



60th Annual Newsletter 2004

REPORT FROM THE SECTION CHAIR

As I approach the end of my second term as the IEEE Ottawa Section Chair, I want to say that it has been a privilege to serve in this capacity for the past two years. I have never ceased to be amazed by the level of commitment of everybody involved in making the Section as successful as it has been. It is a great pride for me to report that the Ottawa Section has been recognized by the IEEE Canada with an "Exemplary Section Award" based on an outstanding level of activities generated by the Section. This accomplishment reflects upon hard work of our dedicated volunteers: chapter officers, committee members, students, and everybody else involved. The award was presented to the Section by the IEEE Canada President, Mr. Bill Kennedy, on May 26th 2004, at the National Arts Center (NAC).

This year marked another great event; the IEEE Ottawa Section celebrated its 60th Anniversary on May 26th at the NAC. Those of you who were among over 140 people in attendance would agree with me that Hala Tabl, Ibrahim Gideon, and Saman Adham did an outstanding job in organizing the event. Many thanks, on behalf of our members! The anniversary was accompanied by the IEEE Workshop on "Applied Next Generation Networks and Services," held at the NAC on May 25th to 27th. On May 27th, Mr. Bill Kennedy also gave a seminar "What Do You Need to Know About Electrical Power?" at the National Research Council, in Ottawa, with over 65 attendees.

I feel confident that the IEEE membership in Ottawa will continue to grow in the years to come, and that 40 years from now the Ottawa Section will be celebrating its 100th Anniversary of successful work. (I hope that everyone reading these lines will be there with me.) The future of our membership lies with our student members. Special attention should be devoted to understanding and supporting their needs. I encourage you to support them whenever you can. The IEEE "Graduates of the Last Decade" (GOLD) affinity group helps in career development and making connections with peers and colleagues.



John Grefford and Bill Kennedy in Ottawa

An upcoming special event is the Canadian Conference on Electrical and Computer Engineering (CCECE) that will be held in Ottawa in May 2006. If you wish to know more information or help support the conference, please contact Dr. Ramiro Liscano at rliscano@ieee.org.

I would like to encourage you to review your IEEE membership options so that you maximize your benefits of belonging to the largest engineering organization in the world. All of the Section officers listed in this newsletter will be happy to help you.

In accordance with the Section by-laws (posted at www.ottawa.ieee.ca), after 2 years it is time for me to step aside as the Section Chair, but I hope to continue further contributing to the Section.

Finally, I thank our Chapter Chairs and all other Ottawa Section volunteers for their time and talent; they need your support for their successful work.

Sincerely,

John Grefford, P.Eng.

Ottawa Section Chapters and Groups

We have 17 technical Chapters in our Section, as well as other groups. Some representative Chapter briefs are provided here:

AESS: In 2004, we co-sponsored a Car-Driver Electronics presentation, and supported a 4-lecture presentation on the O-Train and associated rail/wheel technology. In the fall we will be cosponsoring a double presentation on New Initiatives in Air Navigation - Thursday 18th November, Crowsnest.

AICN: The Ottawa Consultants Network is an affinity group of IEEE Ottawa and provides members with the opportunity to learn and network with other consultants. The following events have been planned: Oct. 2004, Seminar presented by Contracts Canada on: "Writing an Effective Proposal" provided advice and guidance in preparing a winning proposal. Dec. 2004, Seminar to be presented by Contracts Canada on: "How to do Business with the Federal Government" will help people learn about the fundamentals of selling goods and services to the Government of Canada

AP/MTT: The spring presentation was about generating a 10 km radius antenna in mid-air by distorting the path of the ionosphere's jet of charged particles. This presentation by Dr. Ryan Riddolls of DRDC in Ottawa drew an enthusiastic audience.

ComSoc: The main activities centered around full-day workshops on wireless communication technologies with topics like "Ad Hoc and Sensor Networks," "Security, Reliability and Trust in Mobile and Wireless Networks," "Advanced Signal Processing for Communications," and "VoIP over Wireline, Wireless, and Satellite – Trends, Issues and Successes." A major event this year was the IEEE Workshop on Applied Next Generation Networks and Services. The event, held May 25 to 27, was organized by Ibrahim Gedeon, Hala Tabl, and others.

Computer: We had three presentations: Driver electronics interface presentations by Barrie Kirk and Chris Biber (April 19), "What Can Biology Teach Us About Computer Security?" by Anil Somayaji (June 16), and "Government of Canada Secure Channel Project" by Alfred Yu (July 21).

