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The EDGE Newsletter

Equity & Diversity in Geoscience & Engineering

DAWEG Call for Nominations for APEGBC Council Candidates

by Cathy Marr, P.Eng.

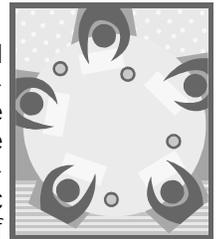
Want to Make a Difference at APEGBC?
Get Nominated as a Candidate for
Council!

It's that time of the year again when the APEGBC Nominating Committee is looking for potential candidates to be put forward as nominees for the annual election of APEGBC Council Members. If you, or someone you know, has a keen interest in helping to define the direction for the Association, please consider putting your name forward for nomination.

The time commitment requires in the order of 4 to 5 hours per week. A Councillor's annual schedule includes 6 or 7 Council meetings, 5 or 6 line committee meetings, occasional task force participation and Branch visits as time permits.

As a Councillor, you will have the opportunity to influence and help define the engineering and geoscience professions in British Columbia. The APEGBC Strategic Plan states that one of APEGBC's goals is to ensure diversity, equity and inclusivity in the professions. DAWEG is particularly interested in ensuring the election slate includes qualified women candidates.

If you wish more information, would like to be considered for nomination, or would like to suggest someone who should be considered for nomination, please contact Cathy Marr at cmarr@istar.ca or 604-731-7187.



All DAWEG members welcome to Executive Meetings

Inside this issue:

APEGBC Council/ APEGBC/ASTTBC Merger	1
MIT Women's Initiative	2
Sustainability/ Volunteer Opportunity	3
Immigrant Women Workshop/ Generation-E/ "Becoming Leaders"	4
Balance at the Workplace Workshop	5
Celebrating Women in SET and Business in Vancouver	6

Did you know that:

- Enrolment of women in engineering and mathematics has increased more than 20% in the past 3 years.
- Women account for 23% of the enrolment in engineering and applied sciences.
- In 2000/01, women accounted for 57% of total enrolment in university.

One APEGBC's Councillor's Change of Heart on the Proposed APEGBC/ASTTBC Merger

APEGBC's May Referendum: Moving toward more effective self-regulation of the Engineering/Geoscience professions – my change of heart on the proposed APEGBC/ASTTBC merger.

by Margaret Li, P.Eng., APEGBC Council

We will be given an opportunity to decide on how our profession will be governed and regulated during the referendum in May. We as professionals pride ourselves by self-governing our technical professions. APEGBC is the organization fulfilling this mandate for P.Eng and P. Geo. ASTTBC is the organization govern-

ing the practice of engineering for technologists and technicians. The clarity of the responsibilities between engineers/geoscientists and technologists/technicians has been an on-going discussion for many years. In the last 2 years, initiatives are going on in many provinces to integrate/merge the two organizations to enable more effective self-regulation. This allows the opportunity of laying out relative scopes and responsibilities according to different levels of training.

Details have been reported in the last few issues of Innovation. After the integration

(Continued on page 2)

APEGBC/ASTTBC Merger (con't)

(Continued from page 1)

of the organizations, there will be one governing body and 4 levels of membership in the association, each with a defined scope of practice. Briefly, they are P.Eng. and P.Geo. (same as now), RPT (Eng.) and RPT (Geo.), RET and RGT, CTech. Definitions can be found on the APEGBC website and in the March issue of Innovation. This will provide the ability to recognize a broad range of competencies in the engineering/geoscience professions.

The main benefit will be that there will be common rules governing the various scope of practice in engineering/geoscience. Another benefit will be that the 'relative scope' or 'turf' discussions will be dealt with internally instead of by competing, through lobbying, or by being regulated by government. It is not in the public's interest to have technical scope issues potentially affecting public safety decided by people not in the professions. On-going

'turf' wars could result in further public confusion of a profession when the scope was decided by people outside of the profession due to lobbying and/or publicity campaigns. This could be seen in some other professions such as legal and accounting.

Personally, my first reaction to this merger was a big 'NO' at the merger presentation during the DAWEG AGM. However, the more I learn about the details, like the levels of members, composition of Council, pros and cons, etc., I find that it makes much sense.

