy and cost to the plans approval process, with minimal public benefit. Its requirement that practitioners

pass building code examinations is seen as an encroachment on engineers' self-regulating authority under the PEA. Section 72(2)(d) of Ontario Regulation 941 already requires all professional engineers to make provision for "applicable statutes, regulations, standards, codes, by-laws and rules," including the OBC.

Meanwhile, the environment ministry's Regulation 153/04 (Brownfields) has been criticized for excluding PEO's limited licence holders from a list of "qualified persons" permitted to sign Records of Site Condition for environmental site assessments and site remediation.

PEO's latest appeal to the attorney general—the minister ultimately respon-

sible for the acts that establish architecture, engineering, law, accounting and others as self-regulating professions in the public interest—comes after months of apparently unsuccessful efforts with the housing and environment ministries.

AG's reaction

Comrie told *Engineering Dimensions* that the attorney general seemed mildly receptive to PEO's position during the December 6 meeting. "There was no huge push-back on Mr. Bryant's part, but I also didn't sense any commitment on his part to fix things, at least not in the near term," Comrie said.

As a result, PEO will escalate its communications campaign regarding Bill 124 and Brownfields. "I think it's important that members try to keep their arguments at a high level—namely that this legislation conflicts with the *Professional Engineers Act* and adds red tape and additional expense with very minimal benefit," Comrie said.

In a November 15 letter to the attorney general, Comrie described Bill 124 and Regulation 153/04 as examples of legislative initiatives calling into question the validity of the PEA. "The imposition of these external certification measures has clearly compromised the powers of PEO to regulate the profession in the public interest," Comrie told the attorney general. "The *Professional Engineers Act* provides statutory public accountability through PEO's complaints and discipline processes, yet neither of these new frameworks includes any legislated instruments for such accountability."

In a separate letter to Minister of Municipal Affairs and Housing John Gerretsen, Comrie reiterated the view that ministry-mandated examinations of building code knowledge remain at odds with existing public statutes regulating the practice of licensed professional engineers.

Chris Roney, P.Eng., a member of a PEO task force on Bill 124/BRRAG, also discussed the legislation with PEO chapter leaders at the recent Chapters Forum in Mississauga.

"The thrust of my speech was that the trend towards external certification

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George Comrie, P.Eng.

regimes rather than self-governance is something that we should be concerned about," Roney said. "I showed how the new legislation fails to achieve each and every principle behind the reforms, and most of the key recommendations of BRRAG."

Roney also warned chapter leaders about some of the insurance-related implications of Bill 124. In addition to the building code certification requirement, the legislation requires engineers wishing to submit designs for building permits to carry a minimum of \$250,000 professional liability insurance—a level that increases relative to a firm or practitioner's annual billings.

"I outlined the hard costs of the new insurance provisions and how PEO's own survey of Certificate of Authorization (C

of A) holders indicates that there will be a significant negative impact on the industry," Roney added. "The most troubling point I made is that now it will be insurance companies that will decide who can and who cannot practise professional engineering in this sector. This is bad public policy and should be stridently opposed" (see *Engineering Dimensions*, July/August 2004, pp. 29-32).

Roney recommended chapter leaders and PEO members-at-large consider contacting their local member of provincial parliament to express their position on Bill 124.

PEO, meanwhile, has prepared talking points for the chapters and a sample letter for members to send to their MPP. The talking points and sample letter are available from the BRRAG page on PEO's website at www.peo.on.ca.

ASQ agrees to protect "engineer"

BY JENNIFER COOMBES

As a result of work by the Canadian Council of Professional Engineers (CCPE), the American Society for Quality (ASQ) has advised Canadian holders of its Certified Reliability Engineer (CRE) designation that they must use only the abbreviation unless they are licensed professional engineers.

The Milwaukee-based ASQ awards its designation to those who have met its qualifications, regardless of whether they are

licensed professional engineers. Under most provincial engineering licensing legislation, however, use of the title "engineer" by an unlicensed person is illegal, and CCPE additionally holds a federal trademark on the term.

