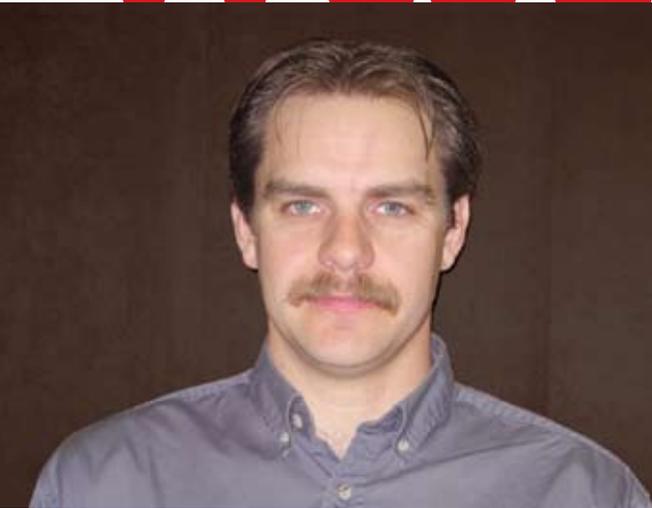


# WHY PEO volunteers give back



Common among all volunteers is their willingness to sacrifice personal time to help others and contribute to a worthwhile cause. But what about PEO volunteers in particular? What makes them tick? We asked a random sampling about what motivates them to give of their time, their experiences as PEO volunteers, and how they fit this work into their already busy lives.

**BY SHARON ASCHAIK**



## **BOSKO MADIC, P.ENG.**

When Bosko Madic, P.Eng., emigrated to Ontario from the former Yugoslavia in 1990, he sought to resume the mechanical engineering practice he'd established in his home country. At that time, PEO's Experience Requirements Committee (ERC) helped pave the way for his official entry into the province's engineering workforce, and today, Madic's engineering career is in full swing.

Since 2005, Madic has been giving back to PEO and to the committee that helped put him on the road to licensure; as a member of the ERC, he helps qualified engineers from around the world obtain their P.Eng. licences and restart their own practices in Ontario.

"I went through this process when I moved here 20 years ago, so I know what it's like. I see these people coming here with the same hopes, toiling to keep their profession and working at different jobs in the meantime. I can relate to them, and I want to help them out," says Madic, who works for Burlington-based Danieli Corus, which serves the iron- and steel-making industries.

Each month, Madic volunteers a full day of his time to interview up to six newcomer engineers seeking licensure. Madic and a fellow committee member review and ask questions about specific engineering projects presented by candidates that they have completed in their homeland.

"Sometimes the candidate is one of my countrymen, and if they have a hard time expressing themselves in English, I help them out by talking to them in our native language," says Madic on his efforts to facilitate the interview process for candidates.

Helping other newly arrived engineers find their way in Ontario is certainly rewarding, Madic says, but it's not the only way he benefits from his ERC volunteer work.

"In many cases, I learn something new," Madic says. "People come from so many different engineering fields, and while I have theoretical knowledge in lots of them, they have actual experience, so I'm often able to learn from them."

Madic has been actively contributing to PEO since 1999, when he joined the organization's Lake Ontario Chapter and became its vice chair, a position he held until 2004.

During that time, Madic helped organize and lead the chapter's local community events for National Engineering Week. Primary among these events was a demonstration the chapter would perform at the Pickering Town Centre to illustrate engineering principles to children. Teaching kids how to build their own building structures or circuit boards, or presenting engineering in action through dynamic computer animation, are just some of the fun and creative approaches he's used to engage the children.

"We were working to show kids what professional engineers can do, and we were also trying to attract new members," Madic says.

Madic was also involved in organizing the chapter's twice-yearly licence certificate presentation ceremonies. To ensure the events were interesting, Madic helped line up speakers ranging from a representative of the International Thermonuclear Experimental Reactor fusion energy project, to members of the Queen's University Solar Vehicle Team.

Madic says that while PEO volunteering can sometimes be intense—he uses his vacation days to participate in ERC interviews—he appreciates the opportunity to support and promote his profession.

Says Madic, "I want to contribute somehow and work as a team with others to generate more interest in engineering, and in how engineers contribute to society."

