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PEO declines to support joint accreditation of software engineering programs

Council creates task group to propose alternative solutions

by Alison Piper

Controversial recommendations made by a national panel formed to consider the use of the term "software engineering" in the undergraduate university community stirred debate among Councillors and guests at PEO Council's September 15-16 meeting. Of particular concern was the panel's recommendation that a joint accreditation board be formed to accredit software engineering programs. The joint board would comprise representatives of the Canadian Council of Professional Engineers' Canadian Engineering Accreditation Board, the Computer Science Accreditation Council of the Canadian Information Processing Society (CIPS), and industry- and universitybased members. The panel recommends that only programs accredited by the joint board be entitled to be called software engineering programs. Accredited programs would qualify their graduates academically to pursue either a P.Eng. licence or the I.S.P. (Information Systems Professional) designation granted by CIPS. (See "Software engineering report comes under fire," September/October 2000 issue of Engineering Dimensions, pp. 13-14.)

Citing concerns that the proposal could lower standards in engineering, Council passed a motion stating that PEO is unable to support the concept of joint

accreditation of software engineering programs proposed in the Software Engineering Panel's report. The two-part motion also authorized creation of a small task group to prepare a response that describes the rationale for PEO's concerns and proposes alternatives. The motion calls for the task group to provide an interim report to Council in October and make its final recommendations in January 2001. The CCPE board is scheduled to vote in March 2001 on the recommendations of the Software Engineering Panel, which was established in 1999 by CCPE and the Association of Universities and Colleges of Canada to settle a lawsuit brought by CCPE against Memorial University over Memorial's use of the term "software engineering" in the name of a non-engineering program.

In discussion, several Councillors raised concerns that accreditation of software engineering programs by a new joint board might lower admissions standards in the engineering profession, because of the difference in the accreditation criteria used by the Canadian Engineering Accreditation Board and those used by the Computer Science Accreditation Council. Councillors were also concerned that an accreditation that qualifies graduates academically for either a P.Eng. licence or an I.S.P. designation might be perceived as implying that the licence and certification are equivalent.

Some Councillors also expressed the view that the joint accreditation proposal could be the first step in a decline of PEO's ability to restrict use of the engineer title to licensed members. "It seems

that the outcome could be that we would lose control over who can call themselves a licensed professional engineer," suggested Vice President Chris Roney, P.Eng.

Councillor Colin Cantlie, P.Eng., said that, to be constructive, PEO must make clear why it cannot support the joint accreditation concept: "We need to put forward reasons for disagreement and proposals for going forward."

As a prelude to Council's motion on the Software Engineering Panel recommendations, David Parnas, PhD, P.Eng., director of McMaster University's Software Engineering Program, made an informal presentation to Council on his views about the issue. Parnas said he believes that joint accreditation is unfeasible because of the need to cover different material in software engineering and computer science programs. He proposed a different solution based on the needs of the marketplace, in which separate academic programs would be developed for software engineers; software designers in non-engineering areas, such as data mining; and software project managers.

"These are all essential programs, but they wouldn't meet the same criteria and shouldn't be called the same thing," Parnas said. "We should stay true to our principles and let employers hire the graduates who suit their needs."



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PEO appoints EIT program manager

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To the top: Professional engineers from Quinn Dressel Associates assist kids in building a model of the CN Tower out of toy "Mega Blocks" as part of TVOntario's ninth annual open house. Held at Toronto's Harbourfront Centre on Sept. 16, the event attracted thousands of children to see educational interactive displays. PEO assisted TVO in recruiting engineers to help build the model and was recognized in event signage and in the program.



CHAPTERCALENDAR

PEO Chapter Calendar lists upcoming chapter meetings and events. Send listings to: Sharon Gillam, Field Operations, PEO, 25 Sheppard Avenue West, Suite 1000, Toronto, ON M2N 6S9; fax: (416) 224-8168 or 1 (800) 268-0496; email: sgillam@peo.on.ca. Deadline for the February/March 2001 issue is January 29, 2001.

NOVEMBER

November 1, 2000

MISSISSAUGA–Development of a Bias-free Human Stress Measurement Scale, Mississauga Central Library, 7 p.m., Room CL3, 301 Burnhamthorpe Road West, Mississauga. Cost: \$5/person. **Contact:** Jana Havard, P.Eng., (905) 273-3076.

November 3, 2000

LAKEHEAD—39th Annual Engineering and Technology Conference, at the Valhalla Inn in Thunder Bay. For more information, please visit the chapter's home page:www.peo.on.ca/Chapters/Lakehead/ default.htm.

Contact: Seimer Tsang, P. Eng., email: Seimer.Tsang@Lakeheadu.ca

November 13, 2000

MISSISSAUGA–Ergonomics Seminar, 7 p.m., Mississauga Central Library, Room CL3, 301 Burnhamthorpe Road West, Mississauga. Cost: \$5/person.

Contact: Jattinder Dhillon, P.Eng., (905) 896-3882, ext. 250.

November 15, 2000

YORK—Technical Seminar, "Light is the Tool of the New Millennium: An Introduction to Laser Machining," presented by Dr. Marc Nantel, Photonics Research Ontario. Location: Richmond Hill Public Library, Room A, 1 Atkinson St., southwest corner of Yonge St. and Major Mackenzie Dr. Time: 6:30 to 8:30 p.m. Admission fee: \$10 (at the door). **Contact:** Edward Poon, P.Eng., (416) 393-3995.

November 17, 2000

BRAMPTON–Annual General Meeting and Certificate Presentation, Old Beef Market (northeast corner of Rutherford Rd. and Steeles Ave.), 6:15 p.m. Speaker: Jeff White, P.Eng., president and founder of Delta Engineering. Topic: "Water, Sewage and the Inside Story of Walkerton."