I encourage everyone to review the information on the website and think about the long-term of the professions, and make an informed decision at the referendum in May. This is one of the most important decisions we will make for the future self-regulation of our professions. You can also participate in one of the information sessions at the various Branches so that you can have more details.

MIT Women's Initiative Visit to Lower Mainland

by Daniela Constantinescu

During the week of March 24 – March 28 2003, DAWEG organized the visit of Kiran Madhav and Pallavi Naresh from the MIT Women's Initiative to 8 Lower Mainland high schools. The MIT Women's Initiative is a student group dedicated to encouraging more women to pursue degrees and careers in Electrical Engineering, Computer Science, and Engineering in general (for more information about the group, please visit their web site at <http://hkn.mit.edu/wi/>).

Visits were 90 minutes long and they included interactive engineering related activities, an overview of engineering and the various fields of engineering, together with a more in-depth presentation of one or two areas of engineering. The goal of the visits was to motivate students, especially female students, to consider engineering as a career option by giving them the opportunity

to experience fun engineering activities and by enriching their understanding of the role of engineering in our society. According to the feedback received from the teachers whose classes were visited, Kiran and Pallavi were very inspiring presenters who successfully connected with the students and got their message across. Congratulations and many thanks to both of them!

Many thanks are also due to the enthusiastic teachers who invited the group to their classes and accommodated the visits despite their non-conventional duration. DAWEG is excited that we can join forces in our effort to reveal the rewards of an engineering or science career to young students.

The MIT Women's Initiative will come again to the Lower Mainland during January 2004. If you know high school teachers who may be interested to invite them to visit their class, we would be pleased to hear from them at daweg@mech.ubc.ca.

- from Web Funnies -

What gender is your computer?

A language instructor was explaining to her class that in French, nouns, unlike their English counterparts, are grammatically designated as masculine or feminine. "House," in French, is feminine-"la maison". "Pencil," in French, is masculine-"le crayon".

One puzzled student asked, "What gender is computer?" The teacher did not know, and the word wasn't in her French dictionary. So for fun, she split the class into two groups, appropriately enough by gender, and asked them to decide whether "computer" should be a masculine or feminine noun. Both groups were required to give four reasons for their recommendation.

The men's group decided that computers should definitely be of the feminine gender ("la computer"), because:

- 1. No one but their creator understands their internal logic.*
- 2. The native language they use to communicate with other computers is incomprehensible to everyone else.*
- 3. Even the smallest mistakes are stored in long-term memory for possible later retrieval.*
- 4. As soon as you make a commitment to one, you find yourself spending half your pay check on accessories for it.*

The women's group, however, concluded that computers should be masculine ("le computer"), because:

- 1. In order to get their attention, you have to turn them on.*
- 2. They have a lot of data, but they are still clueless.*
- 3. They are supposed to help you solve problems, but half the time they ARE the problem.*
- 4. As soon as you commit to one, you realize that if you'd waited a little longer, you could have gotten a better model.*

DAWEG & Sustainability

by Christy Love, E.I.T.
—APEGBC Sustainability Research Engineer

Notes from the Sustainability Committee of APEGBC:

The March 2003 newsletter from APEGBC's Sustainability Committee is online and can be downloaded at www.sustainability.ca. This issue of Sustainability Now focuses on transportation and features: an interview with Richard Drdul, PEng, PTOE; a profile of the City of Van-

cover's Sustainable Streetscape pilot project; and an overview of the City of Quesnel's transportation initiatives.

If you would like to subscribe to the newsletter, contribute material for publication, or offer comments and suggestions, please send an email to info@sustainability.ca or call Christy Love, Sustainability Engineer/Researcher, at (604) 412-4868. Hard copies of the newsletter can also be mailed on request. The next issue, due out in June 2003, will focus on Energy.



Sustainability—there is so much that YOU CAN do!!

DAWEG "Opening the Door" to a Wonderful Volunteer Opportunity

by Cathy Marr, P.Eng.

Science World is looking for people with careers in engineering and science to participate as role models at two "Opening the Door" sessions coming up soon. "Opening the Door" are career networking events that bring high school students together with engineers and scientists to give the students the opportunity to learn about career opportunities while practicing their networking skills. The first session is at Pender Harbour Secondary on Wednesday, April 30th, from 8:00 am to 5:30 pm or so. The second one is at Science World on Monday, May 12, 2003 from 12:30 to 3:30pm. The experience is guaranteed to be fun and rewarding. No preparation is required and travel expenses are paid. Essentially, there are two main goals for these events:

1. Talk to the students about the opportunities for careers in science, engineering, and technology and the importance of keeping the door to science and math open.
2. Give the students the opportunity to

approach you, introduce themselves, shake your hand and ask you questions about yourself - the opportunity to network.

