Publications Mail Agreement No. 40053012

ISSUE 139 / WINTER 2009
NUMÉRO 139/ HIVER 2009

NEW BRUNSWICK ENGENUITY

THE SOURCE OF **ENGINEERING** AND **GEOSCIENCE** NEWS IN NEW BRUNSWICK
LA SOURCE D'INFORMATION EN **INGÉNIERIE** ET **GÉOSCIENCE** DU NOUVEAU-BRUNSWICK

ANNUAL MEETING — February 19-20, 2009

Engineering is magnetic for Edmundston kids.

Page 10

6th Annual APEGNB Pumpkin Fling

Page 19

16th Annual APEGNB Awards Dinner

Page 32

New Water Treatment Plant Named In Honour of Former City Engineer

***John Bliss**, P.Eng., (front, far right) and his wife, **Dorothy**, celebrate the opening of Fredericton's new water treatment plant named in his honour on September 12, 2008.*

pages 20-21

www.apegnb.com

ENGINEERS GEOSCIENTISTS *New Brunswick*
INGÉNIEURS GÉOSCIENTIFIQUES *Nouveau-Brunswick*

Who's taking care of the mortgage while you're taking care of yourself?

Getting sick wasn't something Bob and Joan considered in their financial plans. Then Joan was diagnosed with cancer.

Bob and Joan discovered the hard way that treating and coping with illness can mean significant unexpected costs the typical family's finances may never recover from. It would be a different story if they had included Critical Illness insurance in their financial plans.

Critical Illness insurance is designed to help pay these costs so you don't need to dig into your retirement savings and investments – or worse, go into debt – to cover expenses. It provides cash if you're diagnosed with one of up to 18 covered conditions and you survive the waiting period. You can use this cash to pay your rent or mortgage, cover your regular household bills or pay for additional medical costs not covered by private or government health plans. The choice is yours.

Significant impact on savings

Joan was 42 when she was diagnosed with cancer. While in active treatment, Joan was on long-term disability from her $65,000-a-year job. Bob cut back his hours to help out more at home. Since they still had a $96,200 mortgage, this made their monthly budget tight. Ultimately, the unexpected expenses associated with Joan's illness forced them to renegotiate their mortgage.

Bob and Joan had planned to retire when Joan turned 62, after their youngest child completed her post-secondary education. Without Critical Illness insurance, that goal became unrealistic. Here's their revised financial picture.

Bob and Joan's monthly net income is $6,500, leaving only $300 for expenses such as car and home repairs, gifts, entertainment and all other family expenses. They know they'll need to reduce their RRSP contributions most months to make ends meet.

A Critical Illness benefit of $100,000 would have given them the cash to pay all recovery costs AND reduce their mortgage to $50,000, freeing up extra money to use as they wished.

Bob & Joan's Annual Lost Income and Recovery Expenses	
Difference between Joan's regular income and income provided by group disability insurance	$16,900
Net Income (before her illness): $65,000 less tax* = $42,250	
Taxable Disability Income: $65,000 X .6 = $39,000 less tax* = $25,350	
(Lost income during her disability elimination period is not included in this estimate)	
Bob's lost yearly income (from cutting back his hours)	$20,000
Travel to and from treatment (gas and parking costs)	$5,100
Medical equipment (special bed)	$1,800
Cost of drugs and supplements not covered by Bob and Joan's health plans	$7,000
Additional help with household chores	$3,000
Total additional expenses	$53,800

* Assumed tax rate of 35%.

Monthly Expense	
Mortgage – increased from$96,200 to $150,000 @ 6.25% (25-year amortization)	$1,000
Car payments and gas	$700
Regular household bills (utilities, taxes, groceries, clothing)	$3,000
RRSP contributions	$1,000
RESP contributions	$500
Total	$6,200

No one knows if they will ever need Critical Illness insurance. But if you have it, you'll have peace of mind knowing it will let you focus on what really matters … getting better. ■

Engineers Canada-sponsored Critical Illness Insurance offers you 10% savings on coverage of $125,000 or more, offering you even more value for your money. To find out more and apply online, visit:

www.manulife.com/Engenuity

Or speak to a Customer Service Representative toll-free at **1 877 598-2273** Monday through Friday from 8 a.m. to 8 p.m. ET

Sponsored by:

engineerscanada

Engineers Canada is the business name of the Canadian Council of Professional Engineers

Underwritten by:

Manulife Financial

The Manufacturers Life Insurance Company

NEW BRUNSWICK
ENGENUITY

PUBLISHED BY:
The Association of Professional Engineers and Geoscientists of New Brunswick
183 Hanwell Road, Fredericton, New Brunswick, Canada E3B 2R2
Tel: 506-458-8083
Fax: 506-451-9629
e-mail: info@apegnb.com
www.apegnb.com
EDITOR: **Melissa Mertz**

APEGNB STAFF

Andrew McLeod **Executive Director**	mcleod@apegnb.com
Tom Sisk, P.Eng. **Director of Professional Affairs**	sisk@apegnb.com
Sandra Stairs **Director of Registration**	sandra@apegnb.com
Melissa Mertz **Director of Communications**	melissa@apegnb.com
Rachael Christenson **Director of Administration**	rachael@apegnb.com
Kate Sisk **Registration Coordinator**	kate@apegnb.com
Allyson Clark **Administrative Assistant**	info@apegnb.com

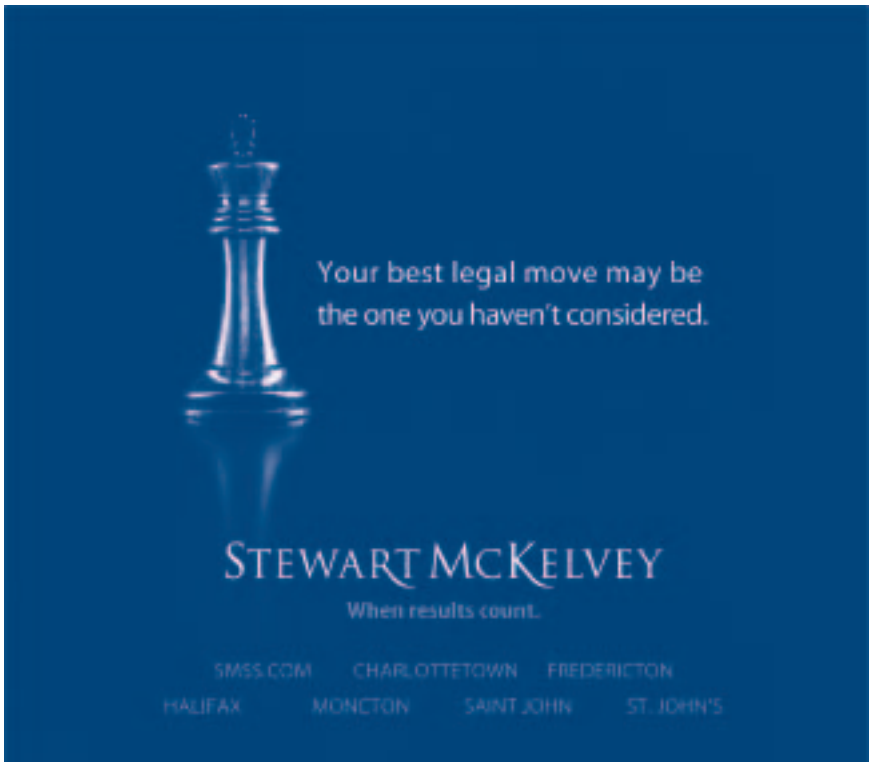
Engenuity is published three times per year: spring, summer and fall/winter. Deadlines for copy are February 15, May 15 and September 15 respectively. Advertising space is available on a first-come, first-served basis.

For more information concerning ad placement, specifications and standard rates, please contact Danielle Duranleau, advertising coordinator (*danielleduranleau@rogers.com*).

For all other questions, please contact Melissa Mertz, Director of Communications (*melissa@apegnb.com*; tel 506-458-8083 x5)

APEGNB EXECUTIVE AND COUNCIL

President	**Tanya Horgan**, P.Eng./P.Geo.
Vice-President	**Eldo Hildebrand**, P.Eng.
Past President	**David Crandall**, P.Eng.
Engineers Canada Director	**Brent Smith**, P.Eng.
CCPG Director	**Bruce Broster**, P.Geo
Fredericton Councillors	**Tom MacNeil**, P.Eng.
	Fred Bérubé, P.Eng.
Moncton Councillors	**John Gallant**, P.Eng.
	Mark Bellefleur, P.Eng.
Saint John Councillors	**Holly Young**, P.Eng.
	Paul Holah, P.Eng.
Northwestern Councillors	**Georges Roy**, P.Eng.
	Mireille Vautour, P.Eng.
Northeastern Councillors	**Ray Ritchie**, P.Eng.
	Iris Auclair-Bernard, P.Eng.
Geoscientist Councillors	**Allan Higgins**, P.Geo.
	Paul Rennick, P.Geo.
Lay Councillors	**Christa Bourque**, LL.B.
	Marc Richard, LL.B.



PRESIDENT'S MESSAGE

Tanya Horgan, P.Eng./P.Geo.

Well as they say this will be my swan song. It is with a heavy heart and a dried-up pen that I write my last *Engenuity* article as President.

The past few months have kept me busy.

I had the pleasure of attending the dedication of the **E. John Bliss Water Treatment Plant** in Fredericton on September 12, 2008. This was a lovely event honouring a very special (and humble) man. It was very well attended with guests speakers including **Brad Woodside**, Mayor of Fredericton, John's colleagues from the City of Fredericton, the Canadian Water Works Association and our Association (me!). I would like to thank Mayor Woodside for generously providing his suit coat as I was a little unprepared for the cool weather in Fredericton that morning. Being from Saint John, you always assume Fredericton will be warmer. Lesson learned.

***Tanya Horgan**, P.Eng./P.Geo., on behalf of APEGNB, addresses the crowd during the dedication of Fredericton's new E. John Bliss Water Treatment Plant.*

***Tanya Horgan**, P.Eng./P.Geo., congratulates a proud **John Bliss**, P.Eng.*

*Fredericton Mayor, **Brad Woodside**, and **Tanya Horgan**, P.Eng./P.Geo., share a laugh after he offers his blazer on the chilly September day.*

The **annual meeting for Engineers Nova Scotia** was held in the beautiful Annapolis Valley in September. It is good to know we aren't alone in our fight for limitation of liability. Nova Scotia is also working towards an ultimate limitation period and we have been sharing our efforts on this issue. I would like to welcome **Dr. Paul Amyote**, P.Eng., into the President's role. I am sure he will find it as rewarding as I have.

Engineers Canada hosted their semi-annual meeting in October in Ottawa from October 6 to 9. There was a lot of information packed into this week with one main topic of conversation being the **National Advertising Campaign**.

As discussed in my last update, **David Crandall**, P.Eng and **Melissa Mertz**, APEGNB's communication director, played vital roles in the development of the campaign. The advertising creative generated a great deal of discussion-which to me is always a good sign. You want a campaign to be something people talk about. Why spend the money if no one notices?

I think the National Campaign Advisory Committee did an outstanding job and I commend them for their efforts. Be sure to look in *Chatelaine / Châtelaine, Canadian Living, Macleans, Reader's Digest / Sélection du Reader's Digest, Canadian Geographic, Coup de Pouce*, and *L'Actualité* to view the campaign's goal of encouraging parents to support their children in math and science-thus opening and encouraging engineering as a career option.

In addition to targeting parents during year one of the campaign, advertising was also created for employers of engineers. The messaging for this group worked on improving employers' understanding of the value of engineering licensure and the importance of hiring a professional engineer. Ads appeared in *Atlantic Business, Canadian Business, Report on Business Magazine, Financial Post Magazine, L'Actualité* and *Affaire Plus*.

The **semi-annual meeting of the Canadian Council of Professional Geoscientists** was held in Toronto from October 31 to November 2. It was great to see our own **Dr. Bruce Broster**, P.Geo, in action as the President of CCPG. Since I was unable to attend CCPG's annual meeting, it was great to reconnect with folks and meet a few new ones from Canada's world of geosciences.

The **Prince Edward Island annual meeting** was held in November. It is always a pleasure to visit Canada's version of the "emerald isle" but on this occasion, it was tempered with a bit of nostalgia. Our beloved friend and colleague, **Frank Parslow**, P.Eng., retired from his role as Executive Director for Engineers PEI. I have had the pleasure of knowing Frank and his wife **Margaret** for a few years now and I hope we will continue to be friends for years to come. A classier man you will never meet.

Finally, I want to say thank you to all who attended "my Christmas Party" in Saint John. (I know it really was APEGNB's annual **Members Reception** but we all know I like a party and will claim one as my own whenever I can). It was great to see everyone and I hope everyone had a fabulous holiday season.

On a final parting note, I want to **thank everyone for their continued support of the Association** this year. I believe we are fortunate to have chosen our professions and should continue to be proud of our accomplishments as engineers and geoscientists and shout from the rooftops. I have had a fantastic year and would do it all again in a heartbeat.

To the APEGNB Council this year I say, thank you. Hopefully, I was able to make your year as enjoyable as you made mine.

To **Andrew Mcleod**, our executive director, and his APEGNB staff, YOU ROCK! I don't believe there is another association that can rival your contributions (not being biased or anything of course!).

And lastly, to the APEGNB membership: thank you so much for allowing me the opportunity to represent you at the provincial, regional and national levels. It was worth every minute and I highly recommend that each of you maximize your involvement with your Association. Both the personal and professional rewards are incredible.

I wish the 2009 Council another productive and memorable year as we all work toward advancing our members' issues of concern and maintain our high standards of enforcement and public safety.

MÉSSAGE DE LA PRÉSIDENTE

Tanya Horgan, ing./géosc.

Bien, comme on dit, ceci sera mon chant du cygne. C'est le cœur lourd, avec un stylo récalcitrant, que je rédige mon dernier article dans *Engenuity* à titre de présidente.

Les derniers mois m'ont gardée occupée.

J'ai eu le bonheur d'assister à l'inauguration de l'usine de traitement de l'eau **E. John Bliss** à Fredericton le 12 septembre 2008. Ce fut un événement charmant pour honorer un homme très spécial (et empreint d'humilité). Il y a eu une bonne participation, et on comptait parmi les orateurs invités **Brad Woodside**, maire de Fredericton, des collègues de John à la ville of Fredericton, la *Canadian Water Works Association* et notre association (votre humble servante). Je tiens à remercier le maire Woodside de m'avoir généreusement prêté son manteau, car je n'étais pas vraiment prête à affronter le froid qu'il faisait à Fredericton ce matin-là. Étant de Saint John, je tiens toujours pour acquis qu'il fera plus chaud à Fredericton. Leçon retenue.

***Tanya Horgan**, ing. et géosc., s'adresse à la foule au nom de l'AIGNB lors de l'inauguration de la nouvelle usine de traitement de l'eau E. John Bliss de Fredericton.*

***Tanya Horgan**, ing. et géosc., félicite un **John Bliss**, ing., des plus heureux.*

*Le maire de Fredericton, **Brad Woodside**, et **Tanya Horgan**, ing. et géosc., ne peuvent retenir leurs rire après qu'il lui ait offert son veston en ce jour frisquet de septembre.*

L'assemblée annuelle des ingénieurs de la Nouvelle-Écosse s'est tenue dans la magnifique vallée de l'Annapolis en septembre. C'est rassurant de constater que nous ne sommes pas seuls dans notre lutte pour la limitation de la responsabilité. La Nouvelle-Écosse œuvre aussi en faveur d'un délai de prescription définitif et nous avons collaboré sur cette question. J'aimerais souhaiter la bienvenue à **Paul Amyote, Ph.D.**, ing., au poste de président. Je suis certaine qu'il trouvera cela aussi gratifiant que moi.

Ingénieurs Canada a tenu son assemblée semi-annuelle en octobre à Ottawa du 6 au 9 octobre. Cette semaine a été remplie de tonnes d'information, mais le sujet qui a dominé les conversations fut la **campagne publicitaire nationale**.

Comme je le disais dans mon dernier compte rendu, **David Crandall**, ing., et **Melissa Mertz**, la directrice des communications de l'AIGNB, ont joué un rôle crucial dans l'élaboration de cette campagne. La conception de cette publicité a suscité de nombreuses discussions, ce qui est toujours un bon signe à mes yeux. On veut que les gens parlent d'une campagne. Pourquoi dépenser cet argent si personne ne la remarque?

Je crois que le Comité consultatif de la campagne nationale a accompli un travail remarquable et je félicite ses membres de leurs efforts. Assurez-vous de consulter *Chatelaine / Châtelaine, Canadian Living, Maclean's, Reader's Digest / Sélection du Reader's Digest, Canadian Geographic, Coup de Pouce* et *L'Actualité* pour y voir les objectifs de la campagne qui incite les parents à soutenir leurs enfants en mathématiques et en sciences, ouvrant ainsi la voie à des options de carrière en génie.

