

FOCUS

on foreign-trained engineers: Five P.Engs tell their story

by Karen Hawthorne

More than 200,000 immigrants come to Canada each year, looking for a better life, a higher standard of living and fulfilling work in their chosen field. Many leave relatives behind, striking out bravely on their own. Culture shocks abound: a new language, new ways of doing business, transportation systems, laws and, if they hope to become professional engineers, the regulatory standards of the profession. Some engineers start out delivering pizzas or driving taxis—making ends meet while they look for better employment, take retraining courses and investigate procedures for their licences. Of the 2500 engineers who apply for membership in PEO every year, more than 1400 come from beyond Ontario's borders. *Engineering Dimensions* talked to five foreign-trained engineers who've made Ontario home for themselves, their families and their careers. They've all successfully met PEO requirements for licensure and now use the P.Eng. designation.



Isaak Finkelshteyn, PhD, P.Eng.:
"The work here is very interesting."

Isaak Finkelshteyn, PhD, P.Eng., left his Ukrainian homeland and came to Toronto in 1992, knowing little English. His daughter's family had already immigrated to Canada, and they felt this country would offer the right opportunities.

"I came without anything but two small bags and a dollar in my pocket," he explains. "After a month and a half, my wife came as well." He spent three years studying English and found some work as a roof and home inspector—taking on "any job" he could find.

Finkelshteyn was a professor of civil engineering at Kiev Technology University in Ukraine but his new life in Canada has included working as a manager of engineering at a Toronto-based firm that has created a new construction system using Styrofoam boards.

Like many immigrants, he is also more proficient in his written, than his spoken, English. As a master chess play-

er who played on the Ukrainian national team, he started coaching young students in Toronto to supplement his income.

"Unfortunately, it was very difficult for someone my age," he says. "Nobody knows that I'm a hard worker. I'll work day and night."

Recognizing the importance of licensure to find suitable employment and practice in Ontario, he started the application process with PEO three years ago, and recently received his P.Eng. licence. He even took a law course at the University of Toronto to familiarize himself with the legal terminology. "The struggle for me, was not how to study for the exams, but knowing the language."

Making the decision to immigrate to Canada has left him with no regrets: "Even at my age, it is so much better than my country. And my work here is very interesting."

Shu Liang He, P.Eng., found just what he was looking for after arriving from Japan three years ago: a high quality of life and a challenging job.

The Mississauga, Ont.-based civil engineer was born and educated in China, majoring in bridge construction. Hired on staff at one of the largest consulting design firms in China, he soon had the opportunity to travel to Japan and design cable steel bridges that span more than 200 metres and link the country's islands. He stayed for six years.

"Then I decided to come to Canada," says He, 35. "I wanted a bit of change in my life and to make myself more settled." He found employment, several months after his arrival, for a U.S. company involved in construction work at Pearson International Airport. His wife, a Chinese language teacher, is still looking for work here.

"It's not easy to move from one country to another," he says. "The first thing is language. It's not easy to find a job here. It depends on the company and how they look at your experience."

He was a certified engineer in China and understands the merits of membership in a regulatory body. He received his licence from PEO last year. "I was motivated when I applied for the licence. Being a professional engineer is a big responsibility, especially because our work affects the public."

He says he found the law and ethics examination difficult because of his own comfort level with the English language, but felt confident about his 15 years of engineering experience. Now he works at Morrison Hershfield Ltd. in Toronto, working on structural planning and design projects, including upgrades to highways and interchanges in south-western Ontario.

The main differences between engineering in Canada and Japan, he says, are the clients and the construction practices, while the engineering principles remain constant. "I feel satisfied," he says of his work and his membership in PEO. "Engineers are not working only for money. They're doing something for society."



Shu Liang He, P.Eng., wanted the responsibility of the P.Eng.

Leon Gefter, P.Eng., says he faced anti-Semitism at every turn as a Jewish person living in the former Soviet Union, and felt forced to flee his homeland in 1990, heading to Israel with his wife and relatives. He was already highly qualified in his field, with a master's degree in metallurgical engineering, and experience as a department head for a large manufacturing plant in Leningrad, now St. Petersburg. The plant specialized in steel casting technology for clients in South America, Europe and the former Soviet Union.

When he arrived in Israel, he eventually found work as a labourer for a company that produced aluminum framework for windows, doors and storefronts.

He was unable to use his metallurgical engineering skills and expertise, but did turn the job into an opportunity to learn a new trade. After two years, he was transferred to an engineering department within the company.

"There were a lot of guys like me in the same situation," says Gefter, 41, who today runs his own consulting business from his Thornhill, Ont., home. "We were in the process of finding ourselves. It was very, very difficult." Gefter says his perseverance and dedication to creating opportunities have paid off. He came to Canada in 1995, took a month to settle in, and then landed a job at Commercial Aluminum Ltd., in Toronto.