Contact: Amity Lam, P.Eng., (905) 874-3065, ext. 27, or Max Morrow, P.Eng., (905) 456-3394, ext. 274.

November 18, 2000

OAKVILLE–Engineer-in-Residence Program, 9 a.m.-12 p.m., Holiday Inn Express, Bronte Road, south of the QEW. Cost: \$10 charge applies only to non-members.

Contact: Art Jain, P.Eng., (905) 827-7494.

DECEMBER

December 5, 2000

OAKVILLE–Laser Machining Seminar, 7-9 p.m., Holiday Inn Express (Bronte Road South of the QEW), Bronte Room, Oakville. Cost: \$25. Speaker: Dr. Marc Nantel, Photonics Research Ontario. **Contact:** Art Jain, P.Eng., (905) 827-7494.

FEBRUARY

February 3, 2001

LAKE ONTARIO–2001 Annual General Meeting, Harmony Creek Golf Centre, 1000 Bloor St. E., Oshawa. Cocktails: 6 p.m. Dinner: 7 p.m. **Contact:** Ian Forster, P.Eng., tel: (905) 475-6660; fax: (905) 475-4805; email: bareroots@sympatico.ca

February 16, 2001

BRAMPTON–Downhill and Cross Country Ski Day, Devil's Glen. Meet at lodge at 9-10 a.m. Après ski refreshments. Pre-registration essential by February 10. Cost: \$30 for adults; \$17 for children. **Contact:** Amity Lam, P.Eng., (905) 874-3065, ext. 27, or Max Morrow, P.Eng., (905) 456-3394, ext. 274.

Upcoming Council meetings

PEO Council meetings have been scheduled for:

- ◆ November 17, 2000
- ◆ December 1-2, 2000 (Knowledge Management Workshop)
- ◆ January 11-12, 2001
- ◆ February 15-16, 2001

All meetings will be held at PEO offices at 25 Sheppard Avenue West, Suite 1000, in Toronto. All members are welcome to attend as observers, provided they reserve with PEO. For more information, please contact the Executive Office at (416) 224-1100 or (800) 339-3716.

WEACNEWS

by R. Susan Smandych, P.Eng., WEAC member

National conference focuses on careers for women in science, engineering and math

Over 240 colleagues from across Canada, the United States and Sweden met in St. John's, Newfoundland, in July, for a national conference on women's success in science, technology, engineering and mathematics (STEM). The conference was organized by the Canadian Coalition of Women in Engineering, Science and Technology or CCWEST, an umbrella group of 22 organizations representing 15,000 members in these fields across Canada.

This year's CCWEST Conference was hosted by the Newfoundland and Labrador Chapter of Women in Science and Engineering (WISE) and the Natural Sciences and Engineering Research Council/Petro-Canada Chair for WISE for the Atlantic Region at Memorial University of Newfoundland.

The conference program included the latest in research on women in STEM, career support and networking strategies, leadership skills development, best practices for enhancing diversity, and examples of the excitement and challenges of STEM careers. Work sectors featured were the oil and gas industry, information technology, environment industry and academe.

Three keynote speakers shared their experiences and expertise in plenary sessions:

- ◆ Gloria Montano, director of the Institute for Women and Technology (IWT) and a senior program manager at Compaq Computer Corporation, spoke about the IWT. Founded in 1997, its mission is to increase the impact of women on technology, increase the positive impact of technology on the lives of the world's women and to help communities, industry, education and governments benefit from these initiatives:
- ◆ Kathleen E. Sendall, P.Eng., vice-president, engineering and technology, with Petro-Canada, talked about leadership and values; and
- ◆ Kathy Penney, regional vice-president of Jacques Whitford Limited in St. John's, reminded us of the importance of engineers in society, as well as of the importance of family.

Practical information on career development was provided in seminars. Workshops covered such topics as how to engage female high school students in computer programming, best practices for retaining women in the oil and gas industry, successful outreach programs targeted at girls and young women, high-tech entrepreneurs and women in management.

Conference delegates also shared information on research results and initiatives to reach, recruit and retain women in STEM fields.

PEO takes centre stage

Highlights of PEO's participation in the conference included:

- ◆ a tribute to the late Claudette MacKay-Lassonde, P. Eng., delivered by PEO President Peter DeVita, P.Eng., during the PEO-sponsored breakfast on the opening day of the conference. MacKay-Lassonde, who died in June, was PEO's first female president and an officer in the PEO Order of Honour. Among her many contributions to the engineering profession, she was involved in founding WISE and the Canadian Engineering Memorial Foundation;
- ♦ distribution of PEO's recently published Guideline on Human Rights in Professional Practice, which was developed by a subcommittee comprising members of WEAC and the Professional Practice and Complaints committees. WEAC initiated the guideline in an effort to build awareness about discrimination and harassment in engineering workplaces; and
- ◆ a presentation by Vera Straka, P.Eng., an engi-

neering professor at Ryerson Polytechnic University and WEAC member. Straka presented her paper entitled *Salary Gap in the Next Millennium* during the paper session on retaining women in engineering careers, which was chaired by Nancy Hill, P.Eng.

Straka noted that PEO's 1999 Membership Salary Survey indicated that the salary gap between male and female engineers has widened to approximately 11.4%. "This is alarming, considering the publicity on equality and the general belief that the gap is closing," she said.

