



E

D I T O R ' S  
N O T E

## Ontario P.Engs make us proud

Last week, I re-read one of my favourite books, *Surely You're Joking, Mr. Feynman*, for the umpteenth time. Richard Feynman, although he's not an engineer, is my favourite scientist (I know I'm being disloyal here!)—and a hilarious storyteller. In his memoir he describes a summer job he had in high school operating the switchboard at a hotel owned by his aunt. He developed a contraption that would allow him to goof off rather than be chained to the hotel desk. The contraption worked for him. But of course nobody else's brain worked in quite the same way as Feynman's, and so they couldn't figure out his little gizmo. Needless to say, his invention was met with very little enthusiasm. In fact, everyone at the hotel,

including his own aunt, thought he had more than a few screws loose. He says, "I learned there that innovation is a very difficult thing in the real world."

Hopefully that won't be the case with the engineering innovations that we've highlighted in this issue (p. 54). It will be quite the opposite, I suspect, because these innovations are ones that we will all benefit from, either directly or indirectly.

Take gridlock, for example. Steve Petrie, P.Eng., has invented a traffic optimization system that uses an ingenious system of lights embedded in roadways. Flashing lights alert individual drivers when they're following too closely which, in turn, will prevent sudden braking, a leading cause of traffic jams. His invention is expected to change

rush hour traffic as we know it. It's about time!

A brand new composite material that can withstand our extreme climate promises to change our infrastructure very much for the better. Crumbling and rusting concrete and steel bridges are out. Bridges made out of a glass fibre reinforced polymer composite are in.

I'll let you discover the other innovations on your own. Hint: if you're a rabid roller-coaster fan, you'll want to turn to page 59 this very second.

Of course, the next step post-innovation is protecting those valuable ideas. But is it a patent you need? Trademark protection? If you're confused, we can help. We called on Councillor Nancy Hill, LLB, P.Eng., an engineer and experienced intellectual property lawyer, to help steer engineers in the right direction when it comes to protecting their great ideas (p. 66).

Rounding out our features this issue is a discussion of the challenges PEO faces in regulating new disciplines as they emerge. Bruno Di Stefano, P.Eng., offers up some background and perspective on this from his experience as the chair of the Engineering Disciplines Task Group.

Speaking of emerging disciplines, our profile of Ted Sargent, P.Eng., University of Toronto's nanotechnology superstar, was initially intended for our May/June issue as a companion to our nanotechnology feature article. We ran out of space in that issue, but it's almost more appropriate to include him in our innovation issue anyway. He is truly an innovator, thanks to his groundbreaking work in optical networking technology and infrared light.

I hope you enjoy reading about the great work of your colleagues. Their accomplishments make us all proud.

Jennifer Coombes  
Managing Editor