



Deadline approaching for 2001 Future Engineers Initiative

by Dwight Hamilton

Proposals for projects to be funded by PEO's Future Engineers Initiative (FEI), which can qualify for up to \$7,000 in funding, must be received by December 8, 2001. PEO provides \$20,000 in funding to projects across Ontario that encourage young women and girls to consider careers in engineering. The projects to be funded will run during the spring and summer of 2002.

Eligible projects in the past have included engineering summer camps, career days, and other events that explain and encourage engineering careers.

FEI is an outreach program developed and managed by PEO's Women in Engineering Advisory Committee (WEAC). Established in 1998, the program's aim is to increase the percentage of women who enroll in accredited university engineering programs and ultimately, the number of licensed female engineers in the province.

Proposals are reviewed by a PEO WEAC subcommittee, after which application approval and funding allocation is to be completed by the end of December.

Women currently make up about 21 per cent of students in Ontario's 13 accredited university engineering faculties. Although the percentage of female PEO members is about 6 per cent, women account for about 19 per cent of new entrants to the profession.

Information on the FEI grants has been sent to PEO chapters, accredited engineering faculties, high school directors of science and mathematics and other groups who have expressed interest. FEI funding is available to programs that directly encourage women to enter engineering careers. Projects may target women specifically or ensure that the number of women participants is equal to or exceeds the number of men.

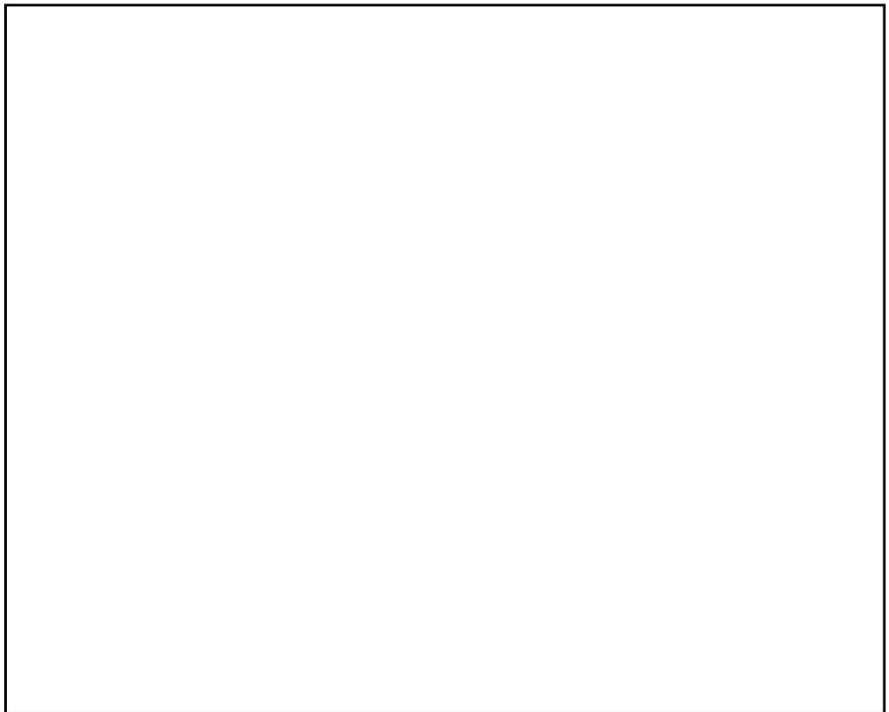
Examples of FEI-funded projects include:



Girls Week camp, part of a program for students completing grades three to nine, is held at the University of Toronto.

- ◆ school contacts with students, including engineering projects and activities;
- ◆ promoting and explaining engineering to high school teachers and/or guidance counsellors;
- ◆ engineering/science summer camps;
- ◆ Saturday morning engineering clubs;
- ◆ engineering career conferences;
- ◆ National Engineering Week activities;
- ◆ promoting the achievements of women engineers in high schools;
- ◆ projects for women who have been in the workforce or child rearing and are considering engineering as their second career; and
- ◆ university engineering recruitment programs.

For 2001, PEO approved \$20,000 support for 13 programs under the initiative. For further information, contact Stephanie Wei, PEO communications coordinator at swei@peo.on.ca.



Foundation for Education increases outreach

by Stephanie Wei

The Ontario Professional Engineers Foundation for Education has elected a new president to steer it through a coming period of growth. George R. Comrie, P.Eng., was elected by the board of directors of the foundation at their August 2001 meeting. Comrie is senior West Central Regional Councillor for PEO Council, and has been active in education outreach on behalf of the profession for nearly 30 years. Appointed Councillor Ken Lopez, P.Eng., was elected vice-president of the foundation. Other members of the board are Colin Cantlie, P.Eng., Brenda Caplan (secretary), Stephen Jack, P.Eng., Nick Monsour, P.Eng., and Linda Prince, CA (treasurer).