En plus de cibler les parents pendant la première année de la campagne, on a aussi créé des publicités s'adressant aux employeurs des ingénieurs. Les messages destinés à ce groupe visent à améliorer la compréhension qu'ont les employeurs de la valeur du permis d'exercice des ingénieurs et de l'importance d'embaucher des ingénieurs agréés. Des annonces sont parues dans les revues *Atlantic Business, Canadian Business, Report on Business, Financial Post, L'Actualité* et *Affaire Plus*.

L'assemblée semi-annuelle du Conseil canadien des géoscientifiques professionnels (CCGP) a eu lieu à Toronto du 31 octobre au 2 novembre. C'était magnifique de voir l'un des nôtres, **Bruce Broster, Ph.D.**, géosc., à l'œuvre en tant que président du CCGP. Comme je n'avais pu assister à l'assemblée annuelle du CCGP, ça été fantastique de reprendre contact avec les gens et de rencontrer quelques nouvelles personnes du milieu géoscientifique du Canada.

L'assemblée annuelle de l'Île-du-Prince-Édouard s'est déroulée en novembre. Il est toujours agréable de se rendre dans l'« île émeraude » du Canada, mais, à cette occasion, ce fut sous le signe d'une certaine nostalgie. Notre cher ami et collègue, **Frank Parslow**, ing., quittait son poste de directeur général d'*Engineers PEI*. J'ai le plaisir de connaître Frank et son épouse **Margaret** depuis quelques années, et j'espère que nous resterons amis encore longtemps. Les hommes de cette trempe sont rares.

Enfin, je tiens à remercier tous ceux et celles qui ont assisté à « mon *party* de Noël » à Saint John. (Je sais qu'il s'agissait en réalité de la **réception annuelle des membres** de l'AIGNB, mais tout le monde sait que j'aime faire la fête et que je me l'approprierai chaque fois que je le peux). Ce fut fabuleux de revoir tout le monde et j'espère que tous ont profité d'une splendide période des Fêtes.

Comme dernier mot d'adieu, je tiens à vous dire à tous **merci du soutien que vous avez continué d'accorder à l'Association** cette année. Je crois que nous sommes choyés d'avoir choisi nos professions et que nous devrions rester fiers de nos réalisations en tant qu'ingénieurs et géoscientifiques… et le crier sur les toits. J'ai vécu une année superbe et je la revivrais n'importe quand.

Au Conseil de l'AIGNB de cette année, je dis merci beaucoup. J'espère que je suis arrivée à rendre votre année aussi agréable que celle que vous avez réussi à me faire vivre.

À **Andrew M'leod**, notre directeur général, et à son personnel de l'AIGNB, je déclare : AVEC VOUS, ÇA DÉMÉNAGE! Je ne crois pas qu'il y ait d'autres associations qui peuvent compter sur une aussi bonne participation que la vôtre (ceci étant dit en toute objectivité, évidemment!).

Enfin, aux membres de l'AIGNB : merci beaucoup de m'avoir accordé l'occasion de vous représenter aux niveaux provincial, régional et national. Chaque minute en a valu la peine et je vous recommande fortement de tirer parti de votre participation à votre Association. Les récompenses sont incroyables, tant au plan personnel que professionnel.

Je souhaite au Conseil de 2009 une autre année productive et mémorable, alors que nous travaillerons tous aux enjeux qui préoccupent nos membres et au maintien de nos normes élevées en matière de mise en œuvre et de sécurité du public.

FREDERICTON BRANCH

Tammy Paradis, P.Eng. – *Chair*

The past few months have just flown by. It is hard to believe that it is already time to start building those front yard snow forts. Each year, our family tries to make the front yard fort bigger and better. It's amazing what you can accomplish with small shovels and ice cream containers. Even the dog gets in on the construction. One year, we had a slide and fort combo which both my son and our dog loved. It will be interesting to see what the imagination comes up with this winter! If there are other snow fort builders out there, please send me your winter fort pictures. I'd love to expand my creative horizons!

I would also like to ask our Branch members to focus on a new endeavour that we are attempting in 2009. We are **hoping to develop an annual Branch event** that brings people together in a spirit of a fun and learning. This new event will give our Branch the opportunity to showcase engineering or geoscience skills and principles. Other APEGNB Branches have been very successful with organizing their own community event. The Northeastern Branch hosts the annual APEGNB Pumpkin Fling. Crowds gather every September to launch pumpkins by catapult, rocket and air cannon into the Miramichi River.

The Northwestern Branch has their Annual APEGNB Igloo Building Competition. Last year, their event grabbed international headlines as they built the world's largest igloo and entered the Guinness Book of World Records.

The Fredericton Branch is considering a few ideas right now, but we encourage any Branch member to share their ideas with us. All suggestions are welcome as long as they are safe and family oriented. We want this to be an annual community event that will help raise the profile of our professions on a long-term basis.

While organizing an annual Branch event is one of our priorities, our Branch members have been busy volunteering for a variety of other initiatives. I am very proud to work with such an amazing group of people. Fredericton's Branch members lead very hectic lives yet still find time to donate their time to help their community. This year we focussed on our strengths from last year and brought back some of our favourite events. We are trying to improve these activities every year. Special thanks goes out to event chairs and volunteers: **Bill Lamey**, P.Eng., **Tammy Lamey**, P.Eng., **Kent Wiezel**, P.Eng.; **Peter Wedge**, MIT; **Fred Bérubé**, P.Eng.; **JC Comeau**, and **Phil Lamey**, P.Eng..

The **Carmen Creek Golf tournament** was fun and well attended. It was held on a beautiful Friday summer afternoon. But it wasn't all about winning or losing. We added a trivia and skills element like hitting the golf ball with a hockey stick or tennis racquet. Everyone had a great time and enjoyed the opportunity to get out of the office and have fun with other Branch members. Attendees expressed their interest to see it return for next year.

Family Fun Day and Barbecue at the Bucket Club was also a return event from 2007. This event was held in August and the weather was terrific. Everyone enjoyed the food and the activities with their families. The Family BBQ seems to be gaining in popularity. We doubled our attendance this year and the smiles on the children's faces were really wonderful to see.

We also brought back the **Fall Mactaquac Golf Tournament** and we were very enthused by how many people attended who asked us to hold it again in 2009. The concept of a challenge between past Branch chairs was tossed around. If anyone is interested, please let me know. I found the tournament was the a perfect opportunity for folks to catch up with each other and expand their social network. I am looking forward to defending my championship trophy next year.

However, there may be a few new teams signing up, so it looks like I am going to have to practice like a professional! **Andy Justason**, P.Eng., and **Alain Paradis**, P.Eng., were my golf partners-two very good golf partners. The Mactaquac competition in 2009 may get quite interesting. Stay tuned!!

The **Base Gagetown Technical Tour** was also a very interesting event. The attendees were given an exclusive guided tour of the military museum to discover the history of Canada's military at our very own Base Gagetown-one of the largest military bases in Canada and home of the Canadian Forces School of Military Engineering. It was a unique chance to see the history of uniforms, instruments and weapons from the Canadian Armed Forces.

If Branch members have any additional ideas for technical tours or speakers, please send them along. Our Branch is always looking for new event ideas.

Thanks again to everyone who volunteered to bring these events together and thank you to those who attended. We hope to build on these successes throughout 2009. The next event will be the **Annual General Meeting** in January. By the time this report goes to press, we'll be in the final planning stages of the AGM. If you weren't able to attend, I'll give you an update in the Spring issue of *Engenuity* or... you can check out online updates at ***www.apegnb.ca/fredericton***

APEGNB AIGNB
SECTION DE Fredericton BRANCH

NORTHEASTERN BRANCH

Claude Mallet, P.Eng. – *Chair*

Three events took place since my last Branch Report.

The **lobster supper** was held at the Dalhousie marina in June. In August, around 40 people attended the **golf tournament in Pokemouche**.

And in September, the annual **APEGNB Pumpkin Fling** was held in Miramichi. It was another outstanding success. We would like to thank **Ray Ritchie**, P.Eng., **Kevin Gallant**, P.Eng., and their team of volunteers who organized this event.

Another **MIT hockey night** is being planned. It is a social event at a Titan game where MITs can meet other Branch members and have fun. Details of the event will be provided by email or on our Branch web page: ***www.apegnb.ca/northeastern***.

2008 NORTHEASTERN BRANCH EXECUTIVE

Chair	**Claude Mallet**, P.Eng.
Vice Chair	**Gaétan Benoit**, P.Eng.
Treasurer	**Darrell Payne**, P.Eng.
Secretary	**Raphael Roy**, P.Eng.
Communications	**Kevin Gallant**, P.Eng.
Councillor - Northumberland	**Ray Ritchie**, P.Eng.
Councillor - Gloucester Est	**Lisa Albert-Thériault**, P.Eng.
Councillor - Gloucester Ouest	**Bernard Roy**, P.Eng.
P.Geo Rep.	**Dominique Bérubé**, P.Geo.
Association Affairs	**Kirk Mullin**, P.Eng.
Provincial Councillor	**Iris Auclair-Bernard**, P.Eng.
	Ray Ritchie, P.Eng.

APEGNB AIGNB Northeastern BRANCH

RAPPORT DE LA SECTION DU NORD-EST

Claude Mallet, ing. – *président*

Trois événements se sont déroulés depuis mon dernier rapport de la section.

Le **souper au homard** a eu lieu à la marina de Dalhousie en juin. En août, environ quarante personnes ont pris part au **tournoi de golf à Pokemouche**.

Et, en septembre, le concours annuel **Projetez-la-citrouille de l'AIGNB** a eu lieu à Miramichi. Ce fut un autre grand succès. Nous aimerions remercier **Ray Ritchie**, ing., **Kevin Gallant**, ing., et leur équipe de bénévoles qui ont organisé cette activité.

On prévoit organiser une autre **soirée de hockey des membres stagiaires**. Il s'agit d'une activité sociale à une partie du Titan où les membres stagiaires peuvent rencontrer d'autres membres de la section et se divertir. On donnera des précisions sur l'activité par courrier électronique ou sur la page Web de la section au ***www.apegnb.ca/northeastern***.

BUREAU DE DIRECTION DE LA SECTION DU NORD-EST EN 2008

Président	**Claude Mallet**, ing.
Vice-président	**Gaétan Benoit**, ing.
Trésorier	**Darrell Payne**, ing.
Secrétaire	**Raphael Roy**, ing.
Communications	**Kevin Gallant**, ing.
Conseiller - Northumberland	**Ray Ritchie**, ing.
Conseiller - Gloucester Est	**Lisa Albert-Thériault**, ing.
Conseiller - Gloucester Ouest	**Bernard Roy**, ing.
Représentant des géosc.	**Dominique Bérubé**, ieo.
Affaires de l'association	**Kirk Mullin**, ing.
Conseillers provinciaux	**Iris Auclair-Bernard**, ing.
	Ray Ritchie, ing.

APEGNB AIGNB SECTION DU Nord-Est

MONCTON BRANCH

Maryse Doucet, P.Eng. – *Chair*

Greetings to all Moncton Branch members!

Again this year, the very much anticipated **Annual Golf Tournament** held in Memramcook was a great success! More than 90 people played in the 18-hole Texas Scramble, and approximately 60 participants joined us for the supper at the Memramcook Institute. Everyone had a really good time, even though golf techniques and results varied quite a bit! Special thanks to **Veronique Hache**, MIT, for organizing this great event, and also to our many sponsors for donating all the prizes. Congratulations to our winners:

Winning Team - Terrain Group 1:	**Mark Bellefleur**, P.Eng. **Michel Ouellet**, P.Eng. **Brian Leger**
Longest Drive for Men:	**Brian Leger**
Longest Drive for Ladies:	**Tina Levesque**, MIT
Closest to the Pin for Men:	**Luc Degrâce**, MIT
Closest to the Pin for Ladies:	**Maryse Doucet**, P.Eng.

In November, the Moncton Branch held a **presentation for fourth and fifth year engineering students at Université de Moncton** to introduce them to APEGNB, and to provide further information on engineer-in-training enrollment. This event had a great turnout with approximately 30 future engineers in the audience.

The Moncton Branch is also very pleased to announce that we will be offering a new scholarship to an engineering student. The "**APEGNB Moncton Branch Scholarship**", valued at $500, will be awarded to a first year student enrolled in an engineering or geoscience program at a New Brunswick university. Applicants must be a resident of Albert, Kent or Westmorland Counties or the Parish of Havelock.

To conclude, more activities and technical sessions are currently being planned, and will be announced on the Moncton Branch page at ***www.apegnb.ca/moncton*** and by email. If you wish to be added on the Branch email list, please don't hesitate to contact **Tina Levesque**, MIT, at *Tina.Levesque@canadapost.ca*. We also welcome any idea for future events!

For those thinking of joining the Moncton Branch Executive, we still have a vacant position under Professional Development. Please contact **Maryse Doucet**, P.Eng., at *doucet.maryse@midlandtransport.com* if you are interested.

APEGNB AIGNB SECTION DE Moncton BRANCH

RAPPORT DE LA SECTION DE MONCTON

Maryse Doucet, ing. – *présidente*

Salutations à tous les membres de la section de Moncton!

Cette année encore, le très attendu **tournoi de golf annuel** tenu à Memramcook a connu un franc succès! Plus de 90 personnes ont joué le *Texas Scramble* de 18 trous, et environ 60 participants se sont joints à nous pour le dîner à l'Institut de Memramcook. Tout le monde s'est très bien amusé, bien que les techniques de golf variaient et que les résultats n'ont pas été les mêmes pour tous! Un grand merci à **Véronique Haché**, membre stagiaire, d'avoir organisé ce fantastique événement, ainsi qu'à nos nombreux commanditaires qui ont fait don de tous les prix. Nos félicitations aux gagnants :

Équipe gagnante - groupe terrain 1 :	**Mark Bellefleur**, ing. **Michel Ouellet**, ing. **Brian Leger**
Plus long coup de départ chez les hommes :	**Brian Leger**
Plus long coup de départ chez les femmes :	**Tina Levesque**, membre stagiaire
Le plus près de la cible chez les hommes :	**Luc Degrâce**, membre stagiaire
La plus près de la cible chez les femmes :	**Maryse Doucet**, ing.

En novembre, la section de Moncton a organisé une **présentation à l'intention des étudiantes et étudiants de quatrième et de cinquième année en génie à l'Université de Moncton** pour leur présenter l'AIGNB et leur donner plus d'information au sujet de l'inscription à titre d'ingénieur-stagiaire. Cet événement a été bien fréquenté, environ trente futurs ingénieurs s'y étant présentés.

La section de Moncton est aussi très heureuse d'annoncer qu'elle accordera une nouvelle bourse d'étude à une étudiante ou à un étudiant en génie. D'une valeur de 500 $, la « **bourse de la section de Moncton de l'AIGNB** » sera accordée à une étudiante ou à un étudiant de première année inscrit à un programme de génie ou de sciences de la Terre à une université du Nouveau Brunswick. Les candidats doivent habiter les comtés d'Albert, Kent ou Westmorland, ou la paroisse de Havelock.

Pour conclure, nous sommes en train d'organiser d'autres activités et d'autres séances techniques; elles seront annoncées dans la page Web de la section de Moncton au ***www.apegnb.ca/moncton***, ainsi que par courrier électronique. Si vous souhaitez que l'on vous ajoute à la liste d'envoi par courrier électronique de la section, n'hésitez surtout pas à communiquer avec **Tina Lévesque**, membre stagiaire, à *Tina.Levesque@canadapost.ca*. Nous sommes aussi intéressés à connaître vos suggestions d'autres activités!

Pour ceux qui songent à se joindre au bureau de direction de la section de Moncton, sachez qu'il y a un poste vacant dans le domaine du perfectionnement professionnel. Prière de communiquer avec **Maryse Doucet**, ing., à l'adresse *doucet.maryse@midlandtransport.com* si le poste vous intéresse.

APEGNB AIGNB SECTION DE Moncton BRANCH

SAINT JOHN BRANCH

Michelle Paul-Elias, P.Eng. – *Chair*

New Year's greetings from the Saint John Branch! We had another great year of events in 2008 that were enjoyed by all. Thank you to our committee for all your organizing efforts. They are much appreciated.

In June, we hosted a **dinner cruise and casino**. The weather was fantastic as well! There were many fabulous prizes to bid on at the end of the night and our auctioneer, **Lisa Frazee**, P.Eng., did an amazing job as did **Holly Young**, P.Eng., who took care of the planning and logistics. Thanks also to the Y's Men, who ran the casino, and the Saint John Marina who catered the event.

Of course, there is no summer without the **annual golf tournament** that was held in July at Rockwood Park Golf Course in Saint John. As usual it was well attended by the membership. It is an event that our branch members look forward to every year. A special thank you goes out to **Kevin Kyle**, P.Eng., for volunteering his time to organize the event this year.

The **annual branch meeting** was held on September 16, 2008, and our new executive has been formed.