When CCPE brought these facts to the attention of ASQ during a series of discussions, ASQ agreed to advise Canadian holders of its designation that they may use only the title ASQ CRE unless they are, in fact, professional engineers.

Engineering stars shine at OPEA gala

BY JENNIFER COOMBES

It's safe to say that most engineers are not accustomed to Hollywood-style glitz and glamour. In fact, it's more common to see them with their shirtsleeves rolled up, hard at work. But that didn't stop PEO and the Ontario Society of Professional Engineers (OSPE) from taking to the stage on November 20 at the Doubletree International Plaza Hotel to present Ontario Professional Engineers Awards to nine of Ontario's engineering stars. And stars they are, each exemplifying all that it means to be an engineer.

Gold Medal

Pierre Lassonde, MBA, P.Eng., president and director, Newmont Mining Corp.

This year's gold medal winner is no stranger to that particular precious metal. Pierre Lassonde's accomplishments in the gold industry are many. He currently heads up the world's leading gold production company, co-founded Franco-Nevada and Euro-Nevada Mining in the 1980s, and is one of Canada's foremost gold analysts and authors. Lassonde has also made priceless contributions to the engineering profession in Canada and internationally through philanthropy, community leadership and his strong support of mining education and research. The Lassonde Institute for Engineering Geoscience at the University of Toronto was established by him, and the Canadian Mining Hall of Fame is now a permanent fixture at the university thanks to his long-time support and involvement.

Engineering Medal Engineering Excellence

Mohamed A. Khattab, PhD, P.Eng., consulting director of design engineering, National Steel Car Ltd.

Dr. Mohamed A. Khattab is known throughout North America for his expertise in railroad freight car and steel weldment design. He has contributed significantly to the profession through his pio-

neering work in applying finite element analysis (FEA) techniques to the design of modern railway cars, authoring nine papers, an as-yet unpublished book, and many international patents on the manufacture of more efficient freight cars. Dr. Khattab was Hamilton Engineering Institute's Engineer of the Year in 2003.

Engineering Medal Engineering Excellence

Douglas W. Scott, P.Eng., manager of engineering, City of Thunder Bay

Widely regarded for his contributions to the infrastructure and environment of Thunder Bay, Douglas W. Scott has had a long and distinguished career in engineering consulting and management. He has directed many important sewage-treatment and water-supply engineering projects and is responsible for Thunder Bay's Island Drive Bridge, the Neebing McIntyre Floodway and Thunder Bay Waterfront Park. Scott played a key role in Thunder Bay's Pollution Prevention and Control Plan, a project that was recognized by the FCM-CH2M Hill Sustainable Community Awards Program. Strongly committed to engineering, he is active in the Canadian Water and Wastewater Association, lectures at Lakehead University, is on the advisory council for civil engineering technology at Confederation College, and advocates for engineering at career fairs.

Engineering Medal Young Engineer

Susan L. Tighe, PhD, P.Eng., associate professor of civil engineering, University of Waterloo

It's difficult to imagine a busier engineer than Dr. Susan L. Tighe, the recipient of this year's Young Engineer Award. She has achieved international recognition for her work in the engineering and transportation sectors, has authored over 50 publications on infrastructure, pavements and transportation, and holds leadership roles in the

Transportation Association of Canada and other transportation research board committees. She also embraces her role as a mentor, particularly for women and girls, through her position as co-chair of the Women in Engineering Committee at the University of Waterloo and many speaking engagements to Girl Guides and other groups. Dr. Tighe is the first University of Waterloo faculty member to receive a Premier's Research Excellence Award for her work.

