



AURUM

Volume 3, Issue 1
Summer 2004

The Canadian Newsletter for IEEE GOLD



View of the conference hotel for the CCECE 2004 in Niagara Falls, see page 4.

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From the Editor

There will be some changes to the Aurum team for the rest of 2004. Andy Balser, the founding publisher has decided to pursue other opportunities. His contributions and enthusiasm will be missed. Peter Guy has agreed to stay on as the French language editor. This is an essential function, as we must publish in French and English. Thank you Peter for your continued support. I have taken over the publishing duties for Aurum. For 2004 this will be a quarterly publication with submission deadlines in late March, June, Sept, and December. I am committing to the role of publisher of Aurum for the remainder of 2004. Contact me if you want to find out more about the position.

In the next issue, we will also be including articles geared toward a general technical interest, so if you have a recent work or research project that you'd like to see in Aurum, please feel free to contact me at hhob@yahoo.com to submit your ideas and articles.

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Getting Involved With GOLD in Ottawa

Sonya Goodanetz, Ottawa GOLD

Hello from Ottawa GOLD! I'm Sonya Goodanetz, the GOLD representative in Ottawa this year. It's been a busy & challenging year getting GOLD back up and running in a city that has gone through a lot of job churn and a drop in IEEE membership. But this is where GOLD is key - we provide opportunities for professional development and networking, and recruit non-IEEE members and encourage them to join IEEE. Our message is that GOLD is open to ALL IEEE members regardless of membership level. And GOLD is open to your friends, co-workers & your family. Ottawa GOLD also asks potential IEEE and GOLD members these questions:

Are you:

- Looking to network and socialize with young engineering professionals?
- Volunteered with IEEE while in university or college, but don't know how to today?
- Are you interested in community involvement?
- New to Ottawa? Looking for a career change? Want to build new interests?
- Want to polish your soft skills such as finance, networking and career development?
- Want to get involved with the IEEE Ottawa section executive team?

SPACE FOR RENT

Contact us about advertising your GOLD chapter notices in Aurum. Things that are appropriate include anything that needs to go on the record for the GOLD community at large. For example changes to your volunteer team, major changes in your city affecting your chapter or the IEEE.

Contact Helen Ho for more details (hhob@yahoo.com).

If you answered yes to any of the above questions then GOLD is for you!

GOLD Ottawa also encourages its members to volunteer with the IEEE Ottawa Section and has outlined a number of diverse volunteer opportunities: http://ewh.ieee.org/r7/ottawa/gold/volunteer_web.doc

Recently GOLD Ottawa was introduced to the IEEE Ottawa section members with a value proposition: A portion of your IEEE annual dues go to your local section (IEEE Ottawa). Get involved in order to get the greatest return on your investment!

Visit IEEE Ottawa GOLD:

<http://ewh.ieee.org/r7/ottawa/gold/>

For more information or to get on our mailing list: OttawaGOLD@ieee.org

Selected IEEE Ottawa Section Volunteer Opportunities

IEEE Ottawa will be hosting the CCECE conference on May 26-31 2006 and conference planning is underway. For more information and/or to help out with the roles below please contact: rliscano@ieee.org or vgroza@ieee.org The CCECE 2006 Committee (IEEE Ottawa section) needs:

- i. Webmaster
- ii. Workshop coordinator
- iii. Treasurer
- iv. Technical Chair
- v. Program Co-Chairs
- vi. Publicity & Public Relations
- vii. Secretary & Registration
- viii. Student Activities Coordinator
- ix. Secure corporate exhibitors. The conference theme is "Towards A Brighter Future"/Towards a Better World (climate change oriented to complement the coinciding Engineering Institute of Canada national conference).

Hamilton GOLD – Present at CCECE

Deborah Messina, Hamilton GOLD

The Spring of 2004 was been dedicated to the preparation of CCECE (Canadian Conference on Electrical and Computer Engineering) 2004 (<http://www.ewh.ieee.org/reg/7/ccece04/>), which was hosted by the Hamilton Section in Niagara Falls, Ontario between May 2nd to May 5th. Working closely with the Hamilton Section organizing and setting up all the events scheduled throughout the week, this gave GOLD an opportunity to be visible on a national and international level.

