



Professional Engineers
and Geoscientists of BC
www.apeg.bc.ca

Volume 6, Issue 2
February 2006

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The 4th dimension

Association of Professional Engineers and Geoscientists of BC
Victoria Branch Newsletter
www.apeg.bc.ca/vic

The February dinner meeting for the spring will be held on Thursday, February 23, 2006 in Queenswood Room at the Cadboro Commons Building, University of Victoria. We are honored to have **Dr. Robert (Bob) Ito, PEng, President of APEGBC** as a speaker for the evening. Our regular dinner meeting speaker is Mr. Paul Manson, President – Sea Breeze Power Corporation, Vancouver, BC. The title of his talk is: “The Wind Power Industry in BC – An Opportunity for Leadership”. This is a sequel to the November presentation **The End of Suburbia: Oil Depletion and the End of the Canadian Dream**, plus a presentation by Guy Dauncey, founder of the BC Sustainable Energy Association, as part of the theme of energy and environmental concerns. Members are encouraged to attend to learn of the latest events from the Victoria Branch.

Speakers of the Month:

Dr. Robert (Bob) Ito was born in Vancouver, BC. He received his B.Sc and M.Sc degrees from the University of Manitoba and his PhD degree from the University of British Columbia. From 1963 to 1973 he was a Research Officer with the National Research Council of Canada in Ottawa. From 1973 to 2003 he was a Professor in the Department of Electrical and Computer Engineering at the University of British Columbia. Currently, he is a Professor Emeritus at UBC. Since 1982 he has been active in APEGBC affairs ranging from examination of credentials of applicants to his current role as President of APEGBC. Bob also chairs APEGBC's Emerging Disciplines Task Force.

Mr. Paul Manson has worked in the natural resources industry since 1987. He has fostered the growth of several companies in their start-up stage, and has extensive experience in the administration of public companies. In addition to serving as President of Sea Breeze Power, he is also president of the financial and management consulting firm Banks Island Management Services Inc. On both a personal and professional level, Mr. Manson is a very concentrated and concerned observer of global climate change.

You want to learn more Come to our dinner Meeting.

Events Details

When: **Thursday, February 23, 2006:** Social at 5:30 pm; Dinner at 6:30 pm.

Where: **Queenswood Room**, Cadboro Commons Building, University of Victoria

For directions and maps to the University of Victoria, link to <http://www.uvic.ca/maps/index.html>.

To find out where Cadboro Commons Building is on campus, link to <http://www.uvic.ca/buildings/ucl.html>.

Parking is free of charge after 6:00 pm Monday through Friday and all day on Saturday.

Parking permits may be purchased during the day from vending machines located at most Campus Entrances; also there is a limited number of metered spaces available in Lot 1, which is located close to the building.

Cost: **Cost (dinner included except where noted):** Registered members and guests \$20.00 ea.; Students \$10.00 ea.; Admission at the Door: \$25.00 ea.; Presentation-only \$5.00 ea. (dinner not included).

RSVP: Please register in advance via the telephone answering service at **721-8896** by **NOON Monday, February 20**. Provide the name of those who you are registering and your telephone number.

If you register but can not attend, please call **477-0151** by **NOON** the day before the meeting and give notice of cancellation on the answering service (please note that the branch may have to pay for dinners that are not cancelled).

You can also register on the web: Visit <http://www.me.uvic.ca/APEG.htm> and register by **NOON Monday, February 20**. To complete the registration, please provide your name and phone number. Friends, Associates and partners are always welcome (pre-registration is recommended). If you cannot join us for dinner, please come and join us for the presentation.

Upcoming Events

APEGBC, Victoria Branch

Victoria Branch dinner meetings are held the last Thursday night of every month from September to May excluding December. Meetings are usually held in the Cadboro Commons Building, University of Victoria and start at 5:30 p.m.

The next dinner meeting is at Queenswood Room, Cadboro Commons Building, University of Victoria.

Everyone is welcome to attend the Branch Executive meetings held every month at the restaurant of the Cedar Hill Golf Course. The next meeting is scheduled for Wednesday March 1, 2006.

Events

- Feb 15 06 – CNIB and Astrographics information session on Accessible Pedestrian Buttons for Traffic Signals. *Information:* See website at: <http://www.citebc.ca>.
- Feb 23 06 - ITE Vancouver Island February Lunch Meeting. Speaker: Marvis Johnson, President, Canadian Traffic Safety Institute. Topic: “Establishing a Long Term Traffic Safety Strategy in the City of Edmonton”. *Information:* See website at: <http://www.citebc.ca>.
- Mar 22 06 – Salary Seminar and Networking Night of Victoria Chapter DAWEG. *Information:* See website at: <http://www.mech.ubc.ca/~daweg/events/>.
- May 14-17 06 - CITE Canadian District Meeting at Banff, AB. *Information:* See website at: <http://www.citebanff.ca>.

Robbie Burns Night Photos



What is new?

DAWEG returns to Victoria

Originally founded in the early nineties, the Victoria Chapter of the Division for the Advancement of Women in Engineering and Geoscience (DAWEG) of APEGBC has recently been revived through a strategic planning meeting. At this meeting, the Chapter has discussed how to support DAWEG's vision that women advance, excel, and thrive at all levels in our profession. The Chapter has decided to focus on two types of initiatives: (i) activities that improve the career path and increase the retention of women in Engineering and Geoscience; (ii) activities that increase member participation in the Chapter and, thus, enable the Chapter to operate in a sustainable manner. A Salary Seminar and Networking Night on Wednesday March 22, 2006 will be the first initiative organized by the Chapter (see [Events](#) on p.2).