## **CHRIS REDMOND, P.ENG., FEC**

Helping engineers and engineering in general to become more professional is what drives Chris Redmond, P.Eng., to volunteer for the profession.

Serving on PEO's Consulting Engineer Designation Committee (CEDC), Redmond is involved in determining the eligibility of individual engineers as well as engineering firms seeking to use the consulting engineer designation.

"I support the designation—it places more responsibility on the individual by having this title, and that's good for the profession as a whole," says Redmond, a civil engineer at AECOM, a global professional, technical and management support services provider.



Bosko Madic, P.Eng.



Chris Redmond, P.Eng., FEC



Gina Cody, PhD, P.Eng., FEC

At quarterly meetings, Redmond and about 11 other co-committee members review the work experiences of potential candidates and determine whether they qualify to obtain the designation that's required for PEO members wanting to call themselves consulting engineers.

In between these meetings, members from the same region work together on subcommittees to assess applications from individuals or companies in their area, and prepare recommendations to present at the quarterly meetings. Altogether, the CEDC considers about 400 designation/redesignation applications a year.

"Not only does this provide me with an opportunity to be more involved in PEO, but I'm also an advocate for engineering in northern Ontario, and there are a lot of opportunities here," says Redmond, who joined the committee in 2001.

Redmond has also contributed his time and energy to PEO's Sudbury Chapter, serving as a director for three years in the 1990s. During that time, he organized a bridge-building contest for students at the local mall each year for National Engineering Week, now National Engineering Month.

"We would attract upwards of 100 kids at these events. They were really popular and fun for them," Redmond says. "It was a great way to attract young people to the profession and give them a hands-on experience of what engineering is all about."

While his committee volunteering requires some sacrifices—Redmond currently has to make up the work time he misses when attending the weekday quarterly meetings—he says it's worth having the opportunity to connect with his peers and to stay on top of engineering trends and opportunities.

"My professional network has grown. We have discussions regarding the engineering services market, the business of engineering, and PEO," Redmond says. "You get to make great contacts and also get to enjoy the social aspect of networking."

Contributing to the health and vitality of the profession is also rewarding, Redmond says. "I like the opportunity to be engaged in the process of advancing engineering as a profession."

#### **GINA CODY, PHD, P.ENG., FEC**

The responsibility as a member of PEO's Discipline Committee to properly review and address cases where engineers are being accused of professional misconduct is a weighty one, says Gina Cody, PhD, P.Eng.

"It's a very challenging endeavour. You are part of a jury, and consensus can become an issue. You have to all agree on the decision, and on the penalty, which might be a fine or a suspension. It's a very heavy load," says Cody, who has served on the committee since 1999.

Discipline hearings are not only challenging, but can also be time-consuming; the few hearings that take place each year can run anywhere from half a day to a few days, requiring Cody to take time off from Construction Control, the consulting firm she runs in Woodbridge.

But Cody says as demanding as this volunteer work can be, she enjoys it because it allows her to contribute in an important way to how engineering regulates itself.

"It's about giving back and helping to improve the profession, which ends up benefitting all engineers," says the Toronto-based structural engineer, who will be honoured June 17 with the Ontario government's 2010 Volunteer Service Award.

Cody is certainly no stranger to giving back to the profession: throughout most of her 30-year engineering career, she has dedicated her knowledge, energy and time to a variety of volunteer initiatives for the engineering profession, both for PEO and other organizations.

Cody first caught the volunteer bug back in 1984, when she joined a delegation of the Canadian International Development Agency that was involved in improving adobe housing construction in rural Peru.

"If you feel you have saved a few lives, then you feel like you're making a difference," Cody says.

In 1987, Cody began volunteering for the Canadian Standards Association (CSA)—a volunteer commitment that continues to this day. Over the years, Cody has served on as well as chaired CSA technical committees that have developed national guidelines for everything from parking garage repair to the safe design, operation and maintenance of tower cranes.

Each CSA technical committee runs for about two years and, during that time, she works with several other stakeholders to address a wide range of related issues and achieve consensus on a set of standards—a task Cody says calls for respect and teamwork.

“People on these committees have different views and visions, and may want to see different results, so to bring everyone on the same page, you have to be diplomatic, knowledgeable, and sensitive to all the issues. I’m a very good listener, so that helps in these types of situations,” says Cody, who last year received the CSA’s Award of Merit for her volunteer contributions to the organization.