The foundation is a non-profit, charitable organization established by PEO as an independent entity. It provides scholarships to engineering students to encourage students to pursue careers in engineering. The foundation makes funds available to each engineering school, which awards the scholarships according to criteria established by the foundation. The scholarships are financed through donations from Ontario professional

engineers. Donors contribute by indicating their support on PEO fee invoices and adding their contribution to their annual fee payment. In 2000, professional engineers donated over \$65,000 to the foundation.

The foundation has recently approved increasing the value of scholarships to students within accredited engineering programs in Ontario.

The scholarships “establish a connection between the students and the engineering profession,” states Comrie. “We don’t want students to just go to an engineering school and get a job in engineering; we want them to be part of our self-governing profession, which has been given the right to title and practice to protect public safety. The scholarships are worth more than just the dollar value, they encourage students to identify with the profession that we hope they will join.”

In addition to reaching out to students, the scholarships serve to reinforce the profession’s support of high standards and professional competence. Comrie believes competence has two elements: knowledge and responsibility. The foundation rewards academic achievement

and gives students “a sense of belonging to a group of people who have gone before them people who care and accept the responsibility of being part of the profession.”

The new president also sees the work of the foundation as building on the partnership between the engineering schools and the profession. Comrie believes that “the scholarships are a tangible reinforcement of how the profession supports excellence in engineering education.” As part of the foundation’s work in reaching out to the universities, board member Nick Monsour, travelled to campuses across Ontario over the past year to gauge the schools’ reaction to the foundation’s scholarship program. On his recommendation, the foundation recently raised the level of entrance scholarships from \$1200 to \$1500, and the level of undergraduate scholarships from \$600 to \$1000. The \$100 payment to Gold Medal recipients will be eliminated.

The foundation will need to increase the level of donations to fund the increased scholarship levels. To address this need, a new communication plan has been drafted, which Comrie hopes will make more professional engineers aware of the foundation’s important work.

The board is also currently engaged in a comprehensive review of the foundation’s objectives and programs to ensure their continuing relevance and viability. “We are looking at how we can increase the scope and impact of our activities. We are also considering how to expand our membership so that it better represents all stakeholders in education outreach within the profession,” says Comrie. “Eventually, the foundation will have to be self-sustaining and independent of PEO’s operations.”

To combine a donation to the foundation with payment of PEO’s annual fee, look for the tick-off box on the PEO invoice and add the donation to your fee payment. Donations can also be made directly at any time by sending them to the Professional Engineers Foundation for Education, c/o Professional Engineers Ontario, 25 Sheppard Avenue West, Suite 1000, North York, ON M2N 6S9.

Engineering bodies build foundation for professional practice and ethics in process of revival

by Sharon Van Ihinger

Three U.S.-based engineering bodies have determined that the route to their future

success lies in helping their members enhance their knowledge of ethics and professional conduct issues. Accordingly, they've teamed up to create a new Foundation for Professional Practice (FPP).

A proposal to form the new foundation was approved unanimously last July by the board of the 123,000-member American Society of Civil Engineers (ASCE). The other founding partners are the ASFE (formerly the Associated Soil and Foundation Engineers), comprising environmental, civil and geo professionals, and the Institute for Professional Practice (IPP) based in New Jersey.

The IPP's previous role in assisting geotechnical engineers with practice and ethics issues will be expanded by the new FPP. ASCE President Robert Bein, P.E., says that the creation of FPP is an important step in attaining the goals of its new strategic plan, *Building ASCE's Future*, which seeks to position "engineers as global leaders building a better quality of life." Toward this aim, FPP will focus on developing ASCE members as leaders committed to lifelong learning.

ASFE also sees FPP as playing a major role toward meeting the strategic objectives in its annual plan, which calls for a "process of revival" in the profession through enhancing business practice resources and education, programs, services and materials. ASFE sees identifying and responding to emerging issues as key to attaining the goals in the annual plan. ASFE President W. Jerrold Samford, P.G., says that FPP will help to restore to the civil engineering profession "the respect and honour that is the due of those to whom society has entrusted the livability of our planet."

Coincidentally, in developing its recently endorsed Strategic Plan (see "Reigniting Relevance," *Engineering Dimensions*, July/August 2001, pp. 32-33), Professional Engineers Ontario (PEO) also came to the conclusion that the key to respect and relevance for PEO and the P.Eng. licence lies in ensuring that they are associated with high standards of competence, professional conduct and ethics.