Engineering Medal Research & Development

Praveen K. Jain, PhD, P.Eng., professor of electrical and computer engineering, Queen's University

In addition to 24 years of research and development of high-frequency power conversion technologies, which have resulted in 25 patents and over 200 publications, Dr. Praveen K. Jain has developed the first high-frequency power electronics laboratory in Canada. Considered one of the world's authorities in the practical application of power electronics, his designs have been applied to telecom power supplies, induction melting, computers and space systems.

Dr. Jain's previous awards include the Innovation Award from the Canada Foundation for Innovation and an Ontario Distinguished Researcher Award from the Ontario Innovation Trust. He is a fellow of the Institute of Electrical and Electronics Engineers and, in addition to his professorship, is Canada Research Chair in power electronics at Queen's University.

Engineering Medal Management

Kathy Milsom, P.Eng., former president and CEO, Canada Lands Company Ltd., now president and CEO, Technical Standards and Safety Authority

Kathy Milsom was recognized with the Management Award for the outstanding property development and facility management results she achieved at Canada Lands Company. Putting her extensive governance and management skills and characteristic high standards of ethics and integrity to work, Milsom significantly improved Canada Lands' opportunities to

manage and develop the federal government's strategic surplus properties. She also created a positive work environment that promotes high morale and productivity. The company is involved in such internationally recognized redevelopments as the Glenlyon Business Park in Burnaby, BC, the Garrison Woods development in Calgary, and the ongoing operation of Canada's National Tower in Toronto.

Engineering Medal Entrepreneurship

Mark J. Chamberlain, P.Eng., retired

The recipient of this year's Entrepreneurship Award was honoured for his drive in advancing visual information systems, and for his overall vision, leadership and ethical business practice. Two years after joining Wescam in 1985, Mark Chamberlain was a newly minted president and CEO leading a \$1-million buyout of the company. With a strong research and development focus, he introduced four new product lines and grew the company into a world leader in visual information systems worth \$166 million. Under his guidance, Wescam won an Academy Award

for technical achievement, 16 Emmy awards, a Canadian Business Tech 100 Award and a Canada Export Award.

Citizenship Award

Murray C. Temple, PhD, P.Eng., retired

Dr. Murray C. Temple is retired following a distinguished 30-year career as a professor of civil engineering at the University of Windsor, but that hasn't stopped him from contributing to his community and profession as he has done all his life. Dr. Temple has made immense contributions to the engineering profession by serving on PEO Council, committees and task forces and through involvement with the Structural Stability Research Council, the Canadian Engineering Accreditation Board and the Corporation of the Seven Wardens. He is also a fellow of the Engineering Institute of Canada, the Canadian Society for Civil Engineering and the American Society of Civil Engineers. Dr. Temple participated actively on committees and the board of directors of the Art Gallery of Windsor for 18 years and is currently volunteer chair of the board of directors of the Hotel-Dieu Grace Hospital in Windsor.

Citizenship Award

Robert D. Loree, P.Eng., special advisor to the dean of engineering, McMaster University; director of Engineering 1

A tireless educator, counsellor, mentor and committed advocate of engineering, Robert D. Loree has been contributing greatly to advancing the profession in society for over 30 years. He has initiated science fairs, competitions, and many other programs that encourage students to consider careers in engineering, the most prominent of which is the McMaster Engineering FIREBALL show, a multimedia experience that has been presented to over 450,000 high school students over eight years. Loree's many other awards include the Prime Minister's Award for Teaching Excellence, the Hilroy Fellowship Award and the Marshall McLuhan Distinguished Teacher Award.

Many thanks to the corporate partners of the 2005 Ontario Professional Engineers Awards: ABB, Autodesk, Canada Life, Celestica, Jordan Engineering Inc., Manulife Financial, the Personal and XL Insurance.



Congratulations to the 2005 Ontario Professional Engineers Award winners, (left to right) Dr. Mohamed A. Khattab, Dr. Murray C. Temple, Dr. Praveen K. Jain, Kathy Milsom, Pierre Lassonde, Dr. Susan L. Tighe, Mark J. Chamberlain, Robert D. Loree and Douglas W. Scott.