The Salary Seminar is a 3-part presentation followed by a student-industry networking session where students have the opportunity to network with professional engineers and discuss the just-learned strategies with them. The event is targeted primarily at female senior undergraduate students and young professionals, although their male colleagues are also welcome. During the seminar, students and young professionals learn what fair compensation is for them as engineers, as well as interview and salary negotiation skills.

In addition to the Salary Seminar, the Chapter will organize a social gathering in May 2006. This gathering will be an opportunity for DAWEG members from Greater Victoria to meet, as well as to brainstorm initiatives that increase the Chapter's value to our local membership. The Chapter's strategic plan and budget for 2006/07 will also be discussed at this May social gathering. Further details about the social gathering will follow in an upcoming newsletter of DAWEG.

If you are interested to participate or want to learn more about the activities, please contact Daniela Constantinescu at danielac@me.uvic.ca.

Summary of January's Dinner Meeting

Our speaker in the January dinner meeting was Dr. Del Fredlund and he spoke about the personalities of engineers. In his presentation, he highlighted the four archetype temperaments found in most people. To illustrate them, he referred to the traits observed amongst his children and his spouse. While he expressed that temperament traits were frequently inherited, he also professed that there were strengths and weaknesses associated with each temperament. He hinted that it was best if one could promote the strengths and minimize the weaknesses. To conclude his talk, he passed out questionnaires for the audience to fill out. The tallied scores of a questionnaire he suggested would reflect one's temperament.

Picture showing Dr. Del Fredlund during his presentation.



Upcoming Feature Presentations

- **March 30 – Student Evening** Our focus this evening will be on students, with presentations by **Engineers Without Borders**, **AUVic** (Autonomous Underwater Vehicle), by UVic Engineering students, **DAWEG** (Division for the Advancement of Women in Engineering & Geoscience) by Daniela Constantinescu, and our **4th Annual Talbot Fund Award** to a 3rd or 4th year UVic Engineering student.
- **April 27 – Earthquake Emergency Response** This will be a continuation of the earthquake hazard series, prompted by the recent natural disasters (Katrina and Rita), and the responses. Part 1 of this theme was September's **Living on the Edge: Earthquake Assessment in the Victoria Area**, by Dr. Pat Monahan. The April 27 evening will feature Jim Whyte, Provincial Emergency response and Ken Neilson, City of Victoria Emergency Coordinator, discussing **Emergency Preparedness in Victoria**.

Engineering in Action

“For most of us, the sight of houseflies zooming around the kitchen or executing precision landing on top of freshly baked bread unleashes a primal urge to kill, maim, or dismember these germy little creatures.” This is the first sentence in an article called “Fly Guys” in the November 2005 issue of the *IEEE Spectrum* related to the research done by Rafal Zbikowski and his colleagues. His team wants to know how these insects are able to carry out their aerial acrobatics to help them to build a micro air vehicle. This will be a tiny flapping-wing robot that can be used for military reconnaissance, disaster rescue efforts, or other kinds of work requiring remote sensing. As pointed out in the article, “the houseflies have plenty of it to share. At low speed, for example, the fly can outmaneuver any human-built craft, reaching speeds up to 50 kilometers per hour and accelerations of 3 g’s. It can fly straight up, down, or backward, and somersault to land upside down on a ceiling.” Turning to nature for scientific and technological inspiration is not new. As engineer Buckminster Fuller once remarked, “In nature, technology has already been at work for millions of years.” To learn about this work, please refer to the article “Fly like a Fly” on p.46 of the November 2005 issue of the *IEEE Spectrum*.

Is one lens better than a thousand lenses? Researchers at Stanford University do not think so. The research group at Pat Hanrahan’s lab has developed and field-tested under a variety of conditions and functions a device like a typical digital camera except that it lets the user choose what is in focus after the fact. As the article in the January 2006 issue of *Photonics Spectra* says, “This can extend the depth of focus and so minimize the common effect wherein some objects in a picture look sharp while others are blurry. The improved depth could be a boon for camera users everywhere, from amateur shutterbugs to serious scientific microscopists. The scheme involves a twist on the standard optics. In a typical digital camera, a lens focuses the incoming light onto a detector. In the new camera, the engineers have replaced the detector with a microlens array at the focal plane of the main lens. A photosensor array behind the microlenses sits at such a distance that the image from each microlens spans many microsensors.” To learn about this work, please refer to the article “Novel Camera Employs Microlenses” on p.20 of the January 2006 issue of *Photonics Spectra*.

Have Your Say!

Do you like our format? Do you have concerns or comments you like to voice? We love to hear from you and welcome any contributions to this newsletter, humorous or otherwise. The deadline for submissions to the next newsletter is Feb.27, 2006. Please send them to Harry Kwok, University of Victoria at hkwok@ece.uvic.ca.

Advertisements

While APEGBC – Victoria Branch is not in a position to endorse advertisements, we do provide them as a service to our members. The advertising rates are \$200 for eight continuous advertisements and \$30 for a single advertisement.

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