2008/2009 BRANCH EXECUTIVE

Chair	**Michelle Paul-Elias**, P.Eng. ggh@nb.sympatico.ca
Past Chair	**Chad Connors**, P.Eng. cconnors@adi.ca
Vice Chair	**Robert Rowe**, P.Eng. rowe.robert@jdirving.com
Treasurer	**Marlo Rose**, P.Eng. marlo.rose@irvingoil.com
Secretary	**Kim Kimball**, MIT kkimball@adi.ca
Communications Officer	**Ken Fenwick**, P.Eng. kenfen@nbnet.nb.ca
APEGNB Provincial Councillor	**Holly Young**, P.Eng. holly.young@saintjohn.ca
APEGNB Provincial Councillor	**Paul Holah**, P.Eng. paul.holah@irvingoil.com
UNBSJ Faculty Representative	**Dr. Ken Sollows** sollows@unb.ca
UNBSJ Student Representative	TBD
Councillor	**Justin McGrath**, P.Eng. justin.mcgrath@innovatia.net
Councillor	**Lisa Frazee**, P.Eng. Frazee.lisa@oceansteel.com

I would like to thank our past Branch chair, **Chad Connors**, P.Eng., and our entire executive of 2007-2008 for all of their efforts. We hosted many successful events last year and they would not have happened without your time and energy.

This year, Saint John Branch members volunteered for **Habitat for Humanity** in Saint John over two weekends: October 25th and November 15th.

Thank you to those who generously donated their time to such a worthy cause. Many of the volunteers were displaying their hidden talents while learning new skills as well. I would like to thank **Jonathan Lenton**, P.Eng., for coordinating the schedule. Special thanks to **Dave Burpee**, P.Eng.; **Kelly Martinell**, MIT; **Holly Young**, P.Eng.; **Andrew Butcher**, P.Eng.; **Tanya Horgan**, P.Eng./P.Geo.; **Paul O'Connor**, P.Eng.; **Brian Morgan**, P.Eng., and **Jennifer Nicholls**.

On November 20, **Peter Hanlon**, P.Eng., was our speaker for the Branch's first **Brown Bag luncheon** seminar at UNBSJ. Peter gave a special presentation about the renowned Water for People Organization and his recent visit to Bolivia. Thank you to Peter, **Holly Young**, P.Eng., and **Dr. Dale Roach**, P.Eng., for their efforts in coordinating this session.

Our Branch members will be taking part in the **Young Engineers Program** again this year, which is an opportunity for our members to share their experiences to middle school students. Thank you to all of our volunteers who will be participating in the upcoming sessions. Please contact me if you are interested in getting involved as there are some openings in 2009.

This year, the **Saint John Branch Christmas party** was held simultaneously with the APEGNB Members Reception on December 11 at the Delta Saint John.

By the time this Branch report hits the presses, the **annual curling event** at Thistle St. Andrews on January 17 will have taken place. Photos will accompany the Spring 2009 *Engenuity* Branch Report.

As well, there are more **technical sessions** planned for 2009. Stay tuned for more details.

We have many events planned for 2009 so stay tuned. News will be coming via your email inbox, our Facebook group or on the APEGNB website. Check out our branch web page anytime at ***www.apegnb.ca/saintjohn***

APEGNB AIGNB
SECTION DE Saint John BRANCH

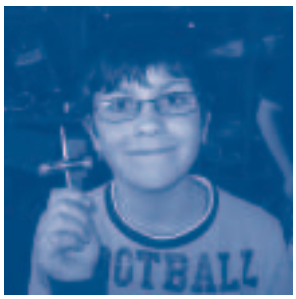
NORTHWESTERN BRANCH

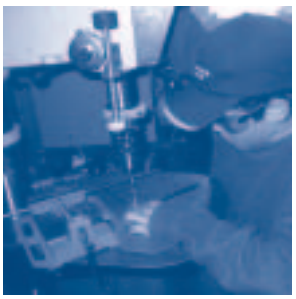
Eric Ouellette, P.Eng. – *Chair*

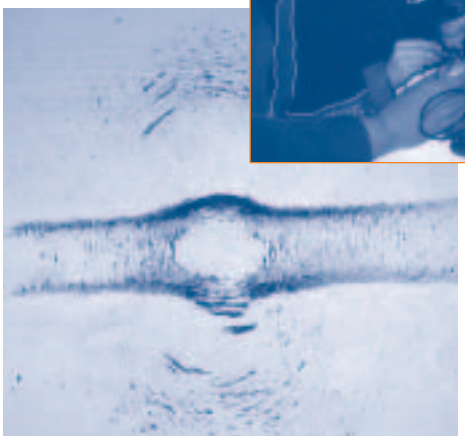
Our Northwestern Branch APEGNB **engineering learning series** continues!!

Alain Pelletier, P.Eng., and **Martin Benoit**, P.Eng., two Northwestern Branch members, started an engineering learning series in partnership with the local library. Kids from the Edmundston area, ranging in ages from 9 to 11, registered free of charge for the second installment in the series entitled *Electricity and Magnetism* which covered topics such as:

- Static electricity
- Magnets and Magnetism
- The Voltaic cell and electric circuit
- Electromagnetism
- Electric DC motor







As with last year's sessions, children learned about basic science laws and principles and engaged in visual experiments. The experiments were carried out using all sorts of recycled parts from Alain's shop. Only small groups have participated to date because the series is being designed and improved as the sessions unfold. The goal is to expand on the idea in coming months so that more children can be encouraged to explore the wonderful world of engineering.

The IGLOOS are coming!!!

Mark your calendars. The very popular **APEGNB Igloo Building Competition** will take place from **February 13 to 15**, 2009, in Grand Falls, New Brunswick.

This year, organizers want to focus more on the actual team igloo building competition and less on the giant ice igloo. But not to worry! The giant ice igloo from last year will be rebuilt for those who did not get a chance to see it.

We are working hard to sign-up a good mixture of student teams, businesses, engineers and just about anybody who wants to come have fun and take part in a unique experience with us this winter. The competition also lands on Valentine's Day weekend. How special and romantic would it be to bring loved ones to the coolest engineering event in the province and get to see a great Canadian competition and a world record igloo!

This year, organizers have decided to **move the competition from Centennial Park** to a more visible location near **the Trans Canada Highway between the Best Western Hotel and the Hyundai dealership** off Ouellette Road. This site will allow easier access and plenty of parking for visitors, organizers and participants. The snowmobile trail also runs through the area for those hardcore sledders.

Again, money raised during the weekend will go towards **funding engineering scholarships**. APEGNB members are encouraged to help promote your profession by volunteering or even participating in the igloo competition. Why not get a few buddies together and take the challenge of actually building one of Canada's most incredible structures? Sounds simple but most who have tried it will tell you it's easier said then done.

To see **our Guinness World Record** for the largest dome igloo, visit *www.guinnessworldrecords.com/records/science_and_technology/structures/largest_dome_igloo.aspx*

See you in Grand Falls at the third annual APEGNB Igloo Building Competition (***www.igloocompetition.ca***)!

NORTHWESTERN BRANCH EXECUTIVE:

Chair	**Eric M. Ouellette**, P.Eng.
Vice Chair	**Karine Savoie**, P.Eng.
Treasurer	**Marc Laforge**, P.Eng.
Secretary	**Christine Ouellette** *
Branch Councillors	**Alain Pelletier**, P.Eng.
	Mireille Vautour, P.Eng.
	Mariette Savoie, P.Eng.
	Jean Louis Daigle, P.Eng.
	Martin Benoit, P.Eng.
	Nadine Levesque, MIT
Provincial Councillors	**Georges Roy**, P.Eng.
	Paul Cormier, P.Eng.

* non member

APEGNB AIGNB Northwestern BRANCH

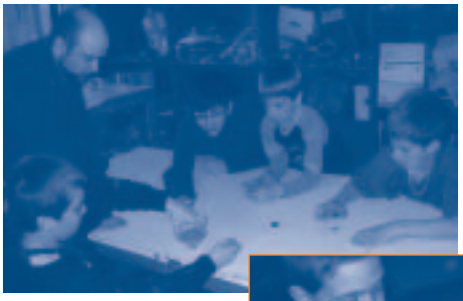
RAPPORT DE LA SECTION DU NORD-OUEST

Eric Ouellette, ing. – *président*

Les séances d'apprentissage en génie de la section du Nord-Ouest de l'AIGNB se poursuivent!!

Alain Pelletier, ing., et **Martin Benoît**, ing., deux membres de la section du Nord-Ouest, ont lancé des séances d'apprentissage en génie en partenariat avec la bibliothèque locale. Les enfants de la région d'Edmundston âgés de 9 à 11 ans ont pu s'inscrire gratuitement à la seconde série de séances intitulée *L'électricité et le magnétisme* où l'on abordait des sujets tels que :

- l'électricité statique
- les aimants et le magnétisme
- la pile voltaïque et les circuits électriques
- l'électromagnétisme
- le moteur à courant continu.



Comme dans le cas des séances de l'an dernier, les enfants apprennent les lois et principes de base des sciences et prennent part à des expériences visuelles. Les expériences ont été réalisées à l'aide de toutes sortes de pièces recyclées provenant de l'atelier d'Alain. Seuls de petits groupes y ont participé à ce jour parce que l'on peaufine et améliore les séances au fur et à mesure. On vise à renforcer l'idée au cours des prochains mois, afin que davantage d'enfants puissent être invités à explorer le merveilleux monde du génie.

Les IGLOUS s'en viennent!

Cochez vos calendriers. Le très populaire **Concours de construction d'iglous de l'AIGNB** se tiendra du **13 au 15 février 2009** à Grand-Sault (Nouveau-Brunswick).

Cette année, les organisateurs veulent surtout mettre l'emphase sur le concours de construction d'iglous en équipe comme tel, plutôt que sur l'iglou de glace géant. Mais, ne vous inquiétez pas : l'iglou de glace géant de l'an dernier sera reconstruit pour le plaisir de ceux qui n'ont pas encore eu la chance de le voir.

Nous travaillons avec ardeur pour inscrire un bon mélange d'équipes étudiantes, d'entreprises, d'ingénieurs et d'à peu près n'importe quelle personne qui veut se joindre à nous cet hiver pour s'amuser et participer à cette expérience particulière. La date du concours correspond aussi à la fin de semaine de la Saint-Valentin. Imaginez combien ce serait spécial et romantique d'emmener des personnes chères à l'activité provinciale la plus rafraîchissante du secteur du génie avec la chance d'assister à une grande compétition canadienne et de voir l'iglou qui détient le record du monde!

Une fois encore, l'argent recueilli au cours de la fin de semaine servira au **financement de bourses d'études en génie**. On incite les membres de l'AIGNB à donner un coup de main à la promotion de leur profession en se portant bénévoles ou en prenant part au concours d'iglous. Pourquoi ne pas rassembler quelques copains et relever le défi d'ériger l'une des structures les plus fascinantes du Canada? Ça a l'air simple, mais ceux qui l'ont tenté vous diront que c'est plus facile à dire qu'à faire.

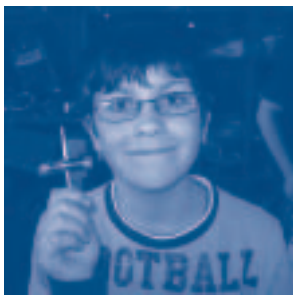
Pour voir **notre record du monde Guinness** du plus imposant iglou à dôme, consultez le site Web *www.guinnessworldrecords.com/records/science_and_technology/structures/largest_dome_igloo.aspx*.

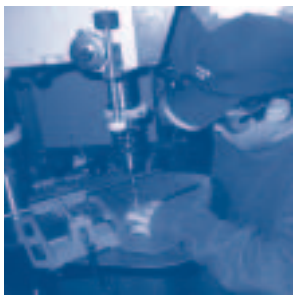
Au plaisir de vous voir à Grand-Sault au troisième Concours annuel de construction d'iglous de l'AIGNB (***www.igloocompetition.ca***)!

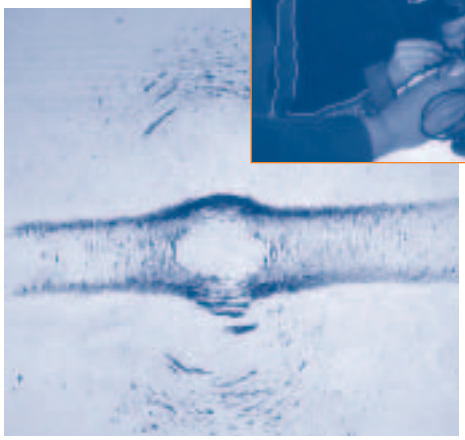
BUREAU DE DIRECTION DE LA SECTION DU NORD-OUEST EN 2008

Président	**Eric M. Ouellette**, ing.
Vice-président	**Karine Savoie**, ing.
Trésorier	**Marc Laforge**, ing.
Secrétaire	**Christine Ouellette** *
Conseillers de la section	**Alain Pelletier**, ing.
	Mireille Vautour, ing.
	Mariette Savoie, ing.
	Jean Louis Daigle, ing.
	Martin Benoit, ing.
	Nadine Levesque, MIT
Conseillers provinciaux	**Georges Roy**, ing.
	Paul Cormier, ing.

* non membre







Cette année, les organisateurs ont décidé **de déménager le concours depuis le parc du Centenaire** à un endroit plus accessible près de **l'autoroute transcanadienne entre l'hôtel Best Western et le concessionnaire Hyundai** sur le chemin Ouellette. Ce site sera plus visible et offrira davantage de stationnement aux visiteurs, aux organisateurs et aux participants. La piste de motoneige traverse aussi la zone, ce qui rendra heureux les amateurs de ce sport.

APEGNB AIGNB SECTION DU Nord-Ouest

Engineers Canada – Message from the President

By Dick Fletcher, FEC, P.Eng.

The past year and a half has been a period of forward momentum for Engineers Canada. Our programs showcase the profession both on the national and international stage, and we are proud to share information regarding our activities in a timely fashion with members of our constituent members' councils. My hope is that my president's messages will be one tool to effectively meet this objective.

The past year and a half has been a period of forward momentum for Engineers Canada. Our programs showcase the profession both on the national and international stage, and we are proud to share information regarding our activities in a timely fashion with members of our constituent members' councils. My hope is that my president's messages will be one tool to effectively meet this objective.

Internationally, for example, Engineers Canada has assumed the position of chair of the World Federation of Engineering Organizations' Committee on Engineering and the Environment for the next four-year term. Nationally, the May 2008 annual general meeting and the subsequent Board of Directors workshop highlighted several priority items for Engineers Canada. To provide a brief update of several projects' activities:

- Speakers for the 2009 Engineering Summit *Leading a Canadian Future: The New Engineer in Society* are currently being confirmed and a systematic marketing campaign including direct mail and web banners provided to sponsors will soon be implemented.
- The Canadian Engineering Accreditation Board has developed a framework that is intended to facilitate the implementation of the new accreditation criteria approved in May for working towards an outcome-based assessment system by 2010.
- Engineers Canada has been working with federal officials to ensure that the federal government understands the engineering profession's leadership role in addressing the mobility issue. Within the profession itself, the priority for 2008 is the development of a national standard aimed at consistency.
- New approach to address roles, direction and sustainable funding for national projects.
- The Women in Engineering Task Force has been working on establishing priorities, actions, and resource requirements, and will be presenting its recommendations to the Board of Directors at their May 2009 meeting.

Our efforts gain efficiency through working in collaboration with our constituent members and the sharing of best practices. In fact, the national campaign to promote our profession currently being developed is greatly benefiting from having communications staff from five of the constituent members as full voting participants on the Campaign Advisory Committee. We have seen the trusted advisor position of our profession slide due in part to the positive promotion of other professions and our reluctance to be assertive in this area. It is up to the engineering profession to invest in itself and to make the case regarding its value – no one else is going to make it for us.

By creating a theme that can be utilized nationally, the collaborative campaign will work in synergy with the efforts of the constituent members, and I look forward to positive discussions regarding the campaign during the October Board meeting.

In closing, my thanks go to the Board of Directors and I deeply acknowledge the countless hours volunteered by association members. It is because of you that Engineers Canada is able to pursue its mandate so effectively. As president, I have had the distinct privilege of meeting many of you and I look forward to further collaboration as we work towards our mutual goals and objectives.

engineerscanada ingénieurscanada

crandall

"Our mission is to work in partnership with our clients to provide practical and innovative solutions, sound advice and leadership in complete engineering services."

