

Message from the Chair



I hope everyone had a happy and satisfying summer in spite of all the bad things that have happened around us, specifically the recent economic shortfall. We are now into autumn, hoping for a better economy and a better life.

Talking hope reminds me of the Engineering for Ontario Day at Queen's Park, held on September 16th and now in its fourth year. Several MPP's, MP's, and ministers and deputy ministers had attended along with many Professional Engineers Ontario (PEO) chapters' executives and members of the PEO government liaison program (GLP). PEO President Catherine Karakatsanis opened the event by welcoming everyone and touting PEO's recent goal to send 11 engineers to the provincial legislature by 2011. That very initiative became the theme of the event throughout the day. This is the hope I speak of: the hope that professional engineers will have more say in legislation and public policy.

Being a member of GLP here in Willowdale-Thornhill since its inception has put me in the position to give this matter more attention. Why? Because I think engineers and the engineering profession as a whole are

not valued by many Canadians including the policy-makers at all three levels of government. That is why we see and hear different engineering-related issues that could have been prevented if they were looked at through the eyes of an engineer.

There are many government policies and actions that engineers can directly or indirectly influence, from immigration rates and matters regarding engineering graduates to the engineering job market to specific federal, provincial, and municipality development projects. This is good for government to prevent waste and disaster, resulting in savings of several millions of dollars. It is good for the protection of the public, which is the mandate of the PEO and Professional Engineers Act. And the resulting public awareness is advantageous for engineers who gain more recognition and appreciation among the public, more say in public policy, and a better job market and higher compensation.

I invite you all to think about this and join us. It does not matter if you don't want to run for public office. Support the ones who want to run, or just participate in GLP and political activities to show that you care. All that matters is that you be involved.

We at the Willowdale-Thornhill PEO chapter GLP committee are ready to talk to you, listen to your ideas and thoughts, and see those words turn into action.

I know we will soon see professional engineers as a priority in the minds of public policy decision makers, and engineering as a top profession.

Regards,
Changiz Sadr, P.Eng.
Chair, Willowdale-Thornhill PEO chapter

ENGINEERING NOTES by Nanda Lwin, P.Eng.

What can be done about the Infrastructure Deficit?

Putting Policy Emphasis on Rehabilitation of Existing Infrastructure

The following article is Part 3 of an ongoing series about the infrastructure deficit. Part 2 is featured in the Summer 2009 issue of The Chronicle.

Much of Canada's physical infrastructure is built of material that requires constant care and attention. For instance, widespread corrosion of structural members in steel structures, the deterioration of concrete and the corrosion of reinforcing steel inside concrete can cause a structure to eventually decay, and hence needs constant monitoring and rehabilitation.

Canadian governments have exacerbated the infrastructure deficit problem by deferring the needed rehabilitation, inspection and replacement of civil engineering works. Specifically, in the past, public funding has been directed towards new capital projects at the expense of the maintenance of older infrastructure. In fact, it is estimated that 80 percent of total infrastructure investment in the 1980's was devoted to the construction of new capital projects.

The delay in maintaining and rehabilitating infrastructure creates persistent problems that worsen with time:

- Increased costs of maintenance, rehabilitation and repair
- Inefficiency and increased vulnerability of public assets
- Increased risks to public safety

Canada's infrastructure is deteriorating to the point where it can be a threat to public safety; the highway overpass collapse in Laval, Quebec, in October 2006, is an extreme, yet stark example of the failure to properly monitor and rehabilitate our structures on schedule. That collapse was subsequently blamed on inadequate maintenance and rehabilitation, as opposed to the bridge's design or construction.

A new emphasis on infrastructure rehabilitation (as opposed to the construction of new projects) will ensure that the existing infrastructure can keep up with economic and population growth. While it is possible to argue that Canada's growing population and economy require new infrastructure, a concerted effort to repair existing public assets is required to offset further decay and to prevent potentially disastrous events from happening.

The above article is based on a research paper written by the author and presented and submitted to McMaster University.

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Parting Shots...

The **next certificate presentation** for newly-minted professional engineers is scheduled for November 28, 2009 at the Holiday Inn at 7095 Woodbine Avenue, Markham. Registration will commence at 5 PM. Dinner will be served at 6 PM.

Parting Shots...

On November 25th, **Rene Mangal** spoke about the future of coal in his talk "Carbon Capture and Storage". Mangal, an expert in this subject, also presented another talk entitled "Co-Firing Biomass for CO₂ Reduction" to our chapter earlier this year.

Lisa Chang from Yenius Interactive Marketing presented a seminar entitled "Internet Marketing – Being Heard Above the Noise" on November 18th. Her talk revealed the intricacies in making a business known on the net.

Joe Sharanowski of DNM Lock-Block Ltd spoke at a seminar sponsored by the Willowdale-Thornhill PEO chapter on October 21st. He talked about the Lock-Block product, which is used to build gravity walls.

Two tours are in the planning stages, to be confirmed at a later date. A tour, tentatively scheduled for December 16th offers PEO members a look at the head office of **Celestica Inc.**, the Canadian electronics manufacturing giant. A tour of the **Hindu Sabha Temple** in Brampton is also scheduled.

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