For the last 15 years, Cody has also been sharing her engineering insights and expertise as an active member of the national committee of the Canadian Condominium Institute.

Cody’s volunteer participation with PEO started in 1993, when she joined its Professional Practice Committee—now called the Professional Standards Committee—and, in 1996, became its chair until 2001. Her role on the committee involved creating and updating guidelines covering the many practical elements of practising engineering in Ontario.

“We helped pave the road for newcomers to the profession by giving them tools for how to deal with certain engineering issues,” she says.

Cody’s volunteer activities can be intensive—sometimes, she says, her combined contributions take up 20 hours a month of her time—but she says it’s all worth it.

“If we have better engineers in society, it’s good for everyone,” she says. “A better-engineered world is a better place for all of us. That’s what I see as the benefit of volunteering.”

### **DIEGO CARDENAS, ENGINEERING INTERN**

Diego Cardenas’ engineering career is off to a great start, and he has, in part, his PEO volunteer involvement to thank for it.

The Kitchener-based engineering intern joined PEO’s London Chapter in 2004, before he started his master’s degree in engineering science at the University of Western Ontario. His active involvement in the chapter since then is what led his chapter’s chair in 2009 to think of him upon hearing of a local job opportunity.

“There was a job opening for someone with mechanical engineering training who also spoke Spanish, and the chair referred me,” says Cardenas, who got the job as a product specialist with propane motor fuel tanks supplier Slegger Tanks Inc., a position he still holds. “I knew that networking could eventually lead to work, but I was surprised at how fast it happened—but surprised in a good way.”

While volunteering for PEO has already paid off handsomely for Cardenas, he continues to give his time and energy to the chapter, investing about five to 10 hours a month in various capacities to make the chapter more relevant to its members and to the community.

In the past, Cardenas has led paper airplane demonstrations for children at the London District Science and Technology Fair and in the local Boys & Girls Club, illustrating the fundamental engineering principles of flight, teaching them how to make effective paper airplanes, and leading them in contests for longest flight and for closest target landing.

“It’s a hands-on activity that really engages the kids. It’s really cool to see them all happy and playing,” Cardenas says.

Cardenas has also helped raise the profile of engineering among high schools students. Two years ago, he took part in his chapter’s exhibit at a career day event at a local Catholic high school, sharing his insights and expertise on mechanical engineering and its various training and job opportunities.

“I like working with kids and being able to make an impression on them, and inspire them to get into engineering,” he says.

Similarly, Cardenas enjoys helping other aspiring engineers make inroads in the profession: for the last three years, he has helped facilitate his chapter’s annual Engineering Intern Training (EIT) Night, an informational and social event that includes a presentation on the process of becoming an official PEO engineering intern and its benefits, as well as a tour of the Labatt brewery in London.

“I have gained from the EIT program and from volunteering, and I like to tell others working to enter the profession about how they can also benefit,” he says.

Cardenas continues to play an active role in his chapter, assisting with several activities that take place during National Engineering Month and throughout the year. This past April, he took on the role of chapter secretary, and eventually, he says, he would like to become its chair.



Diego Cardenas,  
engineering intern



Alvin Olar, P.Eng.



Dalila Giusti, P.Eng.

“Engineering has already done so much for me, and I so enjoy what I do that I want to give back to the profession in a good way,” Cardenas says. “I like interacting with other engineers, and sharing with people the highlights of the profession.”

#### **ALVIN OLAR, P.ENG.**

As the next generation of engineers in Ontario comes of age, there’s a good chance some of them will have been inspired to join the profession by Alvin Olar, P.Eng.

That’s because the Sault Ste. Marie-based structural engineer has spent the last several years sharing the highlights of engineering with elementary and high school students.

“I enjoy interacting with students and watching them come up with ideas. They don’t have any preconceived notions—they’re able to think outside of the box,” says Olar, an executive member of PEO’s Algoma Chapter.

Since Olar joined his chapter executive seven years ago, he has presented to primary school children at about 20 elementary schools about the principles and practicalities of bridge building, as part of their science-related curriculum. In each presentation, Olar guides them as they aim to build the strongest bridges, and then test the sturdiness of their designs in a local bridge-building contest for students.