MONCTON
1077 St. George Blvd.
Moncton, NB E1E 4C9
Ph: (506) 857-2777
Fax: (506) 857-2753
Toll Free: 1-866-857-2777

SAINT JOHN
Red Rose Building, Suite 130
12 Smythe Street
Saint John, NB E2L 5G5
Ph: (506) 693-5893
Fax: (506) 693-3250

crandallengineering.ca

MUNICIPAL • WATER • WASTEWATER • TRANSPORTATION • LAND DEVELOPMENT • MECHANICAL & ELECTRICAL

NEW BRUNSWICK ENGENUITY

EPIC Educational Program Innovations Center

Upcoming Course Schedule

Civil

- **Upgrading Bridge Inspection Skills**
  March 9-10, 2009 - **Halifax**
- **Structural Design Of Industrial Facilities**
  April 20-22, 2009 - **Halifax**

Electrical

- **Modern Power System Protective Relaying**
  April 20-21, 2009 - **St. John's, NL**

Environmental

- **Designing Wastewater Pumping Systems And Lift Stations**
  March 4-6, 2009 - **Halifax**
- **Environmental Statistical Analysis For Effective Cost Reduction**
  April 14-16, 2009 - **Halifax**

Mechanical and Industrial

- **Pumps: Selection, Operation And Maintenance**
  March 9-10, 2009 - **St. John's, NL**
- **Industrial Piping And Associated Equipment**
  March 11-13, 2009 - **St. John's, NL**
- **Industrial Water Treatment Chemistry**
  March 23-24, 2009 - **Halifax**
- **Fire Alarm Systems: Design, Installation, Inspection And Testing**
  March 23-24, 2009 - **Halifax**
- **Reverse Osmosis Technology**
  March 25-27, 2009 - **Halifax**
- **Cooling Water Treatment Technology**
  April 27-28, 2009 - **Halifax**
- **Boiler Water Treatment Technology**
  April 29-30, 2009 - **Halifax**

EPIC On-site Programs

EPIC courses are available on-site at your location and they can be customized to suit your specific requirements. For more information on these programs, please visit our website at www.epic-edu.com or call Tim Chugh at 1-888-374-2338 ext 242 or email him at tchugh@epic-edu.com.

Successful completion of EPIC courses entitles you to CEUs. For information regarding these courses and our recently added courses, please visit our Website at www.epic-edu.com
or Call 1-888-374-2338 • Fax 1-800-866-6343

www.epic-edu.com

APPLAUSE

APENS honours 1961 UNB engineering graduate

*APENS presents **Bill Sutherland**, P.Eng., (right) with the the F. H. Sexton Gold Medal award.*

On September 26, 2008, **William R. Sutherland**, P.Eng., was presented with the F. H. Sexton Gold Medal award by the Association of Professional Engineers of Nova Scotia (APENS) at its annual meeting in Wolfville. This Medal bestows distinction on outstanding engineers and recognizes exceptional achievements in their chosen field. Winners will have had an outstanding career in engineering, benefiting the economic and social development of Nova Scotia and Canada while providing leadership in the profession and in the community. The award was first presented in l961 and has been won by many well-known engineers such as **Hector J. Jacques**, P.Eng., and **Marc Garneau**, P.Eng.

Bill Sutherland grew up in the little riverside community of Red Bank in Miramichi and that presence of water has stayed with him through his distinguished civil engineer career. After graduating from UNB in 1961 with his degree, he furthered his studies with an MSc specializing in foundation and marine engineering. "Each marine project is fairly challenging," says Sutherland, "and they're never repetitive."

In 1969, he transferred to Halifax on the design/project management of the IWK hospital and later worked on many marine and municipal projects including Fairview Cove and Pier C container piers.

In 1978, Sutherland joined Jacques Whitford as vice-president in the corporate office in Halifax, helping grow the company from two offices and approximately 25 people to more than 1000 personnel in 2003 with offices throughout Canada and the United States.

In 2003, he joined the project management team for the Halifax Harbour Solutions Project, working as part of the Dexter Construction Company Ltd. Team on the multi-million dollar design/build project for the infrastructure development and the treatment plants.

Since he first joined the APENS in 1969, Sutherland has been very active in the engineering association, including serving as president in 1992, as well as Chairman of the Canadian Council of Professional Engineers. He served as a board member of the Grace Maternity Hospital during the construction of the new hospital and as a member of the Halifax's Lakes and Waterways Advisory Committee to Council.

In his response, Sutherland acknowledged that "It's humbling to receive the F.H.Sexton Gold Medal. I'm very pleased. It's a reward at the end of a long career and caps it off nicely." He also paid tribute to his university professors who instilled the skills he acquired in his early years as an engineer. He named professors **Howard MacFarlane**, **Albert Stevens**, P.Eng., **Robert MacLaughlan** and **Earl Grant**.

APEGNB member wins National Engineering scholarship

*L-to-R: **Tanya Horgan**, P.Eng.,/P.Geo., President of APEGNB; **Pierre Nadeau**, son of Léopold Nadeau; **Trevor Hanson**, P.Eng.; **Brent Smith**, P.Eng., Engineers Canada - Director for New Brunswick*

UNB civil engineering PhD candidate, **Trevor Hanson**, P.Eng, from French Lake, NB, has been awarded the first Engineers Canada-TD Insurance Meloche Monnex Léopold Nadeau scholarship for his research relating to transportation and rural seniors. The scholarship, valued at $10,000, is awarded to engineers returning to university for further study or research in the area of public policy development.

"It is truly an honour to receive this scholarship and to be recognized nationally by my profession for the research I am currently undertaking" stated Hanson. "I believe my research has the potential to result in long-term, positive impacts for seniors in rural areas who have challenges with transportation."

Hanson is researching, from an engineering and public policy perspective, how seniors in rural areas can better meet their transportation needs. This requires a better understanding of where, when, and why people travel today, including their use of their automobile, as well as understanding available rural transportation services and other policy implications.

"Engineering is a very exciting field and there are many opportunities to make a difference. I am very fortunate to be able to return to university to work on an issue that is not only national in scope, but can result in local solutions that can help my community." Hanson is looking for participants to assist with his research. Eligible participants are:

- men and women who live outside of Fredericton and Oromocto in York, Sunbury and Queens Counties
- ages 65 years and over (though those under 65 years who are retired are welcome to participate),
- in possession of a driver's license.

People who may be interested in volunteering or who would like more information on Hanson's research, can contact him at UNB in Fredericton at 453-4521.

Hanson returned to the University of New Brunswick in 2007 to undertake PhD studies in transportation.

The scholarship was created in honour of the late **Léopold Nadeau**, past executive director of Engineers Canada. Engineers Canada is the national organization of the 12 provincial and territorial associations/ordre that regulate the practice of engineering in Canada and license the country's more than 160,000 professional engineers.

Scholarship recipients demonstrate engineers' roles in contributing to the evolution of Canadian society

Engineers Canada has proudly awarded seven Canadian engineers, who are both representative of and are responding to the concerns held by the engineering profession, with scholarships in support of their great potential for contributing to both their profession and Canadian society.

"We are proud to support these individuals who are pursuing their dreams of assisting their communities, creating new technologies and improving Canadian society," said **Chantal Guay**, P.Eng., ing., chief executive officer, Engineers Canada. "Their dedication to problem solving demonstrates the talent within the engineering profession - the talent that we as a profession have a responsibility to acknowledge, applaud and harness."

The scholarship recipients demonstrate how the engineering profession can contribute towards a healthier, cleaner, safer, more competitive and sustainable Canada. They are working on a wide range of projects, including specializing in nanotechnology to develop thin films that have the potential to improve safety in mine sites; focusing on the challenges faced when designing offshore structures for ice environments; developing better safety equipment and spine injury treatment strategies; developing and implementing public policy geared towards sustainable and strategic resource management in the industrial sector; studying how multinational corporations identify strategic practices; determining how engineers and their companies can better manage risk; and determining how public policy interventions may improve the lives of rural older drivers.

This year's scholarship recipients are:

Engineers Canada-Manulife Financial Scholarships - valued at $10,000

- **Kathleen Krause**, P.Eng., APEGGA, pursuing a PhD in electrical and computer engineering, specializing in nanotechnology, at the University of Alberta
- **Rocky Taylor**, P.Eng., PEGNL, pursuing a PhD in ocean engineering at Memorial University
- **Carolyn Van Toen**, P.Eng., APEGBC, pursuing a PhD in mechanical engineering, with a specialization in biomechanics, at the University of British Columbia

Engineers Canada-TD Insurance Meloche Monnex Scholarships - valued at $7,500

- **Leslie Bateman**, P.Eng., Engineers Nova Scotia, pursuing a Bachelor of Law at Dalhousie University
- **Gwyneth Edwards**, Eng., OIQ, pursuing a PhD in administration, focused on management, at Concordia University.
- **Lianne Lefsrud**, P.Eng., APPEGA, pursuing a PhD in business, with a specialization in organizational analysis, at the University of Alberta

Engineers Canada-TD Insurance Meloche Monnex Léopold Nadeau Scholarship - valued at $10,000

- **Trevor Hanson**, P.Eng., APEGNB, pursuing a PhD in civil engineering, focused on transportation, at the University of New Brunswick

The new Engineers Canada-TD Insurance Meloche Monnex Léopold Nadeau scholarship, created in honour of the late Léopold Nadeau, past executive director of Engineers Canada, is awarded to engineers returning to university for further study or research in the area of public policy development.

For more information on the 2008 scholarship recipients and Engineers Canada, visit:

www.engineerscanada.ca/e/prog_awards_2.cfm

BUILDING ON ENGINEERING KNOWLEDGE
ENGINEERS CANADA NATIONAL SCHOLARSHIP PROGRAM

FOUR SCHOLARSHIPS

to support you on your path to greater knowledge

TD INSURANCE MELOCHE MONNEX, provider of the home and automobile insurance program endorsed by Engineers Canada, is proud to be associated with the Engineers Canada Scholarship Program by offering four scholarships this year.

Three TD Insurance Meloche Monnex Scholarships of $7,500

Each scholarship will assist engineers returning to university for further study or research in a field other than engineering. The discipline should favour the acquisition of knowledge which enhances performance in the engineering profession. Candidates must be accepted or registered in a faculty other than engineering.

The TD Insurance Meloche Monnex Léopold Nadeau Scholarship of $10,000

This scholarship is awarded to students pursuing studies in Public Policy Development in the field of engineering or another discipline.

To be eligible, candidates must be accepted or registered, at the time the scholarship is awarded in the fall, in a master's or doctoral program that will significantly enhance their engineering expertise, abilities and potential to influence the development of public policy.

APPLICATION DEADLINE: March 1, 2009

Application forms are available at: www.engineerscanada.ca
or by contacting the National Scholarship Program at Engineers Canada
awards@engineerscanada.ca

Endorsed by: engineerscanada
Engineers Canada is the business name of the Canadian Council of Professional Engineers

TD Insurance Meloche Monnex

*The term "engineering" is an official mark held by the Canadian Council of Professional Engineers

Par leur contribution à l'évolution de la société canadienne, les lauréats des bourses démontrent les rôles de l'ingénieur

C'est avec fierté qu'Ingénieurs Canada a décerné des bourses d'études à sept ingénieurs canadiens qui s'attaquent aux questions d'importance pour la profession d'ingénieur. Ces bourses leur sont ainsi décernées pour souligner leur immense potentiel de contribution à la profession d'ingénieur et à la société en général.

« Nous sommes fiers d'appuyer des personnes qui poursuivent le rêve d'aider leur communauté, de créer de nouvelles technologies et d'améliorer la société canadienne, déclare **Chantal Guay**, ing., P.Eng., chef de la direction d'Ingénieurs Canada. Leur détermination à résoudre des problèmes témoigne du talent de la profession d'ingénieur, talent que nous nous devons de reconnaître, d'applaudir et de mettre en valeur. »

Les lauréats des bourses démontrent comment la profession d'ingénieur peut contribuer à faire du Canada un pays plus vert, plus sécuritaire, de même que plus concurrentiel et davantage axé sur le développement durable. Les projets auxquels ils travaillent témoignent de leur engagement à cet égard : utiliser la nanotechnologie pour créer des couches minces capables d'améliorer la sécurité dans les mines, s'attaquer aux défis que posent les installations au large des côtes dans des milieux glacés, concevoir de nouveaux équipements de protection et élaborer de meilleures stratégies de traitement des lésions de la moelle épinière, élaborer et mettre en oeuvre des politiques publiques axées sur la gestion stratégique et durable des ressources dans le secteur industriel, étudier la façon dont les multinationales établissent leurs pratiques stratégiques, déterminer comment les ingénieurs et leurs entreprise peuvent mieux gérer le risque et déterminer la façon dont les interventions des politiques publiques peuvent améliorer la qualité de vie des conducteurs âgés vivant en milieu rural.

Les lauréats des bourses de cette année sont :

Bourses Ingénieurs Canada-Financière Manuvie, de 10 000 $ chacune

- **Kathleen Krause**, ing., APEGGA, qui effectue un doctorat en génie électrique et informatique avec spécialisation en nanotechnologie à l'Université de l'Alberta
- **Rocky Taylor**, ing., PEGNL, qui effectue un doctorat en génie océanique à l'Université Memorial
- **Carolyn Van Toen**, ing., APEGBC, qui effectue un doctorat en genie mécanique avec spécialisation en biomécanique à l'Université de la Colombie-Britannique

Bourses Ingénieurs Canada-TD Assurance Meloche Monnex, de 7 500 $ chacune

- **Leslie Bateman**, ing., Engineers Nova Scotia, qui effectue un baccalauréat en droit à l'Université Dalhousie
- **Gwyneth Edwards**, ing., OIQ, qui effectue un doctorat en administration axée sur la gestion à l'Université Concordia
- **Lianne Lefsrud**, ing., APPEGA, qui effectue un doctorat en administration des affaires avec spécialisation en analyse organisationnelle à l'Université de l'Alberta

Bourse Léopold Nadeau d'Ingénieurs Canada-TD Assurance Meloche Monnex, de 10 000 $

- **Trevor Hanson**, ing., AIGNB, qui effectue un doctorat en génie civil axé sur les transports à l'Université du Nouveau-Brunswick

La nouvelle bourse Léopold Nadeau d'Ingénieurs Canada-TD Assurance Meloche Monnex, créée en l'honneur du regretté Léopold Nadeau, ancien directeur general d'Ingénieurs Canada, est décernée à des ingénieurs qui retournent à l'université pour faire des études ou de la recherche dans le domaine de l'élaboration des politiques publiques.

Pour de plus amples renseignements sur les lauréats des bourses 2008 et sur Ingénieurs Canada, visitez le : **www.ingenieurscanada.ca/f/prog_awards_2.cfm**

AGS COLLOQUIUM

Delta Beauséjour Hotel Moncton NB February 6-8, 2009

The 35th annual Colloquium and Annual General Meeting of the Atlantic Geoscience Society (AGS) is planned for the Delta Beauséjour Hotel in Moncton, New Brunswick on February 6-8, 2009.

The Colloquium features **oral and poster presentations** on geoscience research currently being carried out in the Atlantic Provinces by professional geoscientists and post-graduate students. An added feature to this year's program is a **visit to the Potash Corp**. (New Brunswick Division) underground potash mine near Sussex.

Additional information and a **Call for Abstracts** can be found on the AGS website (**http://ags.earthsciences.dal.ca/ags.php**). Registration forms will also be posted on the website around mid-December.

The Atlantic Geoscience Society is a non-profit organization that provides a forum for earth science professionals and students in the Maritimes to communicate the results of their research. AGS is committed to promoting a better and wider understanding of earth science, both to its members and the general public. Our membership includes professional geoscientists (government, university and industry), students, and interested members of the public. AGS is affiliated with the Geological Association of Canada and the Canadian Society of Petroleum Geologists.

One of **three**

$10,000

Scholarships

could take your engineering career to great heights

We want you to move your dreams forward.

That's why we – The Manufacturers Life Insurance Company (Manulife Financial), underwriters of your life insurance plan – and Engineers Canada jointly sponsor a scholarship program to help make those dreams a reality!