These are very important skills students need to learn as they are approaching the point in their lives where they are becoming an adult and they are having to make things happen for themselves.

If you are interested in participating, contact Michelle Collet at Science World at 604-443-7551 or mcollet@scienceworld.bc.ca.

If you wish to keep apprised of future school interaction volunteer opportunities such as Opening the Door, Quantum Leaps, XX Evenings, judging at science fairs or becoming a Scientist and Innovators in the Schools volunteer, subscribe to the DAWEG Resource list serve by emailing majordomo@interchange.ubc.ca putting the following message in the body of the email:
subscribe daweg-resource
end

It may require more courage to take the high road, but it is consistently the path with the best view.

-- Karl Schmidt

Life is a grindstone. Whether it grinds you down or polishes you up depends upon what you are made of.

-- John Maxwell

Stress is what happens when we try to impose our will on life.

-- Karl Schmidt

*

But "stressed" spelled backwards is "desserts".

DID YOU KNOW??

1. Apples, not caffeine, are more efficient at waking you up in the morning.
2. A pack-a-day smoker will lose approximately 2 teeth every 10 yrs.
3. When you sneeze, all bodily functions stop even your heart!
4. Babies are born without knee caps. They don't appear until they are 2-6 years old.
5. If colouring weren't added to Coca-Cola, it would be green.

- from Web Funnies -

DAWEG Workshop for Immigrant Women Engineers

by Daniela Constantinescu

On September 13, 2003 DAWEG will organize a career workshop for immigrant women engineers who want to work in the engineering profession in Canada. The workshop will address several issues, including resume writing and interview skills, Canadian engineering workplace culture, and legal hurdles facing immigrant engineers. Further details about the workshop will be posted on our web-

site at <http://www.mech.ubc.ca/~daweg/events.html>.

While the details of the workshop are still in the making, DAWEG is kindly asking for your suggestions and support in contacting the targeted audience. Please email us your suggestions at daweg@mech.ubc.ca. We also appreciate if you can pass this information to individuals or organizations that may be interested in the workshop.

DAWEG Generation-E

by Cathy Marr, P.Eng.

Looking for material to use in school visits to help show students the relevance of engineering in their lives? Want to show a young person where to find out more about engineering career opportunities? Check out the website at www.generation-e.ca. The website is designed to show young people the relevance of engineering in their lives, that engineering requires a diverse set of skill sets in addition to maths and science, to get young people thinking about engineering in a new way, and to attract a broad cross

section of Canadian youth into the profession. The website, which is aimed at 14 to 18 year old students, also includes resource kits with hands-on projects and handout material. The Generation-E campaign was spearheaded by the Association of Consulting Engineers of Canada (ACEC) with the support of the Canadian Council of Professional Engineers (CCPE), prominent consulting engineering firms from across the country, the Canadian Coalition of Women in Engineering Science and Technology (CCWEST), the Canadian Federation of Engineering Students, high school teachers and guidance counsellors.

"Becoming Leaders: A Handbook for Women in Science, Engineering and Technology"

A Book Review by Cathy Marr, P.Eng.

Dr. Mary Williams and Carolyn Emerson have written a very practical, useful handbook entitled "Becoming Leaders: A Handbook for Women in Science, Engineering and Technology". Mary Williams was the NSERC/Petro-Canada Chair for Women in Science and Engineering (CWSE) for the Atlantic Region and Carolyn Emerson was the assistant to CWSE (Atlantic) at the time they wrote the handbook. The handbook is a practical reflection of much of the research done by Mary and Carolyn during the term of the CWSE.

It was launched at the ICWES Conference in Ottawa last summer.