"The conclusion that can be drawn is very definite: Salaries of females in EST (engineering, science and technology) are consistently less than male salaries in the same fields. It is difficult to interpret the results in order to explain the reasons for the wage gap, why it is possibly widening, and why there are differences in salaries between male and female engineers who graduated the same year."

Straka also said that although the glass ceiling "might have been broken" and professional women are on their way to the top, the wage gap and gender discrimination still exist. "The next millennium may not be about the recognition of the importance of women engineers, scientists and technologists, but, rather, about a constant pressure on governments and organizations to collect and release information by gender."

For more information, please contact Vera Straka at vstraka@acs.ryerson.ca.

CCWEST in 2002

Interested in attending the next CCWEST conference? It will be held in conjunction with the International Conference of Women Engineers and Scientists (ICWES), scheduled for July 27-31, 2002, in Ottawa. This event is being organized by the Natural Sciences and Engineering Research Council/Nortel Chair (Ontario) and WISE's Ottawa-Carleton Chapter. For more information, please contact Monique Frize, P.Eng., at monique_frize@carleton.ca and include ICWES12 in the subject line.

New associate editor joins editorial team



Dwight Hamilton

PEO welcomes
Dwight Hamilton as
our new associate
editor of Engineering
Dimensions and The
Link. Hamilton is a
member of the board
of directors of the
Canadian Society of
Magazine Editors. He
has worked at several

business and industry magazines, including *CAmagazine* (published by the Canadian Institute of Chartered Accountants) and *Today's Trucking*. He also has experience with one of Canada's largest news organizations, the Toronto Sun group of publications.

Hamilton was nominated for a 1999 Canadian Business Press award for best feature article, for a CA Magazine story on the financial rescue of the Edmonton Oilers. He can be reached at dhamilton@peo.on.ca



OSPE on the move...

by Joyce Rowlands, (Acting) Director, Communications and Public Affairs, OSPE

By the time you read this, the Ontario Society of Professional Engineers (OSPE) will have cut the umbilical cord physically linking it to PEO, and moved a couple of blocks north on Yonge Street to its new digs. This is a major event in the gradual evolution of OSPE as a separate entity. Other milestones on the road to "separation" include:

• the first annual membership survey on the issues facing engineers in Ontario, conducted in October (Note: Not all PEO members will have received the survey; it was sent to those with known email addresses, and those who are full members of OSPE);

- ◆ standing granted at Part II of the Walkerton Inquiry, which will examine issues concerning the future safety of the province's drinking water;
- ◆ a submission to the Ministry of Labour regarding requirements for pre-start health and safety reviews (previously known as predevelopment reviews) under the Occupational Health and Safety Act (OHSA), which are currently being revised;
- a submission to the Ministry of the Attorney General regarding preliminary recommendations for a new

Limitations Act;

- ◆ a protest letter to the Ottawa Transition Board regarding the recent appointment of a non-engineer to manage a number of predominantly engineering departments; and
- ◆ OSPE/PEO agreement and OSPE bylaws nearing completion.

For more details on these and other initiatives, see the open letter from OSPE board chair, Jeremy Cook, P.Eng., in the September/October issue of *Engineering Dimensions*, or visit OSPE's website: www.ospe.on.ca

Setting the record straight OSPE governance and first annual General Assembly

by Joyce Rowlands

There appears to be a wee bit of confusion out there about the proposed governance structure of the Ontario Society of Professional Engineers (OSPE), and the method for selecting representatives to the General Assembly, scheduled for November 11. So let's try to set the record straight.

Membership representation

There will be two types of representation; one geographic and the other based on sector of interest or practice. For the time being, it's assumed that boundaries for the geographic divisions will parallel PEO's chapter boundaries. Sector divisions will be self-generating: If and when a group of professional engineers wishes to form a sector group, provided they meet certain criteria (notably, a critical mass of members or prospective members), they may apply to OSPE for official status and the right to send a representative or representatives to the annual General Assembly. The number of geographic and sector divisions will likely vary over time.

Membership categories

All PEO members are automatically eligible to become sustaining members of OSPE. During the three-year transition period, there will be no fees for sustaining membership. Based on results of the February 2000 referendum conducted by PEO, OSPE takes the position that all PEO members are sustaining members of OSPE unless they individually request not to be. To opt out of OSPE sustaining membership, PEO members should email OSPE at: optout@ospe.on.ca, or write to OSPE at 4950 Yonge St., Suite 1000, Toronto ON M2N 6K1, stating their full name and PEO registration number.

For those who wish to more actively support advocacy for the profession, full OSPE membership is available upon payment of a \$50 membership fee. There will also be an affiliate membership category for professional engineers who are not PEO members (e.g. former PEO members living abroad who've temporarily suspended their Ontario licence), a student category and an intern category for Engineers-in-Training (EITs). To register as a full member, use the application form and prepaid envelope included with the September/October issue of *Engineering Dimensions* (see pages 24 and 25), or visit OSPE's website at www.ospe.on.ca.

Elections

All sustaining members and full members will be eligible to vote in elections for the board of directors; the nine directors will serve three-year terms. After the first elections, terms will be staggered so that, each year, three director positions are up for election. There will be no constituencies for these elections; all eligible members will be able to vote for all board positions. The board will elect a

chair and vice-chair from among its directors.

For the first elections, a special arrangement will be necessary, whereby three directors are elected to one-year terms, three directors to two-year terms, and three to full three-year terms. The nomination process will probably begin in January 2001, with elections in April. The elected directors will be installed at the first annual general meeting, expected to be held in May 2001.

In addition to voting in board elections, sustaining members and full members will also be eligible to vote for geographic and sector division representatives to the General Assembly, for the geographic and/or sector divisions to which they belong. The method for selecting/electing geographic and sector division representatives will be left to the divisions to decide. All representatives to the General Assembly must be full OSPE members, as must candidates seeking election to the board.

