



Bringing the profession into Y2K

Patrick Quinn, P.Eng.

by Alison Piper

Patrick Quinn, P.Eng., PEO's President for the new millennium, is an agent of change who's not afraid to raise issues for debate in the public arena. During his career, Quinn has campaigned for engineering to be more proactive in improving the climate for women in the profession, and in reforming governance and practices to meet the challenges of the new century.

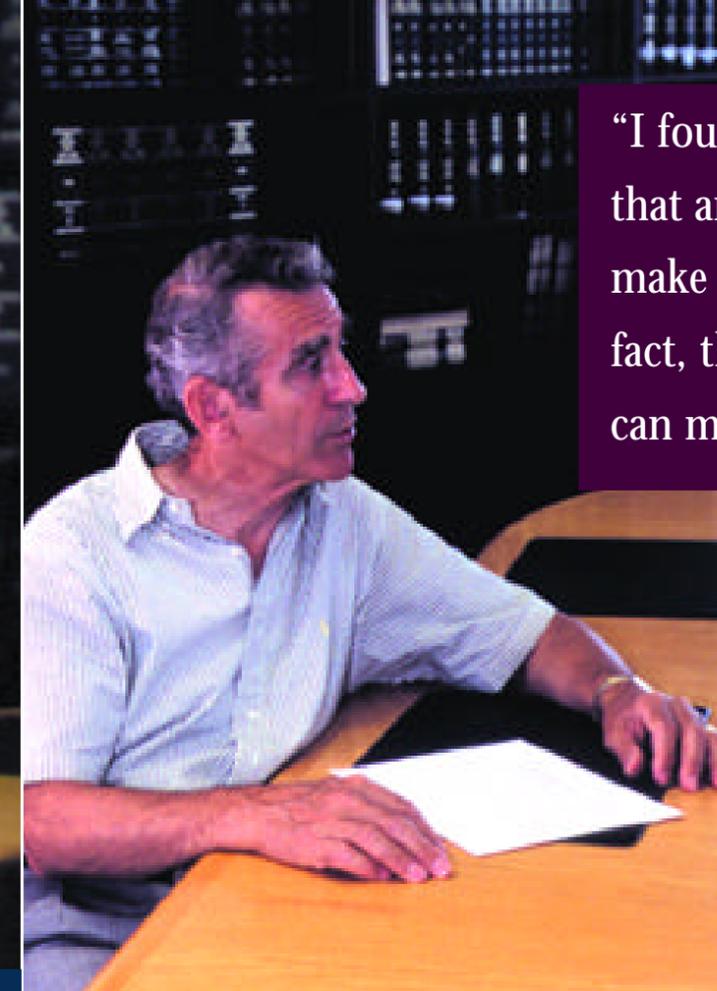
Quinn is past chair of the ad-hoc group Engineers for a Change, which engaged engineers in discussion on issues relating to the state of engineering and the status of engineers. As a public activist on equality and violence issues, Quinn has contributed to TV and radio programs, been profiled on TV and in major newspapers, and presented briefs to the Ontario government and other groups.

A proponent of advocacy for the profession for the past several years, Quinn believes that engineers need

to create their own future, and have a clear vision and a respected voice. During his 1999/2000 term, he would like to see PEO make a renewed member-interest society for the profession a reality and wrap up its regulatory review through the Admissions, Complaints, Discipline and Enforcement Task Force. He also wants Council to make a decision on implementation of a continuing competence program.

Quinn is co-founder and principal of Quinn Dressel Associates, a prominent structural engineering firm that has designed the structures of landmark buildings in North America, Europe, the Middle East and Asia. The firm's most recent projects include the Toronto CBC Broadcast Centre and the Shanghai Stock Exchange Building.

Engineering Dimensions interviewed PEO's new president in June.



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Now, we can do five different analyses, and each one takes about 20 minutes. This has created opportunities as well as dangers. What the computer doesn't do is tell you what the possibilities are. You feed information in, and it will tell you the merits of the possibilities.

A computer can take some of the drudgery out of design work. But there has to be some sort of process that allows creative solutions to be developed and then evaluates them.

Another major change has been the need for increased productivity and competitiveness. Engineering has become very marketing oriented. A consulting engineer used to get work based on reputation and word of mouth. Today, you have to put in proposals; you're one of 10 firms being interviewed; and it's a selling proposition. How do you convince people that you're the best firm for the job? Frequently it's an issue of putting in a competitive price, because nowadays the owner is a sophisticated buyer. They want the best possible value for the buck. There's a feeling that all structural engineers are competent, so buyers pick the one with the cheapest price. That philosophy is out there and it's hard to change it.

ED: What has prompted you to become so actively involved in the profession throughout your career?

Quinn: That's a good question, because I have been thinking about it recently. It has to do with the relevance of the profession in your life. Many young engineers don't see the profession as relevant and are mostly interested in building their careers and making money. The profession is an ancillary product in their lives, which doesn't have the relevance it used to have.