“It’s a fun way for them to learn about engineering, and to see their enthusiasm is kind of neat,” Olar says.

Local high school students have also benefited from Olar’s creative take on engineering instruction: each year during National Engineering Month, many take part in a competition he helped spearhead in which they try to be the fastest to solve engineering-related math problems.

Over the last four years, Olar’s biggest undertaking has been to lead his chapter’s annual PEO/OACETT Golf Classic. Securing sponsors, organizing the venue, planning activities and promoting the event are among the core responsibilities of facilitating the tournament. Olar leads a subcommittee of six people as they try to steadily increase the number of golfers and sponsors each year.

“It takes a lot of effort, but it’s very rewarding to be able to support a charity,” says Olar on the event, which last year raised \$8,500, part of which went towards Therapeutic Ride Algoma, a non-profit therapeutic and recreational riding program for people with disabilities.

Other chapter initiatives Olar has taken under his wing have included organizing informational tours of major local construction projects, such as the Sault Ste. Marie International Bridge, the new Sault OHL Arena and Event Centre, and the currently under-construction Sault Area Hospital; and launching an annual hiking excursion for members and their families along the area’s Voyageur Trail.

Olar, who has served as secretary, vice chair and chair of his chapter, and just recently stepped back into a past chair role, estimates he’s spent, during his busiest times, an average of about 10 hours a week volunteering, and all the while working full time—currently for global professional, technical and management support services provider AECOM—and raising a daughter with his wife.

“Leading up to events is when it would get pretty frantic, and you have to balance getting things done and still manage your work and other obligations at the same time,” he says.

But all the hard work has paid off for the chapter, the profession, himself and even his family.

“My volunteer activities have enabled my family and I to travel all across Ontario,” he says. “Volunteering is good for the chapter because it helps promote the profession in the community. Also, I get a feeling of accomplishment out of achieving the events we put on, and enjoy getting recognition from my peers.”

#### **DALILA GIUSTI, P.ENG.**

Dalila Giusti, P.Eng., understands what it’s like for engineers to move to Canada from another country and try to resume practising the profession.

Giusti, an acoustics engineer who runs Jade Acoustics in Concord watched her mother, a natural sciences professor in their native Sao Paulo, Brazil, struggle to find work in her field when the family moved here in 1966 when Giusti was five years old.

That experience makes Giusti sensitive to the challenges of the newly arrived engineering professionals she encounters while carrying out her duties as a member of PEO's Experience Requirements Committee (ERC).

"The obstacles were so high for my mom to get back into her field, so I know what it's like. We should be trying to give qualified engineers the opportunity to do better here and to put their skills to use," says Giusti, who has been serving on the committee for 10 years.

Giusti's own first-hand challenges of trying to get licensed as an acoustics engineer 23 years ago also plays into her decision to continue volunteering on the ERC. Back then, a shortage of practitioners in this niche field prevented Giusti from receiving a prompt interview.

"I was working in a specialty field within engineering, and there was nobody readily available to review me. My application and experience were approved by then President Claudette MacKay-Lassonde, P.Eng. So it took me some time to get my P.Eng. I wasn't even a foreign-trained engineer, so I can understand what it's like for newcomers," she says.

That understanding of the immigrant engineer experience informs the way Giusti interacts with candidates during the handful of half-hour ERC interviews in which she participates each year. While the sessions focus on candidates' educational backgrounds and knowledge of basic engineering principles, Giusti aims to ensure the process sufficiently considers and respects their practical work experiences.

"A lot of them trained many years ago and have not been dealing with the basics of math and science for years. While they need to know these fundamentals, I try to understand the individuals' actual work experiences," she says. "Also, a lot of the people we're questioning have already been in the field for a long time, so requalifying to practise can be an awkward experience for them. While we're trying to determine if they meet the standards to practise engineering in Ontario, it's important that the interviews are done with respect."

In addition to volunteering on the ERC, Giusti has also contributed her specialty expertise in acoustics engineering to help create a comprehensive PEO document on how to work in this field.

"For people who don't know anything about acoustics, this is a guideline about how to practise in this area," she says.

Giving her time, insights and expertise to PEO is something Giusti says she feels is a natural responsibility of being a member of the engineering profession.

"It's important to stay involved and current, and I think we all have an obligation to provide such volunteer services to our profession," she says. "Sometimes you just have to do things because they're right."