General Assembly

The General Assembly will be an annual issues forum, with discussion and debate based on results of an annual issues survey of the membership. The main purpose will be to identify, debate and prioritize key issues of concern to professional engineers in Ontario.

In addition, the assembly will make recommendations on ways to address these issues. It's anticipated that many such issues will have their roots within various industry/practice settings—hence the decision to form sector groups in addition to geographic groups.

The first General Assembly will take place on November 11, 2000, at the Delta Toronto Airport Hotel. Selection of representatives this year will be a bit different from what's described above, simply because the geographic and sector divisions are not yet in place. This time around, PEO chapters are being asked to select one representative each to send to the General Assembly. How they do this is theirs to decide. In addition, an equal number of non-chapter representatives will be identified by the OSPE board, primarily from among the many individuals who've written thoughtful letters and emails to OSPE and its predecessor, the Joint Advocacy Implementation Committee (JAIC), about issues facing engineers in Ontario. All representatives must be full members of OSPE-or willing to become full members before November 11. OSPE will cover representatives' reasonable out-of-pocket expenses, including travel costs.

OSPE is looking forward to a stimulating and successful first General Assembly!

Road to AGM October Identification of 2000 key advocacy issues for future board action, and Membership recommendations on **Issues** AGM approaches to issues Survey **Elected Board** Installed November 2000 April 2001 General **Assembly** Election **Issues Forum** of Board Members* January Chapter 2001 Reps* **Board** Sector Member Reps* **Nominations**

- * This year, chapter and sector representatives will be selected somewhat differently than they will be in future years (see "Setting the record straight").
- ** All full and sustaining members are eligible to vote in election of board members.



INCOUNCIL

Council considers proposals for secondary liability insurance, applied degree programs

SEPTEMBER 15-16, 2000 MEETING

by Alison Piper

Earlier this year, the Canadian Council of Professional Engineers (CCPE) asked PEO and its other constituent engineering associations to consider a proposal for a mandatory, national secondary liability insurance program that would provide blanket coverage for their members at a nominal cost. The proposed program would provide protection to:

- engineers employed by an entity other than an engineering consulting firm;
- salaried engineers of a bankrupt or insolvent consulting firm, which no longer has insurance protection;
- engineers for professional services provided outside their main employment, provided fees are less than \$2,000 for each project and not more than \$10,000 annually; and
- ◆ retired engineers, for professional services rendered before retirement.

 The proposal would have CCPE cover the cost of the program's first year in 2001, to allow provincial associations time to implement funding. PEO and other associations would start billing members for the program in January 2002.

At its September 15-16 meeting, Council approved a PEO position on the proposal and authorized that the position be communicated to CCPE. The position states that PEO is not prepared to commit to a mandatory program of secondary liability insurance for its members, partly because of a lack of consensus as to whether the program is regulatory or non-regulatory. This is an issue because PEO has committed to divesting its non-regulatory activities. PEO also plans to communicate with members on liability-related issues through its publications and website, and to obtain member feedback, before making a commitment to CCPE.

Applied degree programs

Earlier this year, the Ontario government released a consultation paper on options for increasing degree opportunities for Ontarians, which included establishing private, degree-granting institutions in the province, and enabling Ontario Colleges of Applied Arts and Technology to offer applied degree programs, such as those leading to a bachelor of technology degree. The college system is scheduled to introduce a limited number of applied degree programs on a pilot basis in September 2001

At its September meeting, Council appointed Norman Williams, PhD, P.Eng., deputy registrar, admissions, as PEO's nominee to the Quality Assessment Board being created by the Ministry of Training, Colleges and Universities to work with professional licensing and accreditation bodies to assess proposed applied degree programs and to develop academic program standards. The ministry has stated that any proposed degree program designed to lead to professional licensure or accreditation in Ontario should be reviewed by the appropriate licensing or certification body as part of the academic assessment process.

Speaking about the initiative, Councillor Max Perera, P.Eng., said: "The implications of this initiative are far reaching for the profession. Although it appears to be a stellar move on the part of the government to address shortages of skilled professionals to feed a bustling economy, we need to look at this from the perspective of maintaining standards, and supporting the accreditation process."

PEO sponsorship/grant policy

PEO now has an official policy to enable staff to make decisions on requests for sponsorship and grants up to approved budget levels. Previously, the President and/or Executive Committee had to assess every request on an individual basis, a time-consuming process with the potential to lead to inconsistent funding decisions. Under the new policy, only extraordinary requests for sponsorships or grants will need to be referred to the Executive Committee. The policy caps grants or sponsorships at \$1,000, (except for extraordinary trquests) and states that PEO will consider requests with the potential to improve:

- standards of professional practice or ethics in engineering;
- public understanding of professional engineering as a licensed, regulated profession; or
- public understanding of professional engineering as an open, inclusive profession.

To be considered, sponsorships or grants must also offer opportunities for increasing awareness of PEO.

New national advisory committee

To help keep Council better informed of the activities of the Canadian Council of Professional Engineers and the Engineering Institute of Canada (EIC), PEO create a new standing committee, comprising all the PEO members who serve on CCPE and EIC committees. This includes CCPE's four standing committees: the Canadian Engineering Accreditation Board, Canadian Engineering Qualifications Board, Canadian Engineering Resources Board and Canadian Engineering International Board. The mandate of the new National Committee Members Group will involve:

- exchanging information on national activities among the members of the group and with PEO staff;
- reporting to Council on significant issues under discussion, particularly any that might lead to a conflict between a national position and an already established PEO position or direction;
- soliciting and coordinating feedback from within PEO on national positions, so as to help avoid conflict and/or enhance the harmony of the profession across Canada; and
- driving the provision of timely information on national activities directly to PEO members, using membership publications and the Internet.