Through the program, we offer **three $10,000 scholarships** to provide financial assistance to engineers returning to university for further study or research **in an engineering field. Candidates must be accepted or registered in a faculty of engineering, beginning their studies no later than September 2009.**

BUILDING ON ENGINEERING KNOWLEDGE

Application Deadline: March 1, 2009

For further information and an official application form, contact:

National Scholarship Program, Engineers Canada,
1100-180 Elgin Street, Ottawa, ON K2P 2K3

e-mail: awards@engineerscanada.ca
Telephone: 613-232-2474
Fax: 613-230-5759
Web site: www.engineerscanada.ca

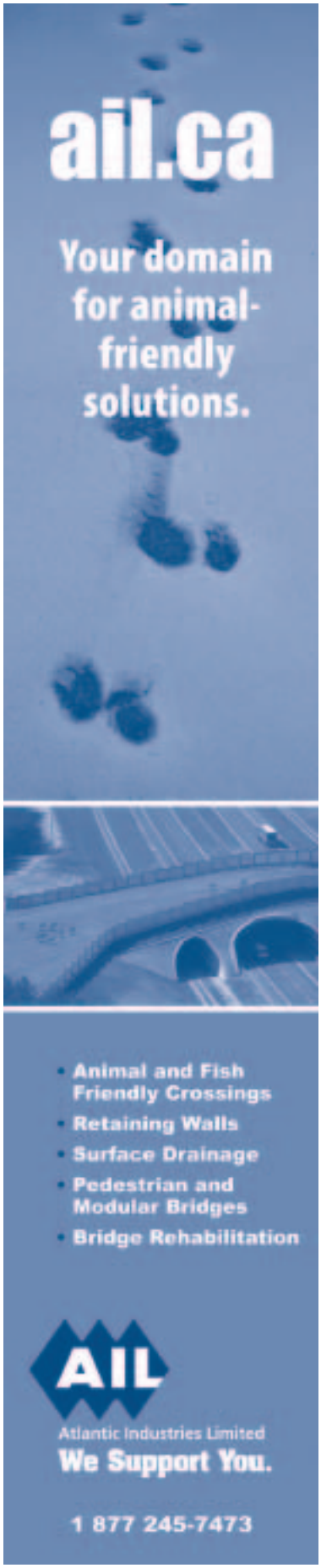
Sponsored by:

engineerscanada

Engineers Canada is the business name of the Canadian Council of Professional Engineers

Manulife Financial

The Manufacturers Life Insurance Company



ENGINEERS CANADA SAYS INFRASTRUCTURE SPENDING MISSING LONG-TERM APPROACH

*While self-interest groups and economic experts applaud Canada's Infrastructure Minister **John Baird**'s cross-country consultations on accelerating infrastructure spending, Engineers Canada fears that a long-term approach is missing from an economic stimulus package that seems to aim only at fixing an economic crisis.*

Much of the country's infrastructure dates back to the post-war economic boom of the 1950s and 1960s and is reaching the end of its serviceable lifespan due to demands of urban expansion and changes in the environment.

Chantal Guay, P.Eng., is the chief executive officer of Engineers Canada and chair of the Transition Team of the National Round Table on Sustainable Infrastructure. She says, "In a time of economic crisis, our government should rightfully be concerned with the impact the funds may have on the economy. But it should also be concerned with ensuring long-term impact on our safety, environment and global competitive edge. Not to mention that it should examine the question of sufficient manpower to support its Building Canada Fund Program."

According to the Federation of Canadian Municipalities, the federal program could create close to 100,000 new jobs. With a nation facing a work force shortage in the area of construction, there are concerns that the municipal and provincial governments can spend the dedicated $8 billion from the Fund effectively in the proposed time frame of just seven years.

Guay also says that effective, strategic infrastructure renewal and new construction require time. "Impact studies including environmental and economic, as well as effective asset management strategies to optimize the use of resources, must be performed to ensure prosperity and safety. Rushing the process may cause decision-makers to turn to their "wish list" of projects in order to encourage short-term new growth, versus their "to do" list, that would also ensure long-term growth, safety, and quality of life."

The federal government has access to resources such as Engineers Canada and members of the National Round Table on Sustainable Infrastructure (see www.nrtsi.ca), which brings together the infrastructure community, including organizations representing expert practitioners, managers and users of public infrastructure, to develop long-term framework and options for infrastructure decisions.

"It is our hope that this government includes long-term strategy and asset management in their infrastructure planning."

"In a time of economic crisis, our government should also be concerned with ensuring long-term impact on our safety, environment and global competitive edge and, examine the question of sufficient manpower to support its Building Canada Fund Program."

COLPITTS DEVELOPMENTS
RESIDENTIAL & COMMERCIAL

CONGRATULATIONS

Colpitts Developments on taking home the top award.

By choosing to build 35 homes with natural gas central heat and hot water, you not only won 'Natural Gas Builder of the Year', you also helped your community. By making the choice to go with natural gas central heat and hot water over electric, you're saving your customers money, and you've spared the environment as much as 470 tonnes of greenhouse gas emissions per year. Thank you for going green with blue.

Colpitts Developments
Winner - Natural Gas Builder of the Year
Canadian Home Builders' Association NB

To find out how you can make a difference in your community,
call 1-866-343-8427 or visit naturalgasnb.com

FÉLICITATIONS

à Colpitts Developments, gagnant du premier prix.

Avoir choisi de construire 35 résidences avec les systèmes de chauffage central et d'eau chaude fonctionnant au gaz naturel vous a permis non seulement de remporter le prix de « constructeur au gaz naturel de l'année », mais d'aider votre collectivité. En optant pour les systèmes de chauffage central et d'eau chaude fonctionnant au gaz naturel plutôt qu'à l'électricité, vous permettez à vos clients de réaliser des économies en plus d'éviter qu'environ 470 tonnes d'émissions de gaz à effet de serre ne se retrouvent dans l'environnement par année. Merci d'être passé au vert en optant pour le bleu.

Colpitts Developments,
Gagnant – Constructeur au gaz naturel de l'année
Association canadienne des constructeurs d'habitations du Nouveau-Brunswick

Pour savoir comment vous pouvez faire une différence au sein de votre collectivité,
composez le 1-866-343-8427 ou visitez le site gaznaturelnb.com

At home. At work. Everywhere.
Natural Gas.

ENBRIDGE
Enbridge Gas New Brunswick
Enbridge Gaz Nouveau-Brunswick

Le gaz naturel.
Au travail. Chez vous. Partout.

NEW WATER TREATMENT PLANT NAMED IN HONOUR OF FORMER CITY ENGINEER

*The City of Fredericton's new $8.5-million water treatment plant on Waterloo Row was officially named in honour of former city engineer **John Bliss**, P.Eng., during a commemorative ceremony held at the facility on September 12, 2008.*

"John Bliss is not only a great city engineer but he is also a great person," said Mayor **Brad Woodside**. "Under his watch, the quality of our water supply improved greatly as a result of the efforts he made during his 19 years working for the people of Fredericton."

*Fredericton Mayor, **Brad Woodside**, (left) congratulates **John Bliss**, P.Eng.*

__John Bliss__, P.Eng., welcomes APEGNB's executive director, __Andrew McLeod__, (left) to the dedication ceremony.

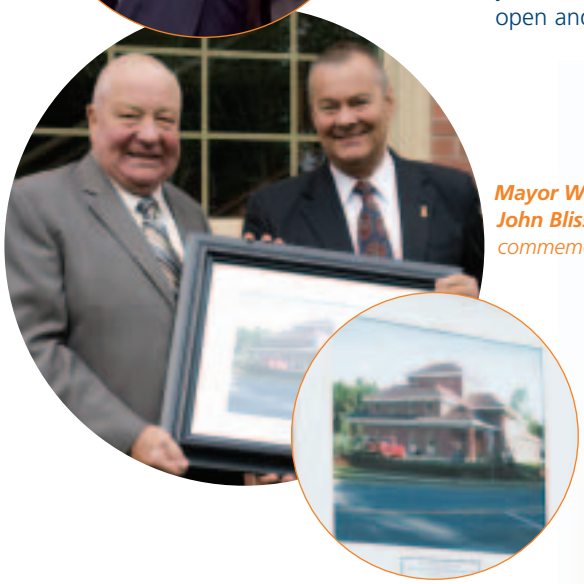
Fredericton Mayor __Brad Woodside__ (left) jokes with the crowd while a beaming __Dorothy__ and __John Bliss__, P.Eng., get caught up in the laughter.

Construction of the E. John Bliss Water Treatment Plant is nearing completion after a year of construction. It is expected to officially open and go on-line mid-February.

"John Bliss served the citizens of Fredericton with distinction and dedication for 19 years," said Councillor **Scott McConaghy**, chair of the City's Public Safety and Environment Committee. "He even served a term as a City Councillor before becoming the city engineer. He set the bar high for our water utility and he deserves a lot of credit for the good reputation it enjoys."

Bliss served as a City Councillor from 1971 to 1973 and as city engineer from 1979 to 1998. He was instrumental in removing manganese in Fredericton's drinking water by overseeing construction of the largest

Inside the water treatment plant, a special plaque is hung in honour of __John Bliss__, P.Eng.



__Mayor Woodside__ (right) presents __John Bliss__, P.Eng., with a commemorative plaque.

Inside the water treatment plant, a crowd enjoys some refreshments and conversation.

manganese removal plant in North America. Water quality improvements continued under his leadership with the introduction of modern construction and maintenance processes.

Bliss also was honoured during the ceremony by **Tanya Horgan**, P.Eng., president of the

Association of Professional Engineers and Geoscientists of New Brunswick and by **Mark Butler**, P.Eng., Chair of the Atlantic Canada Water Works Association.

***Mark Butler**, P.Eng.,chair of the Atlantic Canada Water Works Association, congratulates **John Bliss**, P.Eng., and the City of Fredericton.*

A special tribute came from **Don Gibson**, P.Eng., a retired assistant city engineer who worked

***Don Gibson**, P.Eng., shares a few personal memories of his time spent working with **John Bliss**, P.Eng.*

closely with both Bliss and his predecessor as city engineer **Bill Barrett**, P.Eng., who was honoured by the City last year with the naming of the City's other water treatment plant on Smythe Street.

Bliss was accompanied during the ceremony by his wife, **Dr. Dorothy McDade**.

"I want to thank the Mayor and Council of the City of Fredericton for this special honour," said Mr. Bliss. "I also want to thank all the great people with whom I had the pleasure to work at City Hall. I am truly humbled and honoured to have my name associated with this beautiful new water treatment plant."

The E. John Bliss Water Treatment Plant will treat and filter 270 litres of water per second and pump it into the City's water supply from new wells drilled in the Queens Square area. ADI Ltd., of Fredericton were the architects and design engineers for the project and the principal contractor is Springhill Construction Ltd., of Fredericton.

The landscaping soils, trees and shrubs were installed by the City of Fredericton Parks and Trees Division.

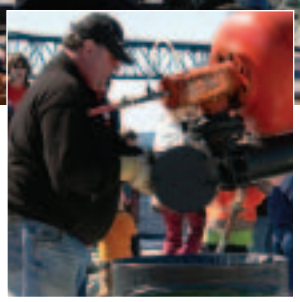
***Murray Jamer**, P.Eng., (left) director for the City of Fredericton's Engineering and Public Works, tours the new water treatment plant with **John Bliss**, P.Eng.*

*APEGNB President **Tanya Horgan**, P.Eng./P.Geo., stops to check out the heart of the water treatment plant.*

ENGINEERS AND GEOSCIENTISTS PROFILE THEIR PROFESSIONS BY USE OF THEIR PUMPKIN BLAST EQUIPMENT

by Harold W. J. Adams
Reprinted with permission from the Miramichi Leader *(September 12, 2008)*

The Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB) held their sixth annual Pumpkin Fling on September 20, 2008 at the Waterford Green, in the Historic Chatham Business District within the City of Miramichi. The APEGNB Pumpkin Fling event was first established by the association in 2003 and they extended an invitation to the Historic Chatham Business District to partner with them in this event.



The pumpkins prepare for blast off using the air cannon.

Getting ready to blast the pumpkins by bottle rockets.

Two pieces of pumpkin blast equipment were designed and manufactured by members of the association and a team of volunteers for your entertainment-the bottle rocket and the air cannon-both used to shoot pumpkins.

Professional engineer, **Kevin Gallant**, P.Eng., is an instructor at the Miramichi campus of the New Brunswick Community College and a member of the Association of Professional Engineers and Geoscientists of New Brunswick. He is on the team organizing this year's Miramichi Pumpkin Festival.

"Our association had been looking for a natural public relations event to help us highlight the work of our association and the roles played by professional engineers and geoscientists. The Pumpkin Fling helps us raise awareness of our professions as well as some basic engineering principles such as friction, trajectory and aerodynamics. We blast pumpkins from our air cannon mounted on the edge of the south bank of the Miramichi River at the Station Wharf Marina. Pumpkins are hurled at a target approximately 1,000 feet off shore. The cannon is powered by compressed air to 120 pounds per square inch. The barrel is six inches in diameter and approximately eight feet long and is mounted on a utility trailer for ease of transport and aiming. Aiming is like an artillery gun, where we point and shoot. The pumpkin is expected to reach a speed of up to 180 miles per hour or more.

"The air cannon was designed and manufactured at Sunny Corner Enterprises by a team comprised of the following volunteers and members of the Northeastern Branch of the Association of Professional Engineers and Geoscientists of New Brunswick: **Doug Howe**, Sunny Corner Enterprises Inc.; **Kirk Mullin**, P.Eng., Sunny Corner Enterprises Inc.; **William Schenkels**, P.Eng., Sunny Corner Enterprises Inc.; **Patrick McMahon**, P.Geo., NBCC Miramichi;

Thomas Jennings, NBCC Miramichi; **Andrew Frost**, NBCC Miramichi; **Ray Ritchie**, P.Eng., Sunny Corner Enterprises Inc.; **Melissa Mertz**, director of communications for the Association of Professional Engineers and Geoscientists of New Brunswick; Communications; **Leon Bremner**, Bremner Farms Ltd. and myself, **Kevin Gallant**, P.Eng.

"I think our team volunteered for this project because there is still a bit of the kid still left in all of us. The event draws attention from the public and I think it captures their imagination. The APEGNB Pumpkin Fling is a real life science experiment that we are using to motivate children to get into science and engineering. The fling allows those watching to gain some understanding of aerodynamics, friction and trajectory which are basic principles of kinematics, the science of motion. Whether you are studying science or engineering at university or college, these elements are basic principles of physics that you would be studying.

"Engineers are usually quite quiet even though we design bridges, roads and buildings routinely. Our efforts don't always get mainstream recognition. We are trying to promote our profession via this family-oriented festival that allows us to show our engineering and scientific bent in a good old fashioned way. The event allows Association members to gather at a fun-filled public event where they and their families can attend as well as members of the general public.

"Our pumpkins are supplied compliments of Leon Bremner the owner of Bremner Farms Ltd. in Napan. Children will be painting their pumpkins with the assistance of NBCC Miramichi students from the art fundamentals and animation programs.

"The Association would like to thank **Emily Hanscombe** of Her Clothes Closet and the Historic Chatham Business District, for all their work in helping to organize this year's Miramichi Pumpkin Festival activities," said Gallant.

ASK THE DPA

Tom Sisk, P.Eng. — *Director of Professional Affairs*

Question

Here are two questions that seem to arise with some regularity at APEGNB's offices:

I have been a member of APEGNB for a number of years. I have an opportunity to move elsewhere in Canada. Do I have to resign from APEGNB before joining the other jurisdiction?

Answer

One of the benefits of being a professional engineer or geoscientist is the opportunity to work in some very interesting fields. And, this means both in terms of physical location and chosen work speciality. Even as a relatively small association, APEGNB has members in over 40 countries around the world practicing in virtually every discipline of engineering and geoscience.

Within Canada, the Inter-Association Mobility Agreements between regulatory bodies make transferring from one jurisdiction to another quite easy. The usual process involves applying to the new association, paying the fees and providing whatever supplemental information they may require. The approval process takes something in the order of a week, depending on completeness of the application form, processing of fees, etc.

One thing that makes the Inter Association Mobility Agreements work is that the new association will contact the home association to verify that the member is indeed in good standing (dues paid up, no outstanding discipline issues, etc). When this is the case, the application can be processed quite quickly.

However, if the member resigns from the home association before applying to the new association, the continuity of membership is lost and the new association may impose a much more stringent registration process. This might include writing exams, producing education transcripts and having references respond as to work experience or character.

Note that it is also possible to retain membership in APEGNB and hold membership in another jurisdiction at the same time. This is particularly useful if joining the new association is required to pursue non-permanent work or if there is a plan to return to New Brunswick at some future date.

Suppose I am a member of APEGNB and I have been directed to appear before the Discipline Committee with regard to a complaint against me. I don't want to go through the hearing process so I resign by emailing a letter to the Registrar before the hearing date. What are the potential problems with resigning in this manner?

Answer

Appearing before APEGNB's Discipline Committee to face charges of incompetence or misconduct must be viewed as the most serious development a professional member could face. Within the confines of the Act, the proceedings of the Committee are nearly as rigorous as the Court of Queen's Bench and the Committee can suspend the member, order additional training, restrict the practice of the member and order that a substantial fine be paid. But, it is also the forum where a member may defend himself/herself and have access to all evidence used against him or her.

Avoiding the discipline process by the simple expediency of resigning is not a valid method of avoiding responsibility. The Discipline Committee, under the Act, may summon any person, whether or not they are a member, to appear before the Committee. This summons carries the same force of law as if it had come from a Judge of the Court of Queen's Bench of New Brunswick and the penalties for contempt are the same.

Secondly, a letter of resignation must be accepted by Council before becoming effective. Council has a duty to ensure that the resigning member's seal is returned, membership certificate is returned and that all accounts are settled. Any pending discipline proceedings would be sufficient to have Council not accept the resignation until the matter had been resolved.

In the extreme case where a member avoids appearing before the Committee by fleeing the country, his/her file is maintained with notification that there are outstanding issues related to the former member's status. As well, the member's status may be shared with other jurisdictions across Canada as part of ongoing enforcement efforts.