### **SOLOMON KO, P.ENG.**

When unlicensed people are practising engineering or calling themselves engineers, among the people looking to stop them is Solomon Ko, P.Eng.

Ko, a fuel safety engineer with Ontario's Technical Standards & Safety Authority, serves on PEO's Enforcement Committee, which advises PEO on how to deal with non-engineers practising the profession without a licence.

"We're a self-governing profession, and it's important to me to be a part of ensuring proper governance of engineering," says Ko, who's been on the committee since it was established in 1999.

Ko and the nine other engineers who volunteer with him on this committee meet every two months for half a day to review and improve PEO's approach to enforcement, and to address specific cases when they arise.

"We are developing policy related to enforcement, and there is ongoing reworking of the policies," Ko says. "Usually, PEO staff know how to deal with violation cases, but sometimes they call on our policy expertise in these matters."

Ko's interest in helping to enhance PEO's self-governance has extended beyond the Enforcement Committee; in 2001, Ko, who was a lawyer in his native Hong Kong, was invited to also join PEO's Governance Task Force to share his expertise on how to make the organization's self-governing system more effective.

"We looked at what PEO governance should be like, what sorts of committees we should have and the structure of committees, how committees should work with council, and so on," says Ko, who served on the task force until 2003. "It was very rewarding to play a role in reshaping and improving how PEO operates."



Solomon Ko, P.Eng.



Anthony Bonney, P.Eng., FEC

It's not only PEO central that has benefitted from Ko's enthusiasm for contributing to the health of engineering: Ko has also been actively involved in strengthening his local chapter.

As vice chair as well as chair of the Brampton Chapter in the early 2000s, Ko helped plan, organize and/or lead such activities as social events with other nearby chapters, professional development seminars and technical talks, and tours of local factories.

"The chapter is one of the most important mechanisms of PEO for building connections with members—that's where all the activity happens," he says.

Ko says volunteering has provided him with opportunities to learn many new things about the profession and to meet top industry professionals.

"You meet people at the leading edge of the field, and you take part in PEO training courses—these are very enriching experiences, and opportunities I would not otherwise have had if I wasn't volunteering," he says.

Volunteering for the engineering profession also helps Ko strengthen his ties with other members of the Chinese community; currently, he's taking part in an initiative to review and possibly improve a society for engineers that's part of the Federation of Chinese Canadian Professionals.

Finally, Ko says, volunteering for engineering has helped him better integrate into Canadian life, and to feel like a vital part of his profession.

"This volunteer work has helped me fit into the community and widen my network," he says. "I like to know what's going on with the profession and how it's governed, and to be a part of it."

### ANTHONY BONNEY, P.ENG., FEC

The way engineering advocacy is done in Ontario today has something to do with the considerable volunteer contributions of Anthony Bonney, P.Eng.

The now-retired radio telecommunications engineer was instrumental in the 1990s in helping to fuel the formation of the Ontario Society of Professional Engineers (OSPE) as a separate professional association for promoting engineering and providing services to engineers.

"The *Professional Engineers Act* didn't allow PEO to provide these services for engineers, so we needed a new organization to provide engineering advocacy, personal services and promotion," Bonney says.

As an executive member of PEO's Brampton Chapter during the 1990s, Bonney organized specific chapter and inter-chapter meetings to discuss the need for a distinct engineering services organization. He also lobbied for this goal while simultaneously serving as volunteer general manager of the Canadian Society for Professional Engineers (CSPE), an organization whose membership he helped grow four-fold from 1993 to 2000. In 1998, CSPE and PEO struck the Joint Advocacy Implementation Committee to examine the idea and, two years later, OSPE was formed.

"OSPE now has a fairly strong legal referral system that will provide a lawyer who understands the engineering profession to give you advice before you go to a PEO discipline hearing or deal with an employment issue—that didn't exist before," Bonney says. "OSPE also helps engineers with things like mentoring, professional development and getting jobs."

As demanding as all this volunteer work was—Bonney estimates he gave about 15 to 20 hours a month of his time during the 1990s to volunteering for the profession, all while balancing family life—Bonney still found the time to be an active member of the Brampton Chapter.