The committee is to meet once a year, with additional meetings to be called at the chair's discretion or in response to a request from CCPE.

In discussing whether to establish the committee, some Councillors said it was unnecessary because PEO already has three directors appointed to CCPE's board. Others noted that PEO directors get only a "high level" view of CCPE's activities, and that improved communication is needed among PEO members serving on national committees and between these volunteers and Council.

PEO membership directory

Council authorized the publication of a new membership directory in both print and electronic formats. The new directory is to contain not less than the information included in the most recent edition, which was published in 1994.

In discussion, Councillors generally agreed that an updated directory is needed to enable members to communicate with each other. Several noted that in implementing the membership directory, steps will need to be taken to ensure that the privacy of members' personal information is protected, and that the directory is not used for commercial purposes.

Chapters to join forces

Council approved a proposal to amalgamate the Kitchener-Waterloo and

Guelph-Cambridge chapters into one chapter by January 1, 2001. The executives of the two chapters feel the move will help them to better coordinate chapter activities and to boost member participation. The next steps for the amalgamated chapter include drafting new bylaws and selecting a name. It will have about 3000 members.

LGA Appointment

Council received an Order in Council from the Ontario government to appoint Peter Frise, PhD, P.Eng., to a second, three-year term as a Lieutenant Governor Appointee to PEO Council. His term will run from July 2000 to July 2003.

Currently, PEO Council has three vacant Lieutenant Governor Appointee positions to be filled by the government.

Registrar presents activity summary, first half accountability report



At the September 15-16 meeting, CEO and Registrar Roger Barker, P.Eng., presented a summary of recent PEO activities to Council. Among the highlights:

Roger Barker P. Eng.

- ◆ PEO has hired new staff to manage its engineering internship and student membership programs (see "New staff member to advance Student Membership Program" on p. 6, and "PEO appoints new EIT program manager" on page 8).
- ◆ PEO is following a simplified approach to developing its budget for 2001, which involves using the 2000 budget as a baseline, with variances based on known or anticipated program or economic changes. The Finance Committee is expected to present a preliminary budget to Council in October, which will be revised as necessary for Council approval in November.
- ◆ In October, PEO was scheduled to meet with Microsoft in Redmond, Washington, to exchange information on the long-standing issue of the use of the Microsoft Certified Systems Engineer and Microsoft Certified Professional Systems Engineer designations for graduates of the company's training programs. The Canadian Council of Professional Engineers and the Quebec and Alberta engineering licensing bodies were also scheduled to participate in the meeting, which aimed to clarify the nature of the Canadian system of regulating the engineering profession and the statutory mandate of the provincial licensing bodies to control the use of engineering titles.
- ◆ At its first meeting in August, the Certificate of Authorization Task Group approved its terms of reference and appointed Councillor Gina Cody, P.Eng., as chair. The task group plans to meet on a monthly basis, and welcomes written submis-

- sions from members on issues related to the C of A program. (Send comments to cofareview@peo.on.ca, and watch for further coverage in PEO publications and on the website.)

 Members are also welcome to attend meetings, upon request.
- ◆ The Advisory Committee on Committees is expanding its volunteer database system to enable PEO members to obtain committee information from PEO's website and to register online for committees and task groups. It is hoped that the new system will be up and running by the end of the year.
- ◆ Planning is now underway for National Engineering Week (NEW) 2001, which will run from March 3 to 11, 2001. As part of its long-standing Engineering Week partnership with the Ontario Science Centre, PEO will be the program sponsor for the K'Nex Exhibition, which will begin during NEW and continue for three months. PEO will also continue its support in 2001 for the "Engineers are Everyday Heroes" program, which was successfully launched during NEW 2000.
- ◆ The next Chapter Leaders Conference will take place on November 3-4, 2000, at the Best Western Airport Hotel in Toronto. (For more information, contact Michael Chan, P.Eng., at mchan@peo.on.ca.)

In the second part of his report, the Registrar presented PEO staff Accountability Reports for the first half of 2000. The reports are available on the PEO Operations page under the About PEO button on PEO's website at www.peo.on.ca.

Alison Piper



YOURSAY

Stamp design a tough

I would like to add my comments to the discussion on Canada Post's commemorative stamp for the Iron Ring Ceremony's 75th anniversary, which was released earlier this year.

I suppose that Canada Post caters mostly to stamp collectors when it selects commemorative stamp designs. The tête-bêche concept [a stamp in a joined pair, in which the two parts are inverted in relation to each other] used in this stamp is very rare and unique to stamp collectors.

As to the selection of Canadian engineering achievements depicted on the stamp, I am sure there are probably thousands of other achievements that would have equally deserved to be included. I guess Canada Post couldn't please everybody.

In the end, maybe Canada Post should have followed my stamp design proposal. This would have involved using, along with the iron ring, the "natural engineer" or the "engineer of the wild" (two common names for the beaver, a Canadian symbol that has been used from the early days of the profession to represent engineering in general), to commemorate the 75th anniversary. Period.

N. Gareffa, P.Eng. Cornwall, ON

Fee increase a revenue grab?

I was pleased to read in the June/July 2000 Link ("Council confirms commitment for interim OSPE funding," p. 3) that PEO Council has confirmed a commitment to transfer \$30 per full-feepaying member of PEO to the Ontario Society of Professional Engineers (OSPE). Such support from PEO is essential, if an advocacy organization is to establish itself as an effective voice.