EDS/CAS/SSCS: So far, four seminars have been organized with titles: "Achieving Competitive Advantage Through Understanding Your Competition," "Challenges and Future of Ultra Highspeed Systems", "Designing a Hardware: Google," and "High Speed ADC." The next meeting, which will focus on organic superconductors, is planned for Oct. 28. EDS/CAS/ SSCS members are encouraged to become active in the chapter. The chapter is looking for a webmaster volunteer. Please contact the chair if interested.

Educational Activities: A series of eight Career Planning Seminars held in 2002, very well received by the numerous attendees, were organized in an effort to help IEEE members affected by the recent downturn in economy. The Engineer in Transition Program, delivered in cooperation with Algonquin College, and five well-attended seminars and one workshop organized in 2003 clearly speak about the continued effort. In 2004, three seminars have been presented to date, and more are planned for the end of the year. The presenters have been renowned and leading experts in their fields, among which there have been IEEE fellows, university professors, and the current IEEE Canada President. The Educational Activities seminars and workshops have been a valuable complement to the IEEE Chapters' technical meetings.

EMCS: Distinguished lecturer presentations: Dr. Thomas Jerse, "Decoupling and the role of Symmetry in PCB Layout," Wednesday March 24, 2004; Greg Kiemel, Northwest EMC Inc., Hillsboro, OR, "Design and Test Considerations for EMC Compliance of Wireless Devices," Wednesday June 9, 2004; Donald Forbes, Sanmina SCI, planned for late autumn.

EMS: After last fall's successful series on Intellectual Property Issues at Labarge Weinstein for an evening of 6 local experts on "Legal & Financial Reality". A series of 4 full day seminars were presented between March and June 2004. Topics covered in these seminars were Project Management, Hi-Tech Marketing, Hi-Tech Finance and Strategic Management. Details of these can be found at http://www.ottawa.ieee.ca/ems/

On November 26, 2004, a one day seminar on Intellectual Property is planned by EMS Secretary Christian Tacit. This event is planned to take place in CRC, Ottawa and also be provided as a webinar. Other Sections interested in joining the seminar via web should contact John Grefford, grefford@ieee.org.

GOLD: GOLD Ottawa has held networking events such as pub evenings and been involved in student events such a professional development activities at Carleton, University of Ottawa, Algonquin College and l'Université du Quebec en Outaouais. Visit http://ewh.ieee.org/r7/ottawa/gold/ for more information and OttawaGOLD@ieee.org to join our mailing list.

IMS: The third annual workshop on Haptic Audio Visual Environments and their Applications (HAVE 2004) was held at the University of Ottawa on 2-3 October 2004. For more information please visit http://www.discover.uottawa.ca/have2004/.

LEOS: The Laser and Electro-Optics Society Ottawa Chapter has won the Most Innovative Chapter of the Year Award for the forth time (1993, 1995, 1996, and 2004). The Chapter has a long tradition of being innovative and thinking outside the box. For a few years now, the chapter has been working closely with NRC, OPRA, NCIT and CRC through Dr. Maike Miller and has hosted a variety of technical meetings and workshops. They have attracted very large audience and interests. These workshops have also allowed the chapter to conduct more profound discussions and provided extensive networking opportunities.

PES and Reliability: The Ottawa PES has a successful year in providing its members and the community with numerous activities, such as conferences, fairs, and seminars. Among the conferences/symposia Electrical Power are Symposium 2004, Electrical Power Symposium 2003, Ottawa Electricity Deregulation Symposium 2002", and Ottawa Electricity Tutorial Deregulation Symposium 2001." PES also organized Ottawa Smart Energy Fair 2004, and was involved in "Lanark Green Fest 2004." PES held various technical and educational activities: "Power System Stability and Trends in Wide Area Protection," "What Do You Need to Know About Electrical Power? - Electric Power Systems for Non Power System Experts," "Ontario's Electricity Supply Situation and Prospects of Meeting Power Demand." "What is the Meaning of 'Safe' in Nuclear Technology?," "Micro-Scale (<50 kW) Renewable Energy Systems," and "Computer Applications in Power Systems - SCADA". PES was also involved in the Engineers in Transition (EiT) Training Program. It organized, for 30 IEEE members, two educational courses "Introduction to Java" and "Website Design," and helped in creating two Research Associate term job opportunities with the Communications Research Centre. The above activities were held in conjunction with Ottawa IEEE Reliability Society, Ottawa IEEE Educational Activities, and Ottawa IEE. "Electrical Power Symposium 2004: Ontario's Tough Electricity Choices" is planned for late October. The venue will be Ben Franklin Place on Centrepointe Dr. off Woodroffe and Baseline. The program will start at 8:00AM on October 29, 2004. Also, preceding this will be a morning tutorial followed by an afternoon field visit on October 28th. For more information and register, visit: to http://www.ewh.ieee.org/soc/pes/ottawa/EPS2004/..