ED: Quinn Dressel has received awards for many of its designs for landmark buildings around the world. What do you think are the key ingredients for success and excellence in structural engineering design?

Quinn: I think that talent is a part of any success. Someone once said that creativity is 5 per cent inspiration and 95 per cent perspiration. It strikes me that that's the case in almost any endeavour. You have to love what you're doing and work at it. If your heart and soul are in something, at the end of the day, it will always be recognized.



Our firm has developed a philosophy we've tried to sell, which is that we treat each project on an individual basis—we don't consider it as just another project in a production process. We've strived to be innovative and inventive. We've brought a part of ourselves to each project.

ED: During your career, what major changes have you seen in the profession—both in consulting engineering and

in general?

Quinn: The biggest change is obviously the computer. When I started my career, we had a team of eight people doing manual calculations on a project for a 45-storey building. It was an iterative process. We did a lateral analysis for the building and got a ballpark answer. We had to go back and adjust the calculations to come to a final answer. When we got our first computer, it took 24 hours to do the same analysis.

BIOGRAPHY AT A GLANCE

Structural Engineer, Principal
Quinn Dressel Associates, Toronto

Awards

- ✓ Fellow, Canadian Academy of Engineering, Institution of Civil Engineers of Ireland
- ✓ Life Member, American Society of Civil Engineers
- ✓ Honorary Life Member, Women in Science and Engineering

PEO Service

- ✓ President, 1999-2000
- ✓ President-elect, 1998-99
- ✓ Vice President, 1997-98
- ✓ West Central Region Councillor, 1996-1997
- ✓ Committees: Consulting Practice, Professional Practice, Discipline, Regional Councillors, Audit, Regional Nominating

When I started off, the idea of being a professional was a very strong part of your outlook, which had to do with ethics. The old-fashioned definition of the professional was “somebody who went that extra mile.” In my case, it was usually something that gored my ox that got me involved. For example, I became involved with l’Ordre des ingénieurs du Québec in Montreal in the 1960s, when there was a concern that the organization was mainly for consultants and wasn’t concerned about the profession as a whole. I ran for office and was elected to its council, where I brought another point of view. This began a reform process that has continued to today.

I also found out very early on that an individual can make a difference and, in fact, that only individuals can make change happen. Somebody said that “ideas come from the lonely mind.” A group can massage ideas, but a group doesn’t actually come up with them. Someone must take ownership of an idea for it to go somewhere. If you want to be involved in change, you have to become involved individually.

What really made me a public activist were the killings (of 14 women, most engineering students at École Polytechnique) in Montreal, because this was really close to home. All of those young women were my daughter’s age. I put myself in the position of their parents. It got to me. I came into the office and said: “Every time I have heard the word engineer and woman in the same sentence in recent years, it has left me embarrassed. This time, it has gone too far and we can’t remain silent.” And we didn’t. We went through a series of steps that thrust me out into the public eye and changed my life.

ED: What do you want to do as PEO President?

Quinn: I want to see PEO become a more proactive, inclusive, creative organization. My faith is in the young engineers coming along. I want to give them the opportunity to make the profession what they want it to be.

There are positive things happening at the moment. We have a terrific Admissions, Complaints, Discipline and Enforcement Task Force. I hope our admissions process will become more transparent, more defensible and more fair. I think that’s being tackled, and Council will have a chance to deal with it.

I think PEO has begun to change its philosophy about its regulatory role, to broaden it to be much more than just discipline and enforcement. There’s a major part of the profession that has to do with ethics and our involvement in public safety. We have been reactive on public safety issues as far as I am concerned.

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Take Highway 407. We were reactive. The road had already been built when we got involved. Had we been proactive, we would have seen the problems coming, and we might have participated in the early negotiations. The same goes for Ontario Hydro. We have developed Ontario Hydro as a resource of tremendous value to Ontario. Now its assets are being redistributed, and we might have had a role to play in the discussion of that.

ED: You have said that launching a renewed member-interest, advocacy organization for the profession will be a priority during your term. What do you think a viable professional society could do for engineers and engineering?



Quinn: In today’s world, our profession needs a strong voice to be heard. But a regulatory body is limited in speaking out for the profession. PEO can’t perform both regulatory and member-interest roles—if we did the government would stop us. With the separation of regulatory and non-regulatory functions, PEO will be strengthened, not diminished. And the profession as a whole will benefit from having a strong advocacy voice. The advocacy organization may be supportive of PEO and vice versa. When conflicts arise between the two organizations, we’ll deal with them.

ED: Are there issues we haven’t covered that you think we should talk about?

Quinn: An issue that troubles me is the relevance of the profession—giving people a reason to become licensed and to get involved. How do we get other people to feel the way we do? We need to create commonality that can be tapped into. Members need to feel they are a part of the profession and are being enriched. The smaller the profession becomes and the fewer our members, the less enriching it will be. Conversely, the profession will become richer if it’s inclusive and welcoming. ♦