Having the opportunity to attend the Region 7 meeting allowed us to get a flavour of the issues discussed on a national level, some affecting the direction of GOLD. This also opened the door to a vast networking opportunity with other local GOLD affinity groups and various IEEE Canada executive members.

Throughout the conference, we had a GOLD booth set up, adjacent to the Hamilton Section booth, promoting GOLD to all the attendees of the conference. There were over 150 attendees present, which allowed for extensive exposure for GOLD. Both IEEE members and non-members from all around the world were inquiring about IEEE membership benefits, GOLD, local section activities, and more. CCECE 2004 was an incredible opportunity both for GOLD to be promoted, and myself to network with members from all around the world.

Aside from the scheduled events taken place throughout the conference, on Sunday, May 2nd 2004 the Hamilton Section hosted an Engineering Milestone dedication ceremony at DeCew Falls Hydro-Electric Generating Station in St. Catherines, Ontario. The Milestone Award recognizes the DeCew development as a pioneering project in distance transmission of electrical energy.

MIT Rocket Scientist Now Pitches for the San Diego Padres

Helen Ho, Vancouver GOLD

When you think of MIT, baseball isn't exactly the first thing that comes to mind. But one alumnus has managed to draw a straight line from his B.S. degree in Aerospace Engineering to a career in major league baseball. "He came in with sort of a determined look and threw well all spring. It's certainly something he's earned," Padres manager Bruce Bochy told the Associated Press on Sunday.

In February 2004, Jason Szuminski, has become a relief pitcher for the San Diego Padres' regular-season roster, and has become the first MIT alumnus to make the major leagues. "You wouldn't know he went to MIT," Bochy added. "He fits in well with the ballclub, not that we're all dummies or anything. He's just been one of the guys and we've had a lot of fun with him."

According to the MIT Alumni Association, Szuminski is only the second MIT player to be drafted by a baseball team. Two other alumni, Claude "Skip" Lockwood (S.M. 1983) and Art Merewether (S.B. 1925) also played in the majors, but both attended MIT after their baseball careers were over.

Szuminski posted a 3.38 ERA in 12 appearances during spring training, after acquitting himself well in Arizona Fall League play. In four minor league seasons, he went 23-12 with a 3.99 ERA, with 186 strikeouts and 110 walks, according to the Associated Press.

Jason Szuminski Links

Jason Szuminski MIT Blog
Associated Press pictures
of Jason
San Diego Padres Roster
(#58)

<http://alum.mit.edu/ne/noteworthy/szuminski-blog.html>
<http://web.mit.edu/newsoffice/nr/2004/baseball.html>

http://sandiego.padres.mlb.com/NASApp/mlb/sd/team/sd_team_roster.jsp

South Saskatchewan joins in the GOLD Rush!

Ahsan Upal, P.Eng., South Saskatchewan GOLD

South Saskatchewan IEEE GOLD is the freshest face on the IEEE GOLD map! The group was formed in February this year in Regina to allow young engineers living in South Saskatchewan to benefit from the GOLD initiative. The Group is presently busy with structuring the committee and planning activities and events for the upcoming year. Incidentally, IEEE Canada President, Bill Kennedy, P.Eng., FEIC, was in Regina on February 19, 2004, to attend the South Saskatchewan Section AGM. He made an excellent presentation on "IEEE Canada - Where are we Going?" I had the honor of representing the South Sask. GOLD and discussing various issues relating IEEE such as effective ways of managing IEEE GOLD Group and the harmonization of continued education development with the Association of Professional Engineers & Geoscientists of Saskatchewan (APEGS). Our discussion was very helpful in defining the role of our GOLD Section.

The GOLD Group held its first event on April 15th at the Golf's Steakhouse in Regina in partnership with the Regina Engineering Society. This successful event consisted of a technical luncheon presentation on "Rethinking the Distribution Substation" by Caron Hopfner, president and cofounder of Partner Technologies Inc. (PTI). Mr. Hopfner spoke about a new transformer that PTI has developed that allows a Utility to serve smaller distribution loads directly from the subtransmission system at a third of the cost of building a new distribution station.