Robotics Automation and Control Systems: This chapter organized a double presentation on Car-Driver Electronics in the Spring (at the Crowsnest, together with VTS), and a 4-lecture presentation on the O-Train and associated rail/wheel technology (at Carleton University).

Retired and Life Member Group: This is presently an informal group. The group will hold a dinner meeting in Feb. 2005, in conjunction with the AESS Ottawa Chapter. Next event: Bill Ward, MIT Lincoln Labs, Boston - "In celebration of the Pioneers and Voyageurs: To Jupiter, Uranus, Neptune and Beyond" - Thursday 10th February 2005. This is a dinner meeting - location to be decided (Dec. 2004).

SPS: This chapter has been revived recently and expanded to a joint chapter of the Signal Processing, Oceanic Engineering, and Geoscience and Remote Sensing Societies. In October 2004, a chapter organizing meeting with a talk by an invited speaker is planned. Anyone who would be interested to help out as a volunteer or who could suggest seminar speakers is welcome to contact the acting chair, Slawo Wesolkowski, s.wesolkowski@ieee.org.

VTS: We had a double presentation on Car-Driver Electronics in the Spring (at the Crowsnest), and a 4-lecture presentation on the O-Train and associated rail/wheel technology (at Carleton U). In the fall, there will be a double presentation on New Initiatives in Air Navigation - Thursday 18th November, Crowsnest. For details visit http://members.allstream.net/~max-

com/ottawa.vts.html. Anyone interested can be placed on an email list for upcoming events. The VTS Ottawa Chapter claimed the "Chapter of the Year" award for 2003 - the second year in a row. CONGRATULATIONS!

IEEE Algonquin College Student Branch: During this year this student branch won the IEEE Canada Student Branch Website Contest and placed 3rd in the worldwide IEEE Website contest.

IEEE Carleton Student Branch: This student branch was the winner of last year's IEEE George Armitage Award for best Student Branch in Canada. There are annually some 100 volunteers helping out in day-to-day activities such as staffing an office for various student services, organizing industry tours, technical speakers, design competitions, paper

competitions, and technical training sessions. IEEE Carleton has been helping out the IEEE Ottawa Section, last year volunteering at the Reliability Conference and the Annual General Meeting. A highlight for IEEE Carleton last year included hosting *Connects*, a successful industry-university social get together held January 22, 2004. More information about the Carleton IEEE Student Branch can be found at www.ieee.engsoc.org.

IEEE uOttawa Student Branch: After winning last year's RAB Student Branch Growth Award, our main thrust is to expand our McNaughton Learning Centre to create a hub for student activity in the School of Information Technology and Engineering. Members will soon have access to more services, including a complete learning library and tutorials for laboratory skills. We will also be encouraging contact with industry by arranging monthly workshops, regular tours, and an industry mentorship program. For more information on branch activities and on our successful SPAC 2004, check out http://www.engineering.uOttawa.ca/~ieee/.

Robotics Competition: The second IEEE Ottawa Robotics Competition took place in April 2004 and involved the participation of 14 middle schools from around the area. This is an exciting competition where each school has 9 weeks to design and build a robot using the Lego Mindstorm kits. Organization for the 3rd event has already begun. This year we expect up to 24 schools to participate. If you Want more information, go to our website: http://www.ottawa.ieee.ca/RobotComp2004.html

CCECE 2006

Under the leadership of the General Chair Dr. Hussein Mouftah and Organizing Chair Dr. Ramiro Liscano, the committee has been busy developing the structure of CCECE 2006 that will take place in Ottawa in May 2006. The CCECE is an annual conference for university, industrial, and government delegates to exchange their ideas on research and disseminate their results and experiences in the field of electrical and computer engineering. The

conference is the major IEEE event and flagship conference in Region 7 (Canada) which was established in 1988. Location arrangements are in their final stages and we hope to start our sponsorship campaign soon.

PLANNED ACTIVITIES 2005-2006

To continue the support of Chapter activities, student activities, educational activities and other activities that provide value add to our members.