If you have a regulatory, enforcement or ethical question you'd like answered, e-mail APEGNB's Director of Professional Affairs.

sisk@apegnb.com

IRVING OIL ALLIANCE WINS 2007 HUGH K. COBLE PROJECT EXCELLENCE AWARD

Submitted by ***Paul Holah****, P.Eng., on behalf of* ***Tom Phalen****, vice-president, Fluor*

Fluor chairman and CEO ***Alan Boeckmann*** *announced that the Alliance, working on its refinery project in Saint John, was awarded Fluor's Hugh K. Coble Excellence Award in 2007. The Project Excellence Award was established in 1991 to recognize projects that have made the most significant contribution to the success of Fluor and the clients for which they were executed.*

"After an evaluation, the Irving Oil Alliance was selected to receive our highest honour because it exemplifies our focus on excellence in client partnering and community service. The Alliance continues to be a win-win situation, contributing to both companies' records of success," said Boeckmann. "I congratulate the team for their superior work over many years."

In 2002, Fluor vice chairman emeritus, **Hugh Coble**, for whom the Project Excellence Award is named, said:

"Over the years, I've developed several concepts that have helped support good client relationships. You've got to be passionate about what you do, believe in your company and its goals. You must always be responsive to your clients and maintain a positive attitude even through the toughest negotiations. Additionally, you must look for ways to make your client successful. Cover all levels of your client's organization, understand its business strategy and keep updated on its projects. And finally, you must always behave in an ethical manner-you will never be sorry if you do. The answer to an ethical question is always in black or white-not grey. If you slip into the grey area, you will never get out."

The Irving Oil Alliance captured the essence of these concepts.

Irving Oil's refinery in Saint John is Canada's largest, with a throughput of 300,000 barrels per day. For more than 10 years, Fluor has been providing engineering services to Irving Oil in an integrated alliance.

Consistent excellence in execution on small-cap projects has paved the way for some dispersed execution on large-cap projects. Irving Oil continues to award work to Fluor, due to its sustained level of execution excellence on all projects.

When the alliance between Irving Oil and Fluor was first conceived, it exclusively focused on engineering services for projects with the Saint John refinery. As Fluor gained the client's confidence, the project team expanded the alliance scope to include a range of other additional services, including marketing projects (re-branding Irving Oil stores), procurement, contracts administration, project controls, engineering and design work, and program management. As a result, Fluor is deeply embedded in Irving Oil's situation for both companies.

Today, Fluor is a strategic partner to Irving Oil, the highest level of supplier relationship that Irving Oil has. In this elevated role, Fluor is expected to contribute to Irving Oil's company initiatives, add value, provide feedback and reciprocate trust. Having done this-and more-Fluor employees have earned positions on the Irving Oil organizational chart as if they were direct employees.

The Hugh K. Coble Project Excellence Award winners are selected each year from a field of nominated projects that have met stringent performance criteria. Each nominated project is further evaluated by a team of senior project directors representing the company's business lines and geographies.

Each project is graded in the core areas of safety, value creation, operating requirements, project schedule, project cost, profitability, client relations, community relations and human resources. Additional challenges, such as site location, risks and opportunities, construction challenges, project complexity and change management are also factored into the evaluation. Since 1990, 64 projects have received this prestigious award.

The Irving Oil Alliance was selected to receive our highest honour because it exemplifies our focus on excellence in client partnering and community service.

ENGINEERS AND GEOSCIENTISTS IN PUBLIC PERCEPTION

Opinion polls surveys British Columbians for their views on the engineering and geoscience professions

APEGBC recently conducted a public opinion poll in BC through marketing research firm Angus Reid. The poll was used to assess public awareness and perception of the professions and the Association, and to determine what perceived barriers may discourage teenagers (12-18) from pursuing careers in engineering and geoscience. This research provides valuable information and will assist APEGBC in structuring its outreach activities and developing its promotional materials.

How Does the Public View Engineers and Geoscientists?

Overall, the BC public are familiar with the kind of work that engineers do, and have a high regard for the engineering profession. However, the public is generally unfamiliar with the work of geoscientists and what this profession entails. 81% of British Columbians said they were very/somewhat familiar with the engineering profession versus 52% who said they were very/somewhat familiar with geoscience. In open-ended questions, those who did indicate familiarity were able to demonstrate a broad and diverse understanding of what the professions entail.

88% of British Columbians indicated that they have a great deal/fair amount of respect for engineers, second only to doctors, and trailed by teachers, architects and police officers in the top 20 percentile. Respect for geoscientists lagged behind (77% great deal/fair amount of respect). The lower level of respect garnered for geoscientists is likely due in part to lack of familiarity with the profession.

How Does the Public View APEGBC?

Approximately one in four British Columbians (25%) have heard of APEGBC. Regionally speaking, an average of 28% of Lower Mainland residents had heard of APEGBC, versus 19% for other regions of the provinces. While awareness of APEGBC is fairly low, British Columbians support the idea of an organization that regulates and governs engineers and geoscientists to ensure that they meet set standards. British Columbians view APEGBC's responsibilities around the maintenance of professional standards as most important.

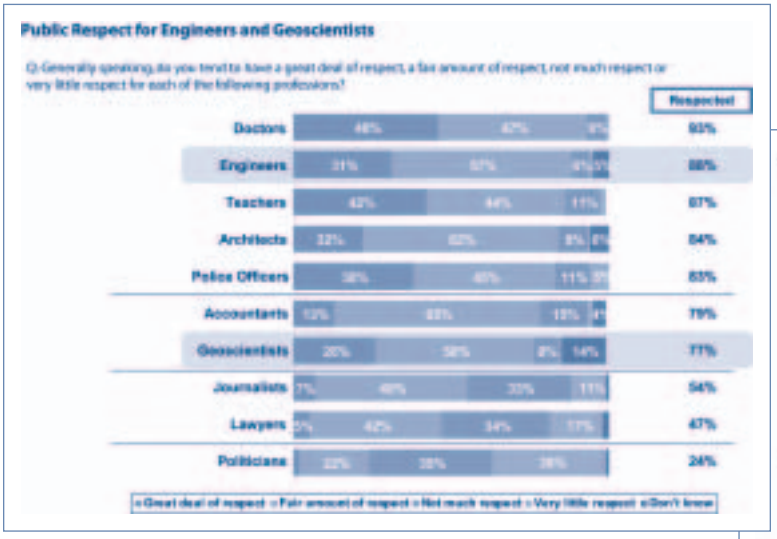
When asked to consider the importance of APEGBC's various responsibilities, those polled indicated that the Association's most important activities included: the investigation of complaints regarding members' practice, and disciplining members if appropriate (84%); assessing qualifications of applicants to determine if they should be issued a licence to practise (84%); and developing guidelines and standards of practice for members (83%).

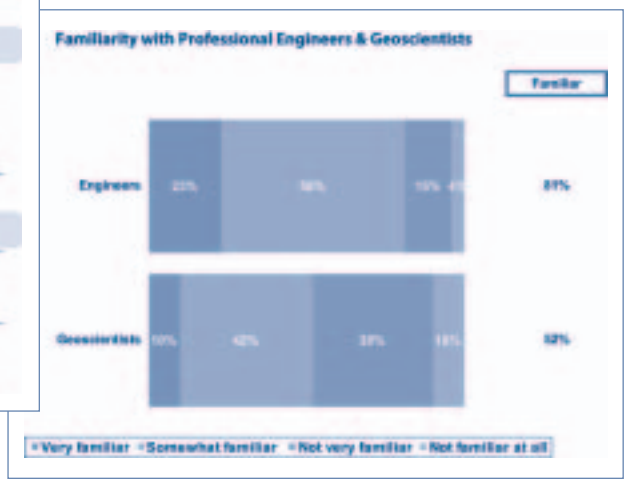
Notably, members of the public assigned an importance of 79% to requiring members to keep up-to-date through a mandatory continuing education program. They also indicated that it was important for APEGBC to regulate firms offering professional engineering or professional geoscience services.

What are the Perceived Barriers to Teens Pursing Careers in Engineering and Geoscience?

Most feel that the academically challenging nature of the engineering profession, specifically the high aptitude for mathematics required, deters teens from pursuing careers in this field. At 28%, Respondents indicated a relatively low level of disinterest in engineering as a profession, suggesting that the barriers that exist are more about a perceived lack of ability rather than a lack of interest in the professions.

British Columbians clearly indicated that the lack of awareness about professional geoscientists and career options within this profession was the most significant barrier to teens pursuing a career this field.





Tables by ***Angus Reid Strategies***

Tuition costs were also identified as a key barrier to the engineering and geoscience professions, though this is likely not an issue limited to the professions of engineering and geoscience.

The least significant issue for both professions is the perception that the salaries earned are not desirable.

Demographically Speaking

Demographics indicated that those with children were more likely to feel that the high aptitude in mathematics required for the engineering profession deters teens from pursuing careers in this field compared to those who do not have children. Also, women felt more strongly that the lack of awareness and information sources about the engineering profession (including the career options available) prevents teens from pursuing careers in engineering.

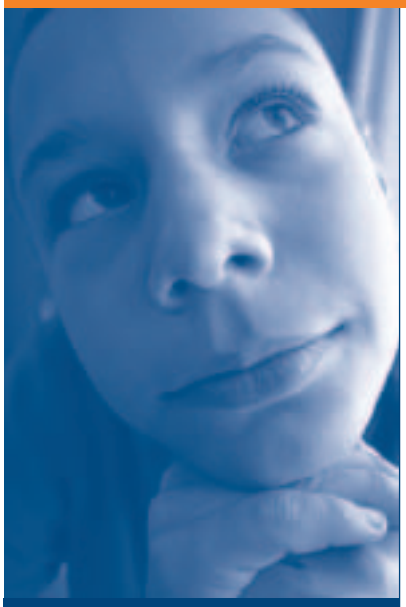
The youngest age group polled (18-34 year olds) felt strongly that the lack of awareness of the profession of geoscience prevents teens from pursuing careers in this field. In open responses, the main issue identified for this age group was that the profession was "boring/not exciting."

With regards to engineering, the main issue noted by the 18-34 age demographic in open responses was that there was a perception that the engineering profession is seen as "nerdy." However the same demographic group indicated the greatest amount of respect for engineers at 94% for a great deal/fair amount of respect.

Opinion Poll - Key Results

- British Columbians indicated that they were more familiar with what engineers do as a part of their job compared to geoscientists (81% vs 52%).
- Overall, 1 in 4 British Columbians are aware of APEGBC.
  - British Columbians indicated that the Association's most important activities include:
  - The investigation of complaints regarding members' practice, and disciplining members if appropriate
  - Assessing qualifications of applicants to determine if they should be issued a licence to practice;
  - Developing guidelines and standards of practice for members
- The top barriers to recruiting for the engineering profession are the perception that these professions require a high aptitude in mathematics and academics.
- The top barriers to recruiting for the geoscience profession are the lack of awareness around this profession and the lack of awareness about career options within this profession.

CONTEST CORNER



Contest Corner Winners (Issue 138)

Carolyn Walker, P.Eng.
Saint John, NB

Xiangning Li, P.Eng.
Saint John, NB

Walter Bursey, P.Eng.
Quispamsis, NB

Scott MacDonald, P.Eng.
Hanwell, NB

Andrew Steeves, P.Eng.
Fredericton, NB

One thing is for certain…New Brunswickers know their natural phenomena. And *Engenuity* readers are no different. Last month, we asked "***What is the name of the largest whirlpool in the Western Hemisphere?***". Nobody was tricked by the names of other large whirlpools in Scandinavia, Scotland and Japan. Everyone knew that "***D. Old Sow***" in the Bay of Fundy was the correct answer.

Congratulations to the winners listed on the left whose names were the first to be drawn with the correct answer.

According to ***www.bayoffundy.com***, the Old Sow was so named because of the sounds that are heard as the waters churn. It is known to be active about three hours before high tide. "The powerful whirlpool is formed when the rising tide passes both sides of Indian Island, takes a sharp right turn around the southern tip of Deer Island to flood the Western Passage. A current of over six knots (11 km/hr) has been experienced off Deer Island Point. In addition to the waters pressing through the narrow straight, the waters are forced along the peaks and valleys of the ocean floor - a trench as deep as 122 meters (400 feet), followed by a reduction in water depth to 36 meters (119 feet) and again followed by a depth of over 107 meters (350 feet)."

If you'd like your own APEGNB prize package, tell us:

Who wrote the book *Acadian Geology?*

A Sir John William Dawson
B Adolphe d'Archiac
C Sir William Edmond Logan
D Pierre Berthier

To win this season's Engenuity *prize package, e-mail your answer to* ***melissa@apegnb.com*** *by* ***February 27, 2009****.*
The first five correct submissions drawn will win a box full of fresh APEGNB-branded products!

89th APEGNB Annual Meeting

February 19-20, 2009
Delta Fredericton, Fredericton, NB

Dr. W. Gene Corley, PE
Senior Vice-President, CTL Group
Skokie, Illinois

SPECIAL GUEST: LEAD INVESTIGATOR OF 9-11 WTC COLLAPSE

Dr. Corley is one of the world's foremost experts in analyzing buildings damaged by bombs, earthquakes, fire, and tornadoes. He led the federal investigation into the September 11, 2001, collapse of the World Trade Center's twin towers. He also conducted the investigation of the 1995 bombing and collapse of part of the Murrah Federal Building in Oklahoma City, and served as an engineering expert during the investigation of the 1993 fatal fire at the Branch Davidian complex in Waco, Texas.

His wide range of experience includes evaluation of earthquake- and blast-damaged buildings and bridges; investigation of distress in prestressed concrete structures; evaluation and repair of high-rise buildings, stadiums, silos and bridges; design and construction of repairs for prestressed and conventionally reinforced, precast and cast-in-place concrete, and structural steel facilities and foundations.

The award-winning engineer is licensed in more than 30 states and currently serves as a Past President of the National Council of Examiners for Engineers and Surveyors (NCEES). Dr. Corley has published over 170 papers and books, including more than 90 on bridge design and/or seismic design.

His presentation, ***Forensic Study of the New York City World Trade Center Collapse*** will answer:

- How did the World Trade Center towers withstand the impact of a 767 airliner for as long as they did?
- Could anything be done to make the twin towers survive longer?
- What did the WTC Building Performance Study Team uncover about the buildings' performance?
- What will make buildings safer?

CATCH THE QUICK WIT OF TONY QUINN ON FEBRUARY 19!

Atlantic Canadian Tony Quinn's hilarious musical stand-up comedy has had audiences laughing and singing along from coast to coast. He has appeared at the Halifax Comedy Fest, on the Royal Canadian Air Farce and the Comedy Channel as well as at large-scale corporate venues across Canada. For the last five years Tony has been playing a weekly musical comedy matinee to a packed to capacity crowd on the Halifax waterfront.

Forensic Engineering: LEARNING from LOSS

ENGINEERS GEOSCIENTISTS *New Brunswick*

INGÉNIEURS GÉOSCIENTIFIQUES *Nouveau-Brunswick*

FUTURE ENGINEERS?

Felix Harding

Born: September 23, 2008
Proud Parents: **Michelle Paul-Elias**, P.Eng. and **Greg Harding**, P.Eng.

Why Felix might make a future engineer:

"He has it in his genes! Both of us are members of APEGNB's Saint John Branch so he's immersed in the profession already. Plus, there are plenty of people eager to provide him with great advice including **Holly Young**, P.Eng., and APEGNB President, **Tanya Horgan**, P.Eng./P.Geo. We can only hope he'll listen!"

Zachary Savoie

Born: November 13, 2008
Proud Parents: **Karine Savoie**, P.Eng. and **Yvon Dubé**

Why Zachary might make a future engineer:

"He's only two months old but Zach is already curious of things around him. He's really bright and sharp. He loves music and recognizes songs that we made him listen to while in his "flotation tank". Evidence suggests that he might take after his Mom, who is an engineer, and he will love figuring out how things work and are made. He will have a great imagination and lots of creativity, and he will love being, playing and working with as many friends as possible!"

BUILDING ON ENGINEERING* KNOWLEDGE

ENGINEERS CANADA NATIONAL SCHOLARSHIP PROGRAM

Engineers Canada invites professional engineers to enter the 2009 National Scholarship Program competition.

Refer to the application form for the complete list of eligibility requirements.

Manulife Financial Scholarships

Field: **Engineering**
Value: $10,000
Criteria: Candidates must be accepted or registered in a faculty of engineering, beginning their studies no later than September 2009.

TD Insurance Meloche Monnex Scholarships

Field: **A field other than engineering.** The field of study chosen should favour the acquisition of knowledge pertinent to enhancing the performance of the candidate in the engineering profession.
Value: $7,500
Criteria: Candidates must be accepted or registered in a faculty other than engineering, beginning their studies no later than September 2009.

TD Insurance Meloche Monnex Léopold Nadeau Scholarship

Field: **Public Policy Development.** The field of study can be engineering or another subject area.
Value: $10,000
Criteria: Candidates must be accepted or registered at the time the scholarship is awarded (in the fall), in a master's or doctoral program that will greatly enhance their engineering expertise, abilities and potential to influence the development of public policy.