During his 23 years on the chapter's executive, he helped organize and lead a wide range of activities, including twice-yearly licence certificate presentations for newly licensed engineers; the annual "Walk in the Woods" social event; and joint meetings with all northwest Toronto chapters to discuss engineering and PEO issues. Bonney also managed the chapter's website and email system for several years.

While he retired in 2000, Bonney has continued to actively volunteer for PEO, serving since 2002 on its Advisory Committee on Volunteers (ACV), which provides operational and administrative support to members of PEO's approximately 25 committees and the 10 or so PEO task forces running at any given time.

"Many people are totally lost as to what PEO policy is all about—it takes time to digest it and become knowledgeable about it, and so they sometimes turn to us with their questions. They like to pick our brains, and I don't mind having my brain picked," Bonney says.

Bonney is passionate not only about volunteering, but ensuring proper recognition for active volunteers. Among the accomplishments of the ACV of which he is most proud is promoting new awards for long-serving PEO volunteers.

“There’s never been proper recognition for these volunteers in the past, and we feel it is important to acknowledge their contributions,” he says.

Throughout his 36-year career, Bonney, a UK native, was also involved in the UK-based Institution of Engineering and Technology as well as the Institute of Electrical and Electronics Engineers in the US. To this day, he continues to participate in the CSPE, currently serving as its president, a role with minimal administrative functions.

“I like volunteering—it’s a good networking system; you stay on top of engineering issues, and it keeps you in touch with people out of your direct field so you learn new things,” says Bonney, who was inducted as a member of PEO’s Order of Honour in 2007 for his volunteer contributions to engineering. “You gain a great professional and social network, and you get to help shape and strengthen the profession.”

### **KATHERINE DIEP, ENGINEERING INTERN**

Katherine Diep may not yet be a licensed engineer, but she’s already miles ahead when it comes to contributing to the profession.

Currently an engineering intern completing her fourth year of preclicensure work experience, Diep has gained a head start on her involvement in engineering by becoming an active member of PEO’s Mississauga Chapter.

“I enjoy the group and I learn a lot. And it’s good for the profession—the more we can promote it, the better,” Diep says.

Indeed, both the profession and the chapter and other engineering interns in Mississauga have been very well served ever since Diep began volunteering for her chapter in 2007. As a self-taught web developer, she offered to update the chapter’s existing outdated and static website with a more current, interactive and visually appealing presence. Under Diep’s attentive care, the site evolved to feature more up-to-date event listings, easier-to-view content, more photos, and better interconnectivity between the chapter’s website and relevant community sites.

“It looks better, it’s easier to read, and it’s helped to attract more people to our events,” says Diep, who managed the site until this past March.

At the same time, from 2007 to 2008, Diep also led her chapter’s efforts to be more inclusive of other local engineering interns. As the chapter’s first EIT community chair, she focused on attracting more engineering interns to the chapter, helping them network with other members, and guiding them in their entry into the profession.

“We provided events where interns could connect with each other, be mentored by experienced engineers, and get advice on getting a job once they graduated,” says Diep, whose efforts helped boost the number of her chapter’s engineering interns to 600 from 400.

It’s not just up-and-coming engineers who have been benefitting from Diep’s Mississauga Chapter initiatives, but women in the profession as well. Last March, Diep helped start Women in Engineering, a chapter subgroup that focuses on addressing what the chapter perceives to be the unique challenges faced by women in the profession.

“This is a male-dominated field, so we wanted our female members to be able to connect with other women, to create opportunities for women who are new to engineering to be mentored by more experienced women, and to see how other women manage their jobs and their families,” says Diep, who coordinates the group.

Other chapter volunteer activities in which Diep has been involved have included serving on its Education Committee on National Engineering Month and its Certificate Committee, and helping to execute its government liaison and mentorship programs.

Most recently, Diep was promoted to chair of her chapter’s awards committee and, in that role, she plans to hold volunteer appreciation and member recognition events this fall.

Diep estimates that, during the most intense times, volunteering takes up about 20 hours of her month—activities she carefully balances with her work as an engineering manufacturing technician at electronics manufacturing services EPM Global Services in Markham.

“I learn a lot from volunteering and it provides good networking opportunities,” Diep says. “I also like being able to make a difference in the profession and promote engineering in the community.” Σ



Katherine Diep,  
engineering intern