On the other hand, I was very disappointed in Council's decision to impose a corresponding fee increase of \$30 on PEO members, which is to remain in effect after financial support to OSPE ceases in three years.

Elsewhere in the same issue of The Link, there is reference to the "impact on PEO of divesting its non-regulatory functions to the OSPE," ("Strategic planning gets underway," p. 1). I would have thought that one of the impacts should be a reduction of expenses for PEO, due to the reduction in its functions. Instead, the occasion seems to have served as an excuse for a revenue grab. This does not reflect the kind of efficient management that one might expect of a professional engineering association. It will not help to improve the low capture rate of new graduates into PEO.

> Richard J. Kind, P.Eng. Ottawa, ON

Looking back on the Y2K crisis

Lately we have heard the Y2K problem spoken in the same breath as software regulation, so

much so, that we felt compelled to comment.

Nearsighted and incompetent are two common terms used to describe the decision to use a two-digit date field for the year. Some within the PEO community have gone further, suggesting that programmers were even negligent. The Y2K problem has often been cited as justification for PEO's push for software regulation. But is the position valid?

The answer lies in an historical understanding of the situation that led to the problem, both from a hardware and a software standpoint.

On the hardware side, the first computers of the mid- to late 1940s had relays and vacuum tubes, not transistors. Data was input with paper tape, and later with punch cards. Any input error was usually fatal to the program, so anything that reduced input both saved time and reduced the possibility of input errors. As an example, at one of its data processing centres, AT&T tried to contain all information for a particular transaction on a single 80-column card. This alone was considered to have driven the decision to limit the year to two digits or columns. In some instances, a one-digit code was used for the year, or simply eliminated altogether.

Storage cost was another factor that affected the decision. It is estimated that in the early days of computer technology, the date field occupied as much as 3 per cent of all computer data. The cost of leasing data storage space in the 1960s was nearly 10,000 times what it costs today. Even in the 1980s, data storage cost was still 20 times today's cost. Thus, the cost saving of eliminating the first two digits of the year was not insignificant.

On the software side, COBOL was conceived and devised in the late 1950s and early 1960s by Grace Murray Hopper. The development was largely under U.S. government sponsorship, and was intended to provide businesses with a publicly available programming language that could be adapted to the different computers of the time. Its subsequent popularity was likely due to the fact that it was relatively easy to learn and write, and it was possible to use ordinary English expressions in instructions and data definitions. It became the language of choice in the computers of most major companies, and it was mandated by the U.S. government for its machines.

Although COBOL could handle data fields of any length, because it gained its popularity during the days of punch cards and expensive memory storage cost, millions of lines of code were written using a two-digit date field. Even after some of the COBOL designers pointed out the limitations of this practice, it had already become a standard, so much so that the Pentagon mandated the two-digit year in all of its COBOL code.

As with many decisions throughout history, the choice to initially use, and later maintain, a two-digit date field was as much affected by accountants and bureaucrats, as computer scientists and programmers. Considering the above, is PEO's posturing regarding Y2K justified? We think not.

References

1. Cohen, I. Bernard. "Father of the Computer Age," *Invention & Technology*, Spring 1999.
2. Fenster, J. M. "Amazing Grace," *Invention & Technology*, Fall 1998.
3. Stout, Robert B. "Y2K," Letters, *Invention & Technology*, Spring 2000.

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A world without oil?

In the May 2000 issue of *Popular Science*, an ominous graph accompanies an article on promising technology in hybrid gas/electric cars. This graph, reputedly based

on information from *Oil & Gas Journal*, predicts substantial exhaustion of all known world oil reserves in a 10 to 15 year period. Astonishingly, the article seems to ignore the most obvious and disturbing questions: What will we do in a world without oil? How do we prepare for it?

There are major implications for all existing modes of transportation; feedstock material for plastics and synthetics; heating of industrial processes, homes and factories; and for lubrication for every mechanical device ever manufactured. Even if natural gas can be used to fill much of this void, a major infrastructure program to construct pipelines and fuelling stations will be required, as will a major overhaul or retrofit of every existing oil-based combustion device-all in a relatively short time span.

No oil. The national and international consequences for

the haves and the have-nots are mind-boggling: economic, social and political disruption on a worldwide scale within our lifetime. Does this sound like a siren call for engineers?

As a large, cold, industrial country, it does not seem to be in the best interest of Canada or our way of life to blithely ignore a problem, which is one day closer every day. We may have just enough time to prepare for a minimum impact on our country and our world, by starting to plan and implement necessary changes now.

Engineers must lead the way. Are we up to both the challenge and the timetable, or will you and I allow society to play ostrich, requiring us to attempt a new start on the basic necessities in an immobile world?

> J.G. Carkner, P.Eng. Cobourg, ON

GOVERNMENTAFFAIRS

Activities in 2000-A status report

by Dwight Hamilton

PEO's Government Affairs Committee (GAC) continues to develop working relationships with several provincial ministries, as well as promoting a better understanding within government of the association's mandate. Contacts have been established in a number of agencies and ministries by GAC members and PEO staff working cooperatively with other committees and task groups.

PEO continues to be in contact with the Ministry of the Attorney General (responsible for the Professional Engineer's Act) to discuss issues related to creation of the Ontario Society of Professional Engineers (OSPE) and implementation of recommendations made by the Task Group on Admissions, Complaints, Discipline and Enforcement requiring changes to the Professional Engineers Act and Regulation 941. Proposed revisions to the Act that would enable implementation of these recommendations as well as transitional funding for OSPE have been submitted to the government for passage through the Red Tape Bill process.