IEEE Elections 2004

For information about the IEEE 2004 annual election visit:

http://www.ieee.org/portal/index.jsp?pageID=corp_level1&path=corporate/elections&file=candidates.xml&xsl=generic.xsl.

Your local list of officers proposed by the nomination committee for the coming year:

Chair: Maike Luiken Miller, maike.miller@ieee.org, rliscano@ieee.org, Treasurer: Raed Abdullah, raedabdullah@ieee.org, Secretary: Branislav Djokic, branislav@ieee.org,

Section's E-Communications

Section's Homepage

The Ottawa Section Webpage is available at http://ottawa.ieee.ca and provides you with contact information and details on the Section's organization.

Newsletter on the Web

The current news and upcoming events in Ottawa Section are available on the Section's events page at http://ottawa.ieee.ca/news/.

E-Newsletter

We also announce our news and upcoming events through our monthly e-newsletter. It is sent via email to all IEEE members who reside in the Ottawa area. You can make sure that you receive our e-newsletter by keeping your IEEE profile up to date by using the information below. To submit events and news to our newsletter visit:

http://ewh.ieee.org/r7/ottawa/news/submit.html.

Contact

For questions or more information regarding the Section's e-communications, contact Amir Ghavam, ghavam@ieee.org, our Newsletter Editor and Webmaster or visit:

http://ewh.ieee.org/r7/ottawa/news/about.html.

Updating Your IEEE Profile

You can update your contact information at IEEE using one of the following options:

- 1. IEEE Web Contact Update http://services1.ieee.org/membersvc/coa/intro.htm
- 2. By phone: +1 732 981 0060
- 3. By mail: IEEE, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331 USA
- 4. By fax: +1 732 562 5445

IEEE Email Alias with Virus Scanning

The Email Alias service is free for members and is easy to acquire, remember, and update. Stay better connected by using this service. Visit: http://eleccomm.ieee.org/.

List of Chapters and Groups

The following table presents a list of our chapters and groups. To find out more about our chapters, groups, and their activities please visit http://ottawa.ieee.ca/SectionAndChapterInfo.html or the chapter's/group's webpage.

CHAPTER	CHAIR	URL
AESS	Mel Walker, melwalker@igs.net	http://members.allstream.net/%7Emax- com/ottawa.AESS.html
AP/MTT	Jasmin Roy, jasmin.roy@crc.ca	http://members.allstream.net/%7Emax- com/ottawa.mtt.html
ComSoc	Maike Luiken Miller - maike.miller@ieee.org	http://ottawa.ieee.ca/comsoc/
Computer	George Yee, g.m.yee@ieee.org	http://ottawa.ieee.ca/cs/
DEIS	Laurent Lamarre - Lamarre.Laurent@ireq.ca	
EDS/CAS/SSCS	Ammar Gharbi, a.gharbi@ieee.org	http://ewh.ieee.org/r7/ottawa/eds_cas_sscs/
EMCS	Syed Bokhari, bokhari@ieee.org	
EMS	John Grefford, grefford@ieee.org	http://ottawa.ieee.ca/ems/
EMBS	Boguslaw J. Jarosz, jarosz@physics.carleton.ca	http://ewh.ieee.org/r7/ottawa/embs/
IC (former NN)	Dmitry Gorodnichy - Dmitry.Gorodnichy@nrc.gc.ca	http://ewh.ieee.org/r7/ottawa/ci/
IMS	Voicu Groza, vgroza@ieee.org	
LEOS	Andrei Skirtach, askirtach@ieee.org	http:// ottawa.ieee.ca /leos/
PES	Wahab Almuhtadi, almuhtadi@ieee.org	http://www.ewh.ieee.org/soc/pes/ottawa/
Reliability	Raed Abdullah, RaedAbdullah@ieee.org	
RAS/CSS	Jurek Sasiadek, jsas@ccs.carleton.ca	
SPS	James Ryan, j.g.ryan@ieee.org	
VTS	Hugh Reekie, h.reekie@ieee.org	http://members.allstream.net/%7Emax- com/ottawa.vts.html
GROUP	CHAIR	URL
Educational	Branislav Djokic,	http://ewh.ieee.org/r7/ottawa/ea/
Activities	branislav@ieee.org	
EiT	Wahab Almuhtadi, almuhtadi@ieee.org	
AICN	Gidon Mida, gmida@ieee.org	
GOLD	Sonya Goodanetz, sonya goodanetz@ieee.org	http://ewh.ieee.org/r7/ottawa/gold/