Application forms are available at:
http://www.engineerscanada.ca/e/prog_awards_2.cfm

or contact the National Scholarship Program at Engineers Canada
awards@engineerscanada.ca

engineerscanada ingénieurscanada

Engineers Canada is the business name of the Canadian Council of Professional Engineers

Ingénieurs Canada est le nom commercial utilisé par Conseil canadien des ingénieurs

Deadline: March 1, 2009

**The term engineering is an official mark held by the Canadian Council of Professional Engineers*

ENGINEERS CANADA ADVANCES LABOUR MOBILITY ON PARLIAMENT HILL

Reprinted from "Engineering on the Hill" (Fall 2008)

The Agreement on Internal Trade (AIT) signed by federal, provincial and territorial governments in 1994 provides for a framework to eliminate restrictions on labour mobility within Canada.

In September 2006, federal, provincial and territorial governments decided to set a firm target for implementation and asked regulators to **achieve compliance by April 2009**, which would provide for "full mobility for all Canadians". For the engineering profession, the objective laid out by governments was to provide nation-wide access to the expertise of all licensed engineers regardless of where they are licensed, while continuing to recognize the authority of provincial and territorial regulatory bodies.

Following meetings in the city of Quebec in July 2008, provincial and territorial government leaders announced further details on what they consider to constitute full labour mobility:

1. *Any worker certified for an occupation by a regulatory authority of one province or territory shall be recognized as qualified to practise that occupation by all other provinces and territories; and;*

2. *Such recognition shall be granted expeditiously without further material training, examinations or assessment requirements.*

Premiers further directed that any exceptions to full labour mobility would have to be clearly identified and justified as required to meet a legitimate objective such as the protection of health or public safety.

In the federal government's response, former Minister of Human Resources and Social Development, **Monte Solberg**, acknowledged the work that Engineers Canada and its constituent members are doing to ensure labour mobility for engineers across Canada.

Subsequently, Engineers Canada was invited to participate in a presentation and panel discussion with stakeholders on inter-provincial labour mobility in early September 2008. Engineers Canada was mentioned specifically at this event for its leadership on mobility issues for the engineering profession.

Engineers Canada will continue to be proactive and to further engage the federal government at the political and bureaucratic levels on what the engineering profession is doing on the issue of labour mobility.

Engineers Canada has been working diligently with federal officials to ensure that the federal government understands the engineering profession's leadership role to date in addressing the mobility issue and that the federal government has a clear understanding of the profession's positive record to date on labour mobility.

This past summer, Engineers Canada Chief Executive Officer **Chantal Guay**, P.Eng., wrote to former Minister Solberg, in order to advise him of the work that provincial and territorial licensing bodies have already accomplished with their respective governments. The Inter-Association Mobility Agreement affirms that registration and licensing be granted to a member in good standing of any other association/ordre that is a signatory to the Agreement. This letter was also forwarded to constituent members as background information for their use in their discussions with their own governments.

Celebrating 50 Years of
Excellence Through Service in 2009

50 years

TRAINOR
SURVEYS
1974 LTD
Established 1959

60 Bishop Dr Fredericton NB E3C 1B2
P 458-9494 / 1-800-661-9494
F 450-6081 / 1-877-450-6081
www.trainorsurveys.com

REGISTERED WITH THE ASSOCIATION OF NEW BRUNSWICK LAND SURVEYORS AND
THE ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS OF NEW BRUNSWICK

ENGINEERS GEOSCIENTISTS New Brunswick
INGÉNIEURS GÉOSCIENTIFIQUES Nouveau-Brunswick

APEGNB GETS A FRESH LOOK FOR A NEW YEAR!

Apple has done it. So has IBM, Pepsi and the Government of Canada. In fact, hundreds of products, companies and organizations have undergone "brand enhancement" by tweaking or modernizing their logos. They do this in an effort to stay current with a changing marketplace, the need to re-align their "public face" with their internal mission, or simply as a way to solidify the brand in the public's mind.

APEGNB is no different. To remain relevant with our members and the public, the Association is ever-evolving. This evolutionary process does not mean we're abandoning the old design or the proven way of doing things. Rather, it's about building upon our original strengths and continuing to advance.

In 2009, APEGNB will be using a different logo on all of its marketing collateral.

Instead of the lengthy "Association of Professional Engineers and Geoscientists of New Brunswick", we will now be known simply as "Engineers and Geoscientists New Brunswick".

You'll hear this shortened version of our name when you call APEGNB offices and you'll see the new logos on ads, brochures and most communications materials arriving in your mailbox.

ENGINEERS GEOSCIENTISTS New Brunswick

The simplified name and logo is more impactful and memorable but yet retains elements of the old version. Also, the refreshed logo does not mean our legal name has changed. Legally, we will remain the Association of Professional Engineers and Geoscientists New Brunswick but publicly, our business name will be Engineers and Geoscientists New Brunswick.

Like our sister Associations across Canada, including the recently rebranded Engineers Nova Scotia and Engineers PEI, Engineers and Geoscientists New Brunswick will soon be firmly cemented in the minds and eyes of the public.

INGÉNIEURS GÉOSCIENTIFIQUES Nouveau-Brunswick

FUN CLICKS

Decrease your stress level!

Increase your brainpower!

Check out these websites!

Founded by veterans of Google and YouTube, Howcast shows consumers useful how-to videos and guides wherever, whenever they need to learn "how". And they do it with a sense of humour and a clarity of vision!

www.howcast.com

Geni turns family tree-building into a collaborative effort: the free site gives you the basic tools for diagramming your ancestry, and it also lets you invite others to contribute. It's a fun, easy way to create and share your family tree.

www.geni.com

MapJack has brighter, sharper photos than other digital mapping sites such as Google Street View, and better navigation tools. To start exploring, just click and drag the icon of a person along the map in the bottom half of your browser; the photographic images in the upper portion will automatically refresh. Time magazine says it offers the best preview of the future of digital mapping

www.mapjack.com

Love Sudoku? You'll love this site! With puzzles ranging in difficulty from easy to "evil", you'll have a hard time getting back to work!

www.websudoku.com

16TH ANNUAL APEGNB AWARDS DINNER

October 16, 2008
Delta Fredericton
Fredericton, NB

On October 16, APEGNB awarded Life Memberships to 48 engineers and awarded $52,500 in scholarships and prizes to 20 students and members studying at the Université de Moncton and the Fredericton and Saint John campuses of the University of New Brunswick.

According to the by-laws of the Engineering and Geoscience Professions Act, Life Members are persons who have been members in good standing with the Association for at least 35 years and were elected to life membership by majority vote of Council.

APEGNB's **Life Members** have built telecommunications systems, designed bridges, educated thousands of students and worked at the highest levels of government and industry. But most importantly, they have helped to make New Brunswick a better, safer place for its citizens.

APEGNB's **scholarship winners** represent the future of engineering and geoscience in New Brunswick. Their awards were made possible through the generosity of APEGNB members and the Association's Foundation for Education, which supports and develops engineering and geoscience education in New Brunswick.

On behalf of our more than 5,000 members, congratulations to all of this year's award recipients.

*APEGNB President **Tanya Horgan**, P.Eng./P.Geo., welcomes guests to the 16th Annual APEGNB Awards Dinner.*

Two of the many guests who were on hand to applaud the scholarship and Life Member award recipients.

*Director of the APEGNB Foundation for Education, **Frank Wilson**, P.Eng., announces the scholarship recipients on behalf of Foundation Chair, **Ed Smith**, P.Eng., who was unable to attend.*

LIFE MEMBER RECIPIENTS

*Seated - **Robert Dugas**, PEng; **Frank Flanagan**, PEng; **David Smith**, PEng; **Tanya Horgan**, PEng/PGeo APEGNB President, **Dallas Davis**, PEng; **Samuel Shannon**, PEng; **David Nelson**, PEng*

*Standing - **Owen Washburn**, PEng; **Philip Parker**, PEng; **John Zinck**, PEng; **James Venart**, PEng; **Bruce Mulholland**, PEng; **Ronaldo Bourgeois**, PEng; **Jean-Jacques Roy**, PEng; **Malcolm Dunfield**, PEng*

*APEGNB Lay Councillor and Executive Director of the Law Society of New Brunswick, **Marc Richard**, (left) chats with **Ronaldo Bourgeois**, P.Eng., a newly minted APEGNB Life Member.*

SCHOLARSHIP/PRIZE RECIPIENTS

*Seated - **Eric Jury**; **Nathan Wilbur**; **Stéphanie Rakotovololona**; **Alyson Dean**; **Emily Jacobs**; **Trevor Hanson**, P.Eng.; **Marc Lacenaire**; **Jesse Godin***

*Standing - **Allan Kember**; **Jeffrey Cowan**; **Pacifique Baguma Maisha**; **Dr. Frank Wilson**, P.Eng., Foundation Director; **Tanya Horgan**, P.Eng./P.Geo., APEGNB President; **Brian Barnes**, P.Eng., Foundation Director; **Aaron DesRoches**; **Erin Wishart**; **Benoit Landry**; **Guillaume Roy***

UNB HOSTS 2008 AUGC

Submitted by **Donald Bark**

The 58th Annual Atlantic University Geological Conference (AUGC) was hosted by the University of New Brunswick (UNB) October 23 through the 25, 2008. More than 90 students from Dalhousie University, Memorial University of Newfoundland, Saint Mary's University, Acadia University, St. Francis Xavier University, and UNB attended the conference.

Four field trips were offered on Friday the 24th, hosted by UNB professors and their colleagues:

- **Dr. David Lentz**, P.Geo., (UNB) led a trip to the Mount Pleasant Caldera,
- **Dr. David Keighley**, P.Geo., (UNB) and **Dr. Adrian Park** (UNB) led a trip to the McCully Gas Field in the Sussex area
- **Dr. Randy Miller**, P.Geo., (NB Museum & UNB) guided a tour of the Saint John area - **Michele Coleman**, P.Eng. (NB Coal), **Dr. Bruce Broster**, P.Geo., (UNB) and **Dr. Nick Susak** (UNB) led a trip through the Minto Coal Mine.

On Saturday the 25th, students working on honours theses presented their research results to their peers through a series of high-calibre oral and poster presentations.

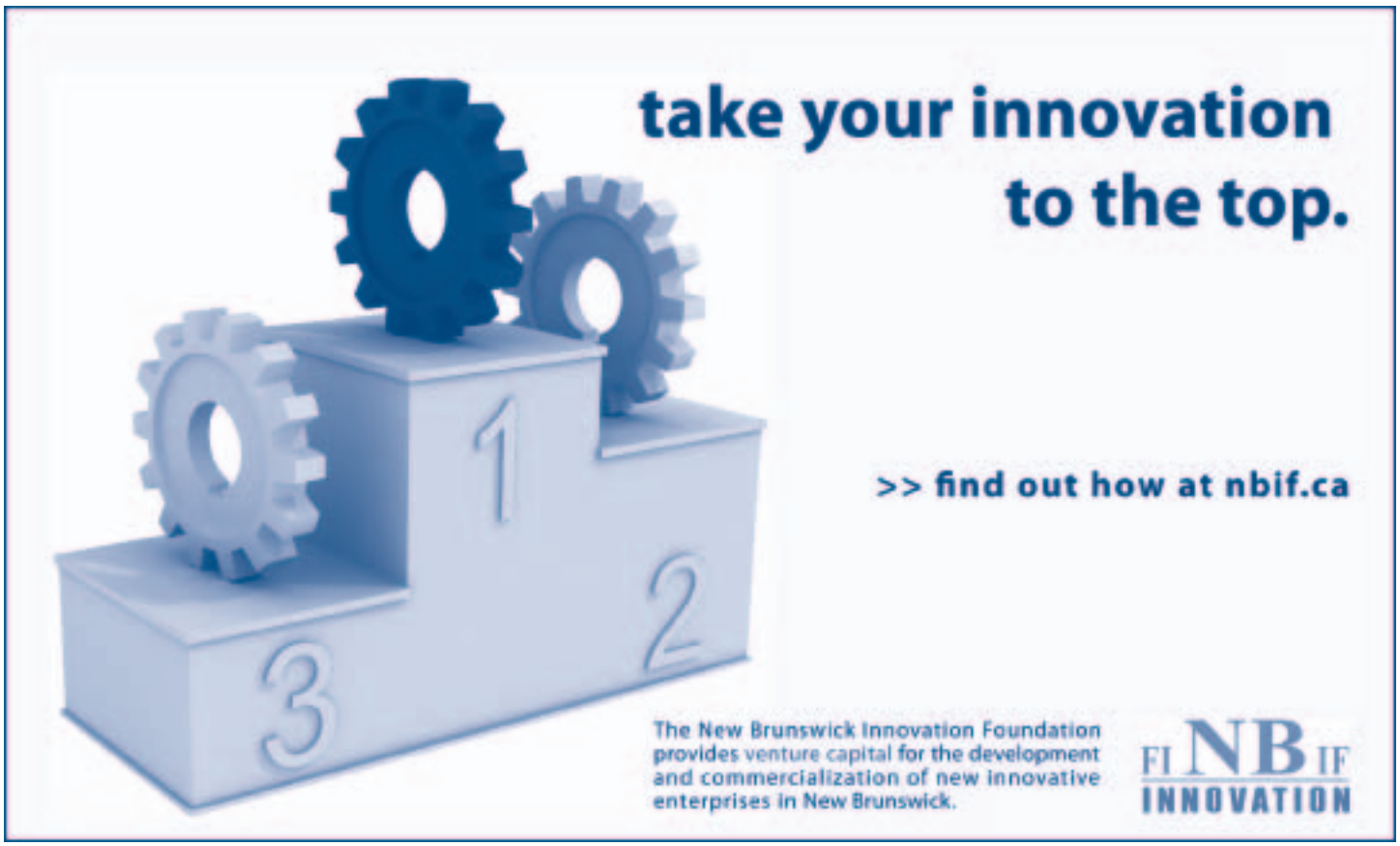
The Frank Shea Memorial Award for the best presentation in the field of Economic Geology was awarded to **April Coombs** from Memorial University. The CSPG Award for the best oral presentation was awarded to **Darren Lefort** from Saint Mary's University. The NSERC-APICS Award for the best paper was presented to **Luke Hilchie** from Dalhousie University. The CSEG Award for the best geophysical presentation was awarded to **Nicole M. Peters** from Dalhousie University, and the Imperial Oil Poster Award, was presented to **Morgan Quinn** from Dalhousie University.

These awards were presented at the well attended closing banquet that featured a provocative keynote talk by **Robert Quartermain**, president and CEO of SilverStandard.

Robert Quartermain *speaks to the AUGC*

The conference was honoured to have Mr. Quartermain speak and the organizing committee extends their thanks to him once again for an insightful presentation.

Finally, all of the attendees would like to thank AUGC 2008 co-chairs **Kim Klausen** and **Megan Trites** for organizing a successful conference. We'll see you next year.



Introducing the

WHERE Challenge

What on Earth is in your stuff and WHERE on Earth does it come from?

National contest offers cash prizes for students and schools

In celebration of the International Year of Planet Earth, the first annual WHERE Challenge is a unique national contest that asks Canadian kids aged 10 to 14 years to discover the answers to these questions: What on Earth is in your stuff and WHERE on Earth does it come from? More than $17,000 in cash prizes will be awarded to regional and national winners, as well as schools. The non-profit WHERE Challenge is sponsored by EnCana Corporation and Teck Cominco Limited.

The WHERE Challenge is encouraging bright young minds to not only think about the many ways the Earth's resources support us, but also to contribute to future discoveries and ground-breaking innovations by considering Earth sciences as an exciting educational and career opportunity.

The WHERE Challenge is designed to foster curiosity and ingenuity through innovative story-telling as kids discover the wonder of the Earth's resources and WHERE on Earth they come from. Participants pick a favourite object in their home, school or playground, identify one or more non-renewable Earth resources used to make that object and WHERE on Earth those resources come from. The story can be told can be told through an essay, a poem, a song or a play, a painting or a poster, an audio, video or multimedia presentation or anything else kids can dream up!

All Canadian students between 10 and 14 years are encouraged to participate in the **WHERE Challenge**, and kids may submit an individual or group entry. **Entries may be submitted between January 15th and February 28th, 2009.**

Judging is based on creativity, accuracy and originality and winning entries will be used as promotional tools to raise awareness about Earth sciences. Up to seven regional cash prizes ranging from $250 to $100 will be awarded in each of the following regions: Atlantic (New Brunswick, Nova Scotia, PEI & Newfoundland and Labrador), Quebec, Ontario, Prairies (Saskatchewan & Manitoba), Alberta, British Columbia, the North (Northwest Territories, Yukon, Nunavut). Three national grand prizes of $3,000, $2,000 and $1,000 will be awarded. In addition, each of the top three school entries will be awarded $1,000.

For more information, please visit
www.earthsciencescanada.com
or email **Jennifer Lyall** at
lyalljennifer@shaw.ca.