The book sets out roadmaps for readers with recommendations on which chapters to read at each particular career stage. There is something in this book for students, career women, faculty members, deans, directors and managers. The 19 chapters cover a wide range of subjects including Work-Life Balance, Career Skills and Strategies, Getting a Rewarding Job, Employment Equity Legislation, Personal Networks and Mentors, Tenure Strategies for

(Continued on page 5)

*If you want a rainbow,
you have to put up with
the rain.*

*Your conscious mind
can only hold one
thought at a time,
positive or negative.
You can decide to be
happy by substituting
positive thoughts for
negatives ones.*

*

*Your mind is like a
garden. Either weeds
or flowers will grow.*

-- Brian Tracy

*Never let yesterday use
up today.*

*A great life is an
accumulation of
thousands of efforts and
sacrifices unseen by
others.*

*

*Your life is the sum
total of all your choices
up to the present
minute.*

-- Brian Tracy

DAWEG Book Review (con't)

(Continued from page 4)

New University Faculty, Time Management, Proactive Diversity for Academic Deans and Department Heads, Strategies for Students in STEM, and even one on Radio and TV Appearances. Each chapter is filled with practical and action-oriented advice often with bulleted lists of tips and a list of references for further information.

One of my personal favorites is the chapter on "Family Support". This chapter is written to be read by those important other people in your life such as spouses and children. Children are cautioned that "If you need cookies or a costume for school, tell her at least three days ahead" and reminded of the upsides of having a mother who is a scientist or engineer; "She may not volunteer at your school but she is really good at helping with math

homework and science projects."

This handbook is packed full of useful tips. It is written in a way that you can select the information you need at the moment. It provides great bedside reading as you ponder how you could better tackle the challenges you ran into during the day. This book should be required reading for every woman with a career in engineering or science.

It is published by NSERC/Petro-Canada Chair for Women in Science and Engineering and Women in Science and Engineering (WISE) Newfoundland and Labrador. Information on obtaining a copy can be obtained from www.mun.ca/cswse or www.stemnet.nf.ca/WISE/ or by contacting Cathy Marr at cmarr@istar.ca.

*If you love something,
set it free.*

*If it comes back, it
will always be yours.*

*If it doesn't come
back, it was never
yours to begin with.*

DAWEG Workshop on Achieving Balance in Today's Workplace

A Workshop Sponsored by DAWEG

June 14, 2003 - from 10:00am to 2:00pm - at UBC

In this workshop we will draw upon the work done by Mary Williams and Carolyn Emerson in their book, [Becoming Leaders. A Handbook for Women in Science, Engineering and Technology](#). The authors will provide a roadmap of topics that address issues, roles, and stages in the life of women in science and engineering. In this workshop we will focus on "Work-Life Balance" by looking at how we set priorities in our lives as professional women. We will examine our assumptions and ideas about work and the interactions between work and other areas of our lives. Recent research has examined how interactions between different roles can contribute to a high-achieving woman's professional and personal development. The findings suggest that skills learned in women's personal lives, such as the ability to handle multiple tasks and to give emotional support and advice, contribute to the increased effectiveness of women in the workplace. An interesting aspect of these findings is that, previously, not much has been written or researched about the benefits personal life can bring to work life. I can't help thinking that it has something to do with women's participation in the workforce.

Through a combination of discussion and group activities, we will identify strategies for achieving a work-life balance. It is my belief that the important components of our life - work, parenting, family, community, learning and health - can be mutually reinforcing. While solutions to improving the work-life balance tend

to be unique to the individual, we can learn from others, fellow engineers and role models. We will see that balance emerges from a combination of your competencies, values, relationships and experiences.

As a facilitator my job is to ask relevant, powerful questions that enable you to take action in your life. Prior to the workshop, I shall prepare a more detailed agenda and suggest some questions for your consideration.

The cost of the workshop, which includes a light lunch, is \$20, and payable on the day of the workshop. For students, the cost of the workshop is \$15.

The book, [Becoming Leaders. A Handbook for Women in Science, Engineering and Technology](#) will be available for sale at \$12.

The location will be a room on the UBC campus.

You can register by fax or by sending me an email.

I look forward to seeing you at the workshop.

Phyllis MacIntyre

tel: 604.222.8099

fax: 604.224.8005

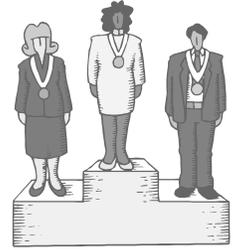
email: pmacintyre@telus.net

DAWEG Celebrating Women in SET Event

by Cathy Marr, P.Eng.