PEO has also been in contact with the Ministry of Consumer and Commercial Relations (MCCR) regarding proposed new regulations under the Condominium Act. PEO has reiterated its major concerns over requirements for the certification of condominiums by engineers and architects, as a condition of registration. Currently, the proposed certificates do not reflect building or construction practices. There is also a concern that real estate paraprofessionals would be allowed to evaluate infrastructure and physical assets performed as part of reserve fund planning. In some cases, the evaluation may involve the practice of engineering or architecture. PEO has met with the Ontario Association of Architects and the Greater Toronto Home Builders Association, and all are in agreement over these issues.

In addition, the GAC, along with the Environment Committee, has been providing assistance to the *Ministry of the Environment* (MOE). The MOE has announced a new drinking water regulation requiring all municipalities to submit an independent professional engineer's report on the state of their water systems every three years. The ministry sought assistance from PEO in preparing the regulation, after a letter was sent to Premier Harris' office by President Peter

DeVita, P.Eng., offering PEO's assistance in dealing with the drinking water contamination crisis in Walkerton. PEO has also been granted standing for Part II of the Walkerton Inquiry, which will hear submissions on broad province-wide issues, such as the regulatory regime and the state of engineering.

The GAC is also working with a Professional Practice Committee (PPC) subgroup that met with officials from the **Ministry of Transportation** last May to discuss the ministry's Quality Verification Engineer (QVE) Program, which requires contractors to take responsibility for work they undertake for transportation projects by having a professional engineer certify, under seal, that construction has been performed according to contract documents. Introduced in 1999, the program has raised questions from both consultants and contractors. Since then, the ministry has clarified the requirements of the QVE to certify work.

PEO still has concerns over the potential problems of having the QVE in the employ of the contractor and will continue to monitor the situation.

The **Ministry of Labour** is currently revising requirements for predevelopment reviews under the Occupational Health and Safety Act (OHSA). The Regulations for Industrial Establishments of the OHSA require that, in certain circumstances, a factory owner obtain a report signed and sealed by a professional engineer stating that a particular piece of equipment will comply with the act and regulations, provided that it's installed or altered according to design drawings, layout and specifications. A predevelopment review is a design review of plans, drawings and specifications to confirm compliance with the OHSA and regulations.

In general, under the proposed new requirements, reviews would be needed for activities that include the custom design and modification of specific types of industrial equipment and would need a P.Eng. sign-off. The GAC generally supports the proposed amendments to the regulation, because they would clarify the labour ministry's expectations and maintain a prominent role for engineers in ensuring worker safety. However, the committee believes that a great deal will depend on how the amended regulation is interpreted in the field. It has been recommended to the ministry that, once amended, the regulation be periodically reviewed to ensure that its intent is being met.



Laser micromachining is cutting tool of the future, says scientist

by Daniel Koskinen, P.Eng.

With the return of our athletes from Australia we have all heard the Olympic motto "Swifter, Higher, Stronger," but what should the motto be for Canadian industry? Scientists at the Laser Micromachining Facility of Photonics Research Ontario believe it should be: "Cleaner, Smaller and more Accurate." PEO's Essex County Chapter was the first to hear this message on October 5, during a "Light Is the Tool of the New Millennium" presentation made by the Laser Micromachining Facility's senior staff scientist, Marc Nantel, PhD. The presentation was offered to a number of local chapters, and Essex

County, Etobicoke, Lakehead, York and Oakville responded quickly enough to obtain the limited dates available for 2000.

As Nantel explained, laser micromachining technology can cut any material, whether it is metal, plastic, glass or ceramic, to an accuracy of microns (0.001 mm). Set up to provide maximum flexibility, the Laser Micromachining Facility can cut with infrared, visible and ultraviolet laser light at speeds of up to 400 millimetres per minute. Nantel pointed out that lasers used in industry cut materials even faster.

The Laser Micromachining Facility operates both as a facility for developing process paths and training for industry. Nantel noted that he teaches the Industrial Research and Development Institute course on laser machining for manufacturing, and he was recently appointed as the project leader for the photonics education and training initiative that will see photonics technicians and technologists graduating from Niagara College in 2003 and Algonquin College in 2004.

Why the focus on laser micromachining technology? Nantel said he's confident that laser micromachining is the way of the future, since it's cleaner than chemical milling and water jet systems, and more accurate than electric discharge machining (EDM). And because a computer controls the 20-micron

diameter laser beam that cuts the material according to CAD drawings, laser micromachining is more flexible than competing technologies.

To demonstrate what laser micromachining can do, Nantel ran a slide show highlighting the range of items made at his facility, including biomedical, telecommunications, automotive and electronic applications. There was also an exhibit on these applications set up for viewing after the presentation.

A question and answer period that covered subjects from star wars of the Reagan years, to communication and medical applications, followed the 45-minute presentation. Nantel stressed the need for education

in the laser industry, as well as the need for industry to look at laser micromachining as an alternative to other industrial cutting tools. His main concern is that laser micromachining is more readily accepted in other parts of the world than it is in Canada.

Upcoming presentations to PEO chapters include Thunder Bay (November 3), York (November 15) and Oakville (December 5). For more information, contact the Laser Micromachining Facility directly through its website at www.pro. on.ca

Daniel Koskinen, P.Eng., is technical transfer coordinator at Photonics Research Ontario, an Ontario Centre of Excellence.