We hope to organize several events similar to other GOLD Sections such as arranging of tours, technical presentations and get-togethers. Some of these events will be organized in cooperation with other professional societies such as the Regina Engineering Society (RES). We have high hopes for an effective GOLD membership here in South Saskatchewan.

We realize that GOLD is an important step in addressing the unique needs of young engineers who demand technical as well as non-technical development. Newly graduate engineers look to IEEE for career guidance, job search, networking opportunities and personal management. Young employed engineers look to IEEE for leadership opportunities and local social activities in addition to the research and technology information. Lastly, I wish to thank everyone in the GOLD team, especially Verona Wong, IEEE Canada GOLD Coordinator, who has been very welcoming and helpful in setting up our section. I am very excited to become a part of such progressive and hard working team of IEEE GOLD!

For more information about IEEE GOLD South Saskatchewan please visit online at <http://www.ieee.org/ssgold/>.

Regina TechMap

Regina is part of the TechMap project. TechMaps are visual heritage maps of companies that have contributed to the local science and technology industries. The idea for TechMap originated with a senior manager at PriceWaterhouseCoopers around 1995.

http://regina.myriadgate.net/whats_new.html

For more information on the Regina TechMap, contact Ryan Wilkes:

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Young Inventor Feature: Auto Crash Safety Inspired by A Squash Ball

We first heard about Gabriella Etcheverry in an article on Young Inventors International (YII), which appeared in the March 2004 issue of IEEE Spectrum. Gabriella is an aerospace engineering major at Ryerson University in Toronto Canada; this year she'll be finishing up her second year. She's also an ambitious young inventor determined to make her latest invention commercially viable. Gabriella has invented a safety mechanism for side impact crashes on car doors. She calls this invention the "squash ball energy dissipating mechanism", because the mechanics of squash balls in action inspired the basic concept. So far she's managed to catch the attention of Volvo.

When we asked Gabriella to describe her "ah ha" moment, where she thought of the device, she had this to say. "The actual ah ha! moment was more like a few moments. I knew that the automotive industry was approaching the side impact problem in the wrong way and so I thought I would try and make the outside of the door deform as long as there was a force being applied to the surface and then return to its original shape. I am an avid squash player and the squash ball inspired me because of its ability to absorb energy and turn it into heat. So I came up with an initial set up, but I wasn't happy with it. The raw final design actually came to me in a dream. I fell asleep thinking about the project and then I woke up and I knew why it was wrong. So I changed it around and it made sense. After that, I just refined the design and did the calculations.

In February Gabriella attended the 2004 Canadian International Autoshow, where she met the Volvo's Regional Operations Manager. An abstract of her invention eventually got into the hands of the Canadian Product Planning Manager for Volvo, which was sent over to Sweden to a high tech safety crash test facility. Research staffs in the facility are now reviewing this for commercial viability.

As for what Gabriella thinks "I don't know if anything will come of this, but you never know." Gabriella and her contacts in Volvo are currently devising a patenting strategy. Gabriella currently holds a provisional patent on this invention. "My sponsor and I decided that it would be a wise idea to file our full patent and so in May we will be filing for those documents. At this time, it is yet to be decided which patent exactly is going to be filed because there are different treaties and such."

Before she became involved with Volvo, Gabriella took her invention to the 2003 YII "Inventing the Future" conference, and won an honorable mention in the competition. Garth Phillips, a mentor with Young Inventor's International approached Gabriella during the competition. "Garth Phillips approached me during the competition and he showed some interest in trying to help me get my product onto the market. We exchanged email addresses, which eventually led to an exchange of an exchange of like a product abstract so that he could pass it on to an automotive contact that he had with regards to car bumpers, and then we lost contact. I haven't heard from him since at least early to mid January."

As for the summer, she is hoping to find a job doing some sort of research at Ryerson, and she'll be spending a lot of time with her new husband. Gabriella recently married and became Gabriella Hunter.

Links

Contacting Gabriella Hunter (nee Etcheverry)	gabriella_8@lycos.com
Ryerson University	http://www.ryerson.ca/
Volvo International	http://www.volvocars.com/
"Young Inventors of the World Unite" IEEE Spectrum, March 2004	http://www.spectrum.ieee.org/careers/careerstemplate.jsp?ArticleId=i030104
Young Inventor's International	http://www.younginventorsinternational.com