The plan's five strategic imperatives are supported by a number of strategic goals and initiatives, implementation of which will begin in 2002 and continue for several years. For further information on PEO's Strategic Plan, see www.peo.on.ca.

Queen's Park introduces legislation to reform building code enforcement

by Dwight Hamilton

The most comprehensive change to the province's building code enforcement in over 25 years was recently introduced for first reading in the legislature by municipal affairs and housing minister Chris Hodgson.

According to the ministry, the new *Act to Improve Public Safety and to Increase Efficiency in Building Code Enforcement* would enhance the qualifications and accountability of building practitioners.

The act's provisions would: require all building practitioners, including engineers, to sit exams on code knowledge; limit permit fees to the reasonable cost of enforcement; allow municipalities to outsource plan review and construction inspection functions to Registered Code Agencies; and require building practitioners to carry insurance.

The new act's provisions are based on recommendations in a report from the province's Building Regulatory Reform

Advisory Group (BRRAG). The group comprises major building sector stakeholders (including PEO) and was created by the Ministry of Municipal Affairs and Housing in spring 2000.

"From a building official's point of view, this is the most significant improvement in the building regulatory field since the inception of the Ontario Building Code," says Rocky Cirminara, a co-chair of BRRAG. "This legislation would improve the knowledge of designers and building officials, would reduce the time required to get building approvals, and would result in more accountability and a fairer liability framework. Municipalities have been requesting these reforms for many years," he adds.

Two major implications for PEO and the regulation of professional engineering are anticipated. First, PEO has been offered the opportunity to be responsible for the administration of the exams to be taken by professional engineers to test building code knowledge. Second,

the act stipulates that all entities that offer design services related to the building code must be registered and hold mandatory liability insurance. PEO's registry would identify those entities that fulfill the mandatory insurance requirements and those professional engineers who have passed the exam.

A PEO task group on BRRAG has been considering what PEO's position on the initiative's proposals should be. It is due to present its recommendations to Council on Nov. 16. The task group will recommend that PEO administer the registry of all PEngs required to write the new exam, not just designers or those who submit applications for building permits. The task group believes it is appropriate for PEO to register PEngs in the municipal and construction sectors as well, regardless of their role.

A meeting involving PEO, the Ontario Architects Association and the Ontario Building Officials Association has been scheduled for Dec. 20 to discuss the proposed legislation.

Civil engineers strike accord to tap into NAFTA

by Dwight Hamilton

The Canadian Society of Civil Engineering (CSCE) has entered into an alliance with its sister organizations in the United States and Mexico to realize the full potential of the NAFTA agreement.

The North American Alliance for Civil Engineering (NAACE) was formed from an agreement dubbed the "Monterey Accord" and is intended to enhance the resources available to about 153,000 civil engineers and related professionals in the three countries. With NAACE in place, the organizations will cooperatively tackle international competitiveness, as well as cross-border issues like educational requirements, and harmonizing systems of units, design codes and standards of practice. In addition, a series of specialty conferences through the organizations' technical councils will be implemented and joint mem-

berships will likely be offered.

Robert Bein P.E., president of U.S. counterpart ASCE, said: "Through my travels I have come to realize that civil engineering is a global responsibility, and we, as civil engineers, must face that responsibility together since we share not only the similarity of our domestic issues, but many of the challenges that are brought about by globalization. I believe that North Americans have reached the stage where our borders can be turned into bridges."

Under NAFTA's provisions, a Canadian consulting engineer can work in the U.S. or Mexico, explains Michel Langlier, CSCE executive director, and having harmonized standards, codes and practices could be one way to achieve more mobility for PEngs. "That's where our commitment is right now, so that Canadian engineers can benefit out of this agreement," he says.

"This agreement blurs the borders between our countries, allowing us to begin

a dialogue on establishing uniformity in our engineering practices," says James Davis, P.E., ASCE executive director. "Our efforts will lead toward a higher standard of living for all North Americans."

As well, because civil engineers in Canada and the US are required to be licensed more often than engineers in other disciplines, the issue of reciprocal licensing cannot be ignored. "It's an agreement that we will cooperate in these areas as a learned society," says Langlier.

"We explained to [the other organizations] that we do not have the legal authority to speak on [licensing] matters, but because of the relationship we have enjoyed with the American society throughout the last century, they sought our involvement first and recognized that we could bring the right parties together," he says. "At that point, we will certainly seek the involvement of the proper authorities."