Turning kids on to engineering



Nabil El-Khazen, P.Eng., a member of the Toronto-Humber Chapter's executive and president, El-Khazen Consulting Ltd., took a school outreach presentation on the road this August and September–receiving an enthusiastic response from teachers and kids alike. He visited all eight Oakville Parks and Recreation summer camps and three Grade 10 classes at Port Perry High School. After viewing audiovisual materials related to engineering (see photo), the students and campers had a chance to ask questions and took home information brochures.

Kids aged 10 to 12 at the summer camps also participated in a writing contest, in which they were asked to comment on what they thought of engineering. Here are the top three responses:

"I think professional engineering is about designing stuff and taking the responsibility." Alex Leonard, St. Luke's Camp

"Engineering rocks and it's number one!"

Jaime Matos, Abe Lane Camp

"I like engineering, because I like roller-coasters and beluga whales."

Tia Paul, Brookdale Camp

New staff member to advance Student Membership Program

by Susanne Frame

Future engineers have a new champion in their quest to graduate from engineering student to P.Eng. Gaston Doiron, P.Eng., joined PEO's Professional Affairs Department this September as Student Membership Program Liaison, to enable further development and expansion of the program.

Doiron holds an M.Eng. (structures) from McMaster University, and a BScA (civil engineering) from the University of Moncton. Before joining PEO, he held an engineering position with the Canadian Institute of Steel Construction, a national industry association that promotes the use of structural steel.

Doiron is responsible for the online Student Membership Program (SMP) for undergraduate engineering students in Ontario. The program's four main objectives are to: increase the level of professional knowledge among students, improve and strengthen communication links between students and the engineering community, standardize PEO's efforts related to student activities and programs, and help ensure a seamless transition for student members moving from school to work.

"Students are interested in learning

more about the engineering profession," notes Doiron. "The student program can be a powerful way for PEO to connect with them throughout their undergraduate years."

To promote the SMP to students, a faculty/student liaison team has been established at all 13 Ontario engineering schools. Program posters and brochures have also been prepared for the engineering student body. Since its start-up in January 2000 as an online, interactive program, over 2700 engineering students have registered.

Beyond marketing the program effectively, which includes developing dynamic and informative content for the SMP website, Doiron hopes to make student membership a seamless step in the transition from student to practitioner.

"It would be helpful to talk to students about their pregraduation experience, and the need to track their engineering work experience," says Doiron. "After their second year, students may receive up to a maximum of 12-months credit toward their four-year experience requirement needed for licensure. At some point, we hope to enable students to input this information electronically."

To learn more about the SMP, visit www.engineeringstudents.peo.on.ca.

What's new on the PEO website?

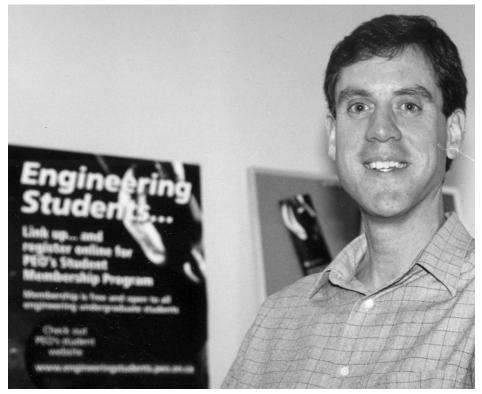
Information about PEO and its activities now regularly posted on the website includes:

- Council meeting agendas and meeting minutes
- ◆ PEO committee and task group meeting schedule
- ◆ PEO Operations Directory
- ◆ Registrar's Accountability Reports

To access these or other recently posted documents, click on "What's new on the site" on the home page.

PEO also has a Walkerton page, with news releases, letters and activities related to the drinking water contamination crisis (www.peo.on.ca/Communications/Walkerton_home.htm).

Also, both *Engineering Dimensions* and *The Link* are available in PDF formats. To access back issues, visit www.peo.on.ca/Communications/engineer.html.



As PEO's Student Membership Program Liaison, Gaston Doiron, P.Eng., plans to make connecting with engineering students, and marketing and further development of the program his priorities.



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PEO appoints new EIT program manager

by Alison Piper

PEO has a new manager for its engineering internship training (EIT) program, who is eager to provide a more meaningful program to program registrants and to encourage more engineering graduates to register.

Appointed to the position at the end of September, Gerry V. Meade, P.Eng., will be responsible for enhancing PEO's EIT program by preparing and distributing an EIT newsletter, reviewing the experience of EIT program registrants, encouraging engineering graduates to obtain their professional engineer licence, and working closely with industry to develop company-run EIT programs.

Meade graduated from the University of Toronto in 1968 with a bachelor's degree in civil engineering, and has had a varied work experience in multi-disciplinary engineering environments. Before joining PEO, he was the

technical director for the Continental Automated Buildings Association. He has also held a variety of management positions at Ontario Hydro, where he was responsible for marketing, technical support, product development and environmental studies.

"I am pleased to be joining the Admissions Department at PEO and look forward to building on the work that has already been done to develop and operate a quality engineering internship training program" he said. "Both PEO and the Canadian Council of Professional Engineers have identified the EIT program as an important vehicle to help engineering graduates gain the experience necessary for licensing. Recent graduates are faced with many challenges, but obtaining their professional engineering licence is an achievement that will benefit them for their entire careers. I will certainly enjoy working with and helping these new professionals, as they embark



Gerry Meade, P.Eng., is gearing up to expand the engineering internship training program. He joined PEO's Admissions Dept. in September.

on this next step in their lives." Meade reports directly to

Meade reports directly to Norman Williams, PhD, P.Eng., deputy registrar, admissions. The department is responsible for processing licence applications, including providing guidance and advice to applicants and determining if they meet PEO's work experience requirements for licensure. For more information on PEO's

EIT program, contact Gerry
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