Together with SCWIST, DAWEG hosted a reception at UBC on March 28 to celebrate women in Science, Engineering and Technology. The event honored Maria Klawe in recognition of her term of as the NSERC/IBM Chair for Women in Science and Engineering for BC and Yukon. Maria was one of 5 such chair holders across Canada. Maria was also Dean of Science at UBC. Maria was responsible for a number of initiatives including the design of

multimedia games for learning mathematics and science targeted toward young girls, the development of the ARC program (Alternate Routes to Computing), and the "Virtual Family" interactive computer game. During her term at UBC, the percentage of women students and faculty in computer science increased significantly. In addition to Maria's accomplishments the activities of other women and organizations were recognized at this event, including DAWEG members Karen Savage, Elizabeth Croft and Lianna Mah. For more information visit www.harbour.sfu.c/scwist/march28.doc.



DAWEG Member Featured in Business in Vancouver

Reprinted with permission from Business in Vancouver, March 4-10, 2003 Issue 697

National Engineering and Geoscience Week

Paving the way for women in engineering

Lianna Mah has made her mark both as an engineer and as an advocate of women in the engineering profession.

For the past 16 years the environmental engineer has applied her talents to designing wastewater treatment systems, much of that time with Burnaby-based Associated Engineering (B.C.) Ltd. She was appointed Associated's manager of engineering development in 1995 after joining the company in 1990.

Mah determined to pursue a career in engineering because it appealed to her sense of contributing to a greater good. "It was," Mah says, "the thought of being able to build something or do something that was good for society; to be able to make an impact on the world in some way. That's what

attracted me to it."

But studying engineering in the 1980s was a lonely pursuit for women. Back then, they accounted for one in 10 students in her UBC classes. Their numbers in the engineering workplace were even fewer.

*Female representation
more than doubles in B.C.
profession*

And Mah says the women in the field at that time were seen more in a support staff role. Much of that workplace culture has changed, however, and Mah's communication and team-building skills have contributed to that change. Her involvement with such initiatives as APEGBC's Division for Advancement of Women in Engineering and Geoscience and her work as B.C.'s representative for the Canadian Coalition of Women in Engineering, Science and Technology won her APEGBC's 2002 Professional Service Award. It has also helped increase the

acceptance of women in the profession and encouraged more to pursue an engineering career.

The proportion of women in engineering in B.C. has more than doubled, from three per cent of the province's engineers to seven per cent, since Mah graduated from UBC in 1987. That's good news for women, but it has also been good news for the profession as a whole. Mah says the engineering culture is now much more accepting of such human-resources issues as parental leave, for both male and female engineers.

Women, she says, bring excellent communication and organizational skills to engineering. But their numbers are still comparatively limited in the field and almost non-existent in senior engineering management roles. Mah, a mother of two, adds that juggling family and career remains a major challenge for women engineers.

*Love is when you don't
want to go to sleep
because reality is
better than a dream.*

*

*Never start frowning
because you never
know who's falling in
love with your smile :)*

*

*Everyone says you
only fall in love once
but that's not true,
every time I hear your
voice I fall in love with
you.*

DIVISION FOR THE
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We're on the Web!!
www.mech.ubc.ca/~daweg



DAWEG Strategic Plan

Vision Statement: To make Engineering and Geoscience Appealing, Rewarding, and Equitable.

Mission: To advise our profession on issues which impact on women in Engineering and Geoscience.

Core Values: Professionalism & Equity & Inclusiveness

See DAWEG Web Site for more information.

A special thanks to all DAWEG members who have submitted articles to this and previous Issues of The EDGE. The content you provide really makes the Newsletter!! We continuously receive praises on the quality of the Newsletter, and we'd like to take this opportunity to share these praises with you and thank you for your contributions. We look forward to more of these articles from you in the future, and we encourage other members to consider sharing their thoughts or interests through the Newsletter.

— The Newsletter Editorial Team —

DAWEG Mentoring Opportunity in Victoria



Share your experiences
and make a difference
in a future engineer's
life.

A student recently admitted to Mechanical Engineering Technology in Camosun College in Victoria is looking for a mentor in Victoria.

The student has contacted DAWEG for assistance.

If you, or any one you know, is interesting in this rewarding mentoring opportunity, please send an e-mail to daweg@mech.ubc.ca, and we will connect you, or provide you with more information.