Leon Gefter, P.Eng.: loves Canada.

"From day one, I started to apply for jobs," he explains. His company subcontracted work to professional engineers, and encouraged Gefter to apply for licensure with PEO so that he could do the work internally—and climb the company's pay scale. He received his P.Eng. earlier this year.

"Whenever people come into Canada, they have to look at it as an opportunity," he says. "The problems are the lack of English, the lack of communication skills, and people with the wrong attitude. I believe you have to earn [the P.Eng. licence]. You have to prove that you have the skills and qualifications to get the good jobs."

For Gefter, the process took two years, mainly because he didn't "rush" to get his academic documents sent from his homeland. He found the process thorough and fair, and now has a better understanding of building codes and professional ethics in Ontario.

This year, Gefter also left his post to pursue his own consulting business. His major client is D-Calc America, headquartered in St. Louis, Mo., which produces manufacturing software for the aluminum industry.

As for living in Canada, he has only good things to say: "I love it. The whole thing—the people, the climate, nature. And the attitude of the people to the country and the country to the people."

Alexander Leshchinsky, P.Eng., designs molding machine systems for the Supreme Tooling Group in Toronto, a subdivision of ABC Group, one of the largest North American manufacturers of blow-molded plastic parts for the automotive industry. He and his wife have a home in North York—a world away from the troubles of his homeland.

After the 1986 nuclear disaster that decimated Chernobyl, Leshchinsky's nearby home in Belarus was evacuated. Trying to recover, he immigrated to Israel with his wife, hoping to start over and find work in his field of mechanical engineering. There, Leshchinsky, now 41, learned Hebrew, joined a mechanical engineering society and found employment as a designer for plastic parts for furniture and household appliances. But, he says life there was not easy for them and they came to Montreal in 1994 with high expectations.

"We came here for several reasons, but first and foremost because we are a mixed family," he explains. "Here, we felt very comfortable and welcome." He spent 18 months in Montreal, trying to learn French and looking for work. For the first six months, he



Alexander Leshchinsky, P.Eng.: A world away from his troubled homeland.

was delivering pizza and subs, until he landed a job as a design consultant for a Mississauga-based company in 1996.

"Just to tap into the first job is very difficult, to struggle with the language is difficult. You really had to show what you can do." He started the application process with PEO about three years ago, starting work 15 minutes early every day to study the law and ethics material for the exam. He had to work diligently on his English language skills to become familiar with

the engineering and law terminology. There are differences in Canadian engineering terminology from his Russian education and experience, but for the most part, he says, "steel is steel and aluminum is aluminum."

On January 11 of this year, he recalls, his name was enrolled as a P.Eng. "I proved to myself that I can do it. This licence says that I know all the regulations, the laws and ethics—so if I ever go to change jobs, the employer knows what he can expect."

Jasmina Vucetic, P.Eng., still says light is a miracle for her. What brought her to study electrical engineering has also become a symbol of hope and courage for her future aspirations in the field and the opportunities for her children since the family fled from war-torn Bosnia in 1994.



Jasmina Vucetic, P.Eng., wanted to be recognized as equal to any other Canadian engineer.

"I came to Canada with a few suitcases and my husband and three kids. The first four years were very, very hard," says Vucetic, 52, a specialist for electrical instrumentation and controls with the Canadian Nuclear Safety Commission in Ottawa.

Vucetic had worked for one of Sarajevo's largest engineering firms, delivering turnkey solutions for infrastructure projects around the world. She had traveled to establish thermal and hydro power plants in Zaire, Indonesia, Libya and Iraq, among others, giving her a breadth of experience in international tenders and cross-border engineering practices.

In Ontario, when she went to job interviews and mentioned her former company, prospective employers recognized the name, but she still had to take baby steps to find gainful employment. "I went to Seneca College in Toronto and took workshops for engineers who had their degree from outside Canada. I also learned how to write a resume for the Canadian market." By 1996, Vucetic found a short-term placement at Agra Moneco Inc. in Oakville, Ont., and later contract work for Ontario Power Generation. She applied for licensure with PEO shortly after she

had gained some Canadian experience in her field, but found it difficult to track down academic documents from her homeland because of the war.

Despite a lengthy process that saw her receive the P.Eng. licence last year, she says the membership is important to making her feel that she belongs in Canada.

"There is something deeply inside me to be recognized on the same level as any other Canadian engineer. All of us who choose to be engineers are all dedicated people," she says.

"When you come to a new country, you have to abide by all of the rules. You can't have such a strong ego that you feel, 'I was working before, so I don't need anybody to assess my skills.'" ♦

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