THINKING OUTSIDE THE BOX: SOLVING PROBLEMS BY TEARING DOWN WALLS

By Dr. Dale C. Roach, P.Eng
Senior Teaching Associate, Department of Engineering, UNB Saint John

As engineers, we are often asked to find solutions to problems that require some creative thinking. Unless one is utterly brilliant, however, we have all encountered those moments when we just can't seem to find a solution to the problem at hand. At this point, we are often directed to "think outside the box".

This phrase has become part of our vernacular (although personally, like a lot of catch phrases, I find it irritating). But we accept and understand that we must think in a new way about the problem.

So at this point, let us stop to examine our dilemma:

1. We have encountered a problem to which we cannot come up with a solution, or at least good one. Either way we are frustrated and;
2. A colleague/supervisor/spouse/child has been kind enough to suggest that our brain is, in some way, inadequate because apparently we aren't being creative enough. I don't know about you but at this point I am usually not very happy (to put it mildly) and require some alone time.

Well, it turns out that using a box is actually a very good analogy to the difficulties that we may be experiencing. Often, we are faced with many barriers that limit, the way we think or, if you like, our creativity. For problems that are new, or at least new to us, these barriers may need to be pushed back or even torn down altogether to find a solution to the problem. To do this we must first identify what these barriers are and then take some type of action to remove them.

The following is a list of different types of barriers as well as some remedies.

Perceptual Barriers **Rx:** Think about the problem differently, approach it from a different angle or take a step back to remove some of the detail. Question every assumption that you have made: Is it necessary? Is it realistic?	**Stereotyping**	Thinking conventionally or in a formulaic way about an event, person, or way of doing something.
	Information overload	You become overloaded with minute details and can't sort out critical information. (i.e. You can't see the forest for the trees.)
	Limiting the problem unnecessarily	Broad statements of the problem help keep the mind open to a wider range of ideas.
Emotional Barriers **Rx:** The essential piece here is to recognize that your personality is the problem. Have a Zen moment and take control of your mind!	**Fear of risk taking**	This is inbred in us as human beings and also by the educational process. We simply don't want to make mistakes.
	Unease with chaos	People, and many engineers in particular, are uncomfortable with highly unstructured situations.
	Adopting a judgmental attitude	We approach problem solving with a negative attitude and jump too quickly to judgment.
	Unable or unwilling to incubate	We don't take the time to let ideas lie dormant so they can incubate properly.
Cultural Barriers **Rx:** Talk to people from other cultures, nationalities, different age groups, etc. They have had different life experiences that may shed light on the problem for you.	People acquire a set of thought patterns from living in a culture. Like it or not, you are a product of your environment.	
Environmental Barriers **Rx:** Take control of your environment: turn the music off, turn the music on, turn the heat down, turn the heat up…you get the idea.	The environment in which we work can have a strong influence on creativity. For example, noisy, hot or distracting work environments stifle creativity.	
Intellectual Barriers **Rx:** Read a book, do some research or hire someone who knows the answer.	Lacking the necessary information or skills. Essentially the problem here is that you simply aren't knowledgeable in the area.	

From: *"Fundamentals of Engineering Design, 2/e"*, B. Hyman, Prentice Hall, 2003

You may at this point be thinking that I've tricked you into reading a psychology textbook and you may, in some ways, be right. I would suggest, however, that understanding how our brains work is very critical to being effective as engineers. A colleague in the liberal arts recently, though in a somewhat different context, invited me to cross over to "The Dark Side". I am happy to say that I have found "The Dark Side" to be quite illuminating.

15th

ANNUAL

ATLANTIC ENGINEERING

2009

Hockey Tournament

March 27 - 29, 2009
Sydney, NS

Tune into Cape Breton

Sydney-Victoria Branch of Engineers Nova Scotia will host the 15th Annual Atlantic Engineers' Hockey Tournament in Sydney, NS.

All the tournament games will be played at the Canada Games Complex, Cape Breton University. Accommodations and team registration will be at the Cambridge Suites Hotel in downtown Sydney.

Register Early! Deadline February 28, 2009

Friday, March 27
Team Registration and mixer

Saturday, March 28
Entertainment and Refreshments
at Royal Cape Breton Yacht Club

For More Information or to Register, contact:

Brian Latimer, P.Eng.
blatimer@adisydney.ca
or visit
www.fyha.ca/2009EngCup

Hosted by

Sydney-Victoria Branch
Engineers Nova Scotia

Engineers Nova Scotia · EngineersPEI · PEG Newfoundland and Labrador · APEGNB AIGNB

CSA Standards now available to view before purchase

On October 1, 2008, the Canadian Standards Association (CSA) launched a pilot program that will provide users with broader and easier access to the occupational health and safety standards referenced in Canadian legislation.

The two-year pilot program provides view access to the CSA's standards referenced in the occupational health and safety legislation of all Canadian jurisdictions. This represents about 259 CSA standards in Canada, and 40 in New Brunswick.

Users can now see the standards before buying them. The standards will be in a read-only PDF format, and users will not be able to cut, paste, print or download the standards.

"We're very excited to partner with the CSA in this program," said **Richard Blais**, WorkSafeNB's chief compliance officer. "We believe this will benefit all our stakeholders, from small and medium-sized businesses, large corporations, labour unions, and industry associations. By making the standards more accessible, we hope it will increase their adoption in the workplace and, ultimately, improve worker safety," Blais said.

To access the standards, go to: ***http://ohs.csa.ca*** and log in (it's fast and easy). Then click on the jurisdiction you want (New Brunswick, for example) to see the list of standards, then click on the standard.

For more information, please contact Richard Blais at 738-4107, or e-mail at *richard.blais@ws-ts.nb.ca*.

Les normes de l'ACNOR peuvent maintenant être visionnées avant l'achat

Le 1er octobre 2008, l'Association canadienne de normalisation (ACNOR) a lancé un programme pilote qui permet aux travailleurs et aux employeurs d'avoir plus facilement accès aux normes en matière de santé et de sécurité mentionnées dans la législation canadienne.

Le programme pilote, qui sera d'une durée de deux ans, permet de consulter les normes de l'Association citées dans la législation en matière de santé et de sécurité de l'ensemble des provinces et territoires du Canada. Cela représente environ 259 normes au Canada et 40 normes au Nouveau-Brunswick.

Les personnes peuvent maintenant visionner les normes avant de les acheter. Ces dernières sont en format PDF pour consultation seulement et ne peuvent pas être coupées, collées, imprimées ou téléchargées.

*« Nous sommes très heureux de collaborer avec l'Association canadienne de normalisation à ce programme », explique l'agent principal de contrôle de Travail sécuritaire NB, **Richard Blais**. « Nous croyons que le programme sera avantageux pour tous nos intervenants, qu'il s'agisse de petites, moyennes ou grandes entreprises; de syndicats ouvriers; ou d'associations d'industries. En rendant les normes plus accessibles, nous espérons que les lieux de travail les adopteront davantage et finiront par améliorer la sécurité de leurs employés », ajoute-t-il.*

Pour accéder aux normes, vous n'avez qu'à aller à **ohs.csa.ca** *et à ouvrir une session. C'est rapide et facile. Cliquez ensuite sur la province désirée (par exemple, Nouveau-Brunswick) pour voir la liste de normes, puis cliquez sur la norme voulue.*

Pour obtenir de plus amples renseignements, vous n'avez qu'à communiquer avec Richard Blais par téléphone au 506 738-4107 ou par courriel à l'adresse richard.blais@ws ts.nb.ca.

EEL GROUND NATIVE GRADUATES FROM UNB ENGINEERING

Tyler Patles, a member of New Brunswick's Eel Ground First Nation, is proud to be a graduate of the University of New Brunswick's civil engineering Class of 2008.

Patles received his Bachelor's degree during the December 2008 UNB convocation ceremony.

"I'm excited," says Patles. "Having this degree will open a lot of doors for me. I can't wait to travel, learn and bring my experience back to Eel Ground to benefit my community."

A graduate of Miramichi Valley High School, Patles wasn't sure what he wanted to do in terms of a career. He remembers having a conversation with a friend who was going into civil engineering and thought that sounded like an interesting career choice.

"If it wasn't for my friend putting engineering on my career radar, I don't think I would have my engineering degree today. I hadn't really heard much about engineering in high school but I did know you needed to be strong in math and science. So when my guidance counselor asked me what my plans were, I told her I'd like to get into engineering. She started the application process and I ended up going to the New Brunswick Community College in Miramichi to get my chemistry upgraded."

Patles earned a 4.0 grade point average while at NBCC before heading to UNB in Fredericton for his first year of engineering studies.

He describes his first year as being a baptism by fire. "There was no easing into the program. You hit the ground running. The workload was heavy. I wasn't sure if I could keep up. But I told myself to wait until the end of the first semester before making any decision on whether or not to drop out. After the first semester, it was smooth sailing from then on."

Patles is grateful he stuck with the program. "I highly recommend that every high school student should think about a career in engineering. It's fun and interesting. There are a wide range of disciplines to appeal to whatever interest."

When asked why more students from New Brunswick's aboriginal communities don't consider engineering a viable career option, Patles says it might have a lot to do with lack of awareness that it's a career that would open up a world of options for them. "It might also be because there aren't many engineers in their community. I think role models are important. I think they need to know that these careers exist and are within reach. They don't need to feel intimidated. Everybody with a curiosity and an aptitude for math and science can do this. I could have missed out on a great education and career if I gave up in my studies early on."

Patles is also very appreciative of the support he received from his family and community. "My success is their success," he says proudly. His father, **Lester Martin**, an ironworker, and his mother, **Patricia** were especially supportive. So were his sisters **Cashley** and **Heather** and his younger brother **Tanner**.

The North Shore Micmac District Council covered all of Patles' education costs-from tuition and books to living and travel expenses. "Everybody in my community was so supportive. They even helped him raise the funds to spend four months in Queensland, Australia as part of the Study Abroad Program. Everyone in my circle really wanted me to succeed."

What's next on Patles' career radar?

"My first goal was to finish school. My next goal is to get my P.Eng. designation. And after that, who knows? It's a big world out there and I have an engineering degree that will help me explore it."

THEY SAID IT BEST

"All over China, parents tell their children to stop complaining and to finish their quadratic equations and trigonometric functions because there are sixty-five million American kids going to bed with no math at all."

MICHAEL CUNNINGHAM—AUTHOR

"Science can be introduced to children well or poorly. If poorly, children can be turned away from science; they can develop a lifelong antipathy; they will be in a far worse condition than if they had never been introduced to science at all."

ISAAC ASIMOV (1920-1992)—SCI-FI WRITER AND BIOCHEMISTRY PROFESSOR

"Every great advance in science has issued from a new audacity of imagination."

JOHN DEWEY (1859-1952)—PHILOSOPHER, PSYCHOLOGIST, EDUCATIONAL REFORMER

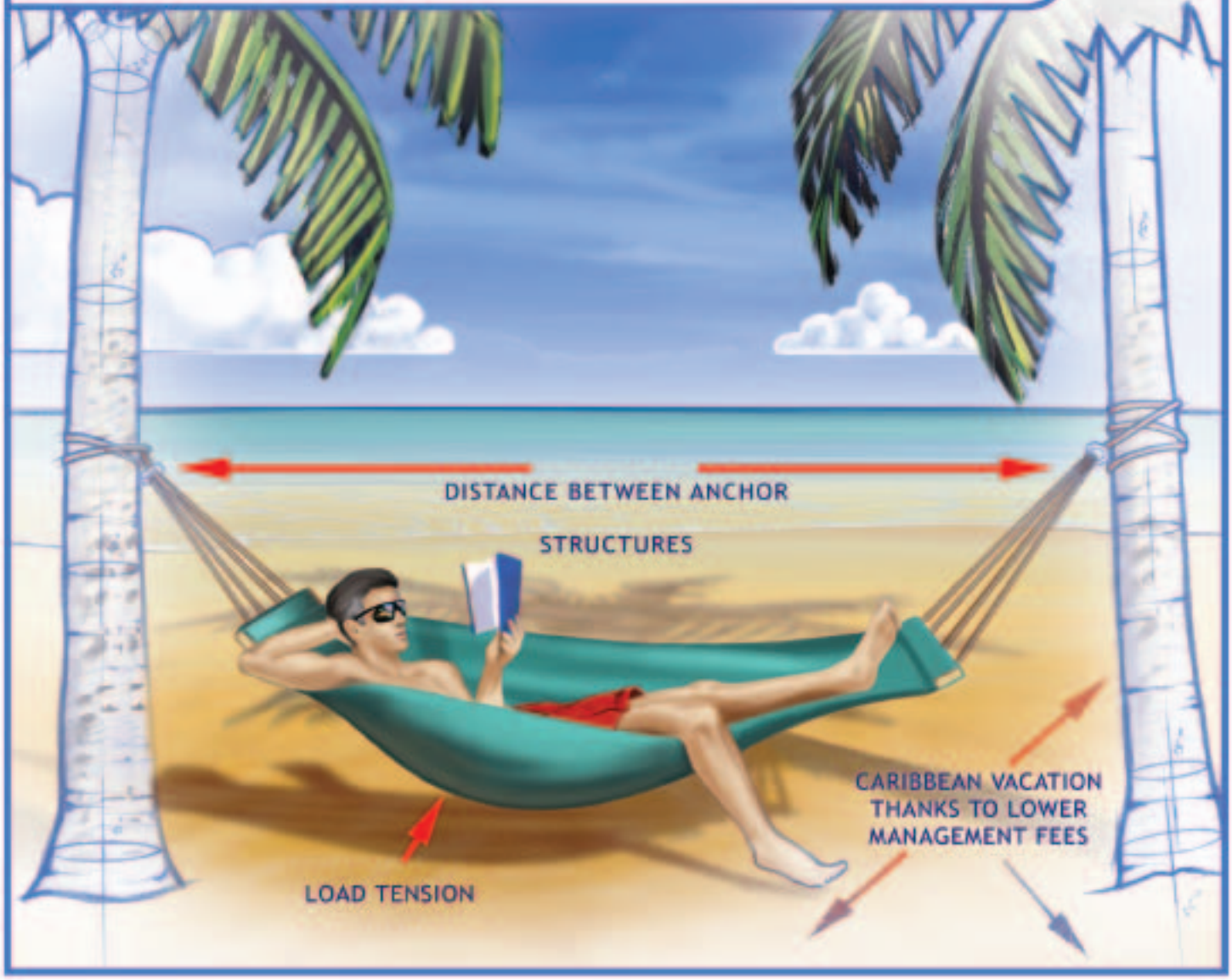
"I don't think necessity is the mother of invention. Invention, in my opinion, arises directly from idleness, possibly also from laziness. To save oneself trouble."

AGATHA CHRISTIE (1890 - 1976)—AN AUTOBIOGRAPHY, 1977

"Nothing in this world is to be feared... only understood."

MARIE CURIE (1867-1934)—CHEMIST/PHYSICIST

ENGINEERS SEE THE WORLD DIFFERENTLY. INCLUDING THEIR RETIREMENT PLANS.



At Great-West Life, we know your standards extend well beyond your engineering career. And when it comes to your retirement, while you may be relaxing, you won't be relaxing those standards. That's why you should consider the only retirement plan officially sponsored by Engineers Canada. Our group retirement plan offers an impressive array of investment options combined with lower-than-typical retail management fees and personalized assistance with investment selection. We understand that as an engineer you expect more and Great-West Life has the strength and stability to deliver.

For details, go to
www.engineerscanada.ca/e/prog_services_4.cfm
or call 1-800-724-3402.

Sponsored by

engineerscanada

THE Great-West Life ASSURANCE COMPANY

Engineers Canada is the business name of the Canadian Council of Professional Engineers.

Great-West Life and the key design are trademarks of The Great-West Life Assurance Company (Great-West), used under licence by its subsidiaries, London Life Insurance Company (London Life) and The Canada Life Assurance Company (Canada Life). Group retirement, savings and payout annuity products are underwritten by London Life and Canada Life respectively, and marketed and serviced by Great-West.

Get an MBA in Engineering Management in One Year at UNB

IT'S NEVER BUSINESS AS USUAL

Earn a Master of Business Administration in Engineering Management in one year. UNB's MBA-Eng is specifically designed for working engineers like you, with courses scheduled around your working day. Gain the skills to run the business end of engineering successfully with courses such as management of engineering and IT projects, finance, and strategic management. Take your career to the next level. You will take a combination of business and engineering courses in four different formats:

- Compressed weekday
- Compressed weekend
- Regular evening courses
- Independent research

PLUS... annually, one student will be awarded the Armour "Ben" McCrea Fellowship, which covers the cost of full tuition.

To be admitted to this program you must have completed an undergraduate degree in engineering from a recognized institution and have three years of business experience.

FACULTY OF BUSINESS ADMINISTRATION
University of New Brunswick, PO Box 4400
Fredericton, NB E3B 5A3
Tel: 506.451.6817
Email: mba@unb.ca Website: www.mba.unbf.ca

UNB Business Administration