



## **IEEE Ottawa Section Report to** the Annual General Meeting





## IEEE Ottawa Section Report to The Annual General Meeting 2010

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- AP/MTT Microwaves/Antennas/Propagation Society
- CI Computational Intelligence Society (formerly Neural Networks)
- CompSoc Computer Society
- ComSoc & BTS Joint Chapter of Communications Society and Broadcast Technology Society
- CPMT Components, Packaging and Manufacturing Technology Society
- DEIS Joint Ottawa-Montreal Chapter of Dielectrics and Electrical Insulation Society
- EDS, CAS, & SSCS Joint Chapter of Electron Devices Society, Circuits and Systems Society, and Solid-State Circuits Society
- EMC Electromagnetic Compatibility Society

- EMBS Engineering in Medicine and Biology Society
- IMS Instrumentation and Measurement Society
- LEOS Lasers and Electro-Optics Society
- PES Power and Energy Society
- RAS & CSS Joint Chapter of Robotics & Automation, and Control Systems Societies
- RL & PEL Joint Chapter of the Reliability and Power Electronics Societies
- SP, OE, & GRS Joint Chapter of the Signal Processing, Oceanic Engineering, and Geoscience and Remote Sensing
- TM, PCS, & SSIT Joint Chapter of the Technical Management Council, Professional Communications Society, and Society on Social Implications of Technology
- VTS Vehicular Technology Society

#### **Affinity Groups**

- AICN Alliance of IEEE Consultant Network
- GOLD Graduates of the Last Decade
- LM Life Member
- WiE Women in Engineering

#### **Student Branches**

- Algonquin College
- Carleton University
- University of Ottawa

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## **Ottawa Section Chair's Report**

I tip my hat in gratitude to each IEEE Ottawa Section volunteer who has in the past two years dedicated themselves in making keeping this section very successful, enough to keep the Ottawa Section in the international spotlight. It is not easy being a volunteer, occasionally something else may be given up: sleep, friends, family, money, ... However, the return reward of accomplishment, of moving the bar ahead, may far out way the short periods of sacrifice. As with anyone's reason for becoming an IEEE member, to each volunteer is a different reward. Perhaps it may be personal satisfaction, personal challenge, and acquisition of new skills – interpersonal, project management, technical — comradeship, or networking opportunities.

The value for all involved in volunteering is great. The personal humble desires and resulting achievements help deliver the section's vision of making the Ottawa Section's service area a great place to learn, work, and do business.

The Executives strategy for the past two years has been:

- 1. To divert volunteer administrative work towards planning and holding member activities: for example, introducing electronic expense handling and what will be most effective is a website based "activity flow" management system that will be launched before year-end.
- 2. To support student branch activities: funding has more than doubled for the last two years. Check out their activities and the improvements they've made!
- 3. To bolster outreach activities: creating the Humanitarian Initiative Committee; bolstering the Engineering in Transition Committee activities; growing the Ottawa Robotics Competition; creating STEP-UP a technology and higher learning fair for grade 11 and 12 students meant to inform them of study and career options in the science, technology, and engineering disciplines and unique pathways. Our commitment to Women in Engineering, Teachers in Service Program and Consultants Network continues.
- 4. To sustain local activities: securing events that will benefit the local economy, members, and the section's annual programs.

The strategy coupled with the commitment of the volunteers has provided a high rate of return, as outlined in this report, to the Section's members that now number over 2200. Some of what to be proud of looking forward and not though to overshadow all that has happened in 2010:

- Winning hosting the prestigious International Conference on Communications (ICC 2012) (2500 attendees targeted), and the Electromagnetic Compatibility Symposium for 2016 (2000 attendees targeted). We are bidding to host the RadarCon2013 with strong support from DRDC.
- Gaining international reputation:
  - The Carleton University Student Branch and University of Ottawa Student Branch won the first and second place, respectively, in the IEEE Student Branch website competition. The

Carleton University Student Branch went on to win third place in the World competition. Many of the same students who developed these reknown websites are developing the new Ottawa Section website that will be transitioned to before year-end.

- The Communications Society Ottawa Chapter won best Communications Society chapter in North America, and went on to win first place in the world competition.
- o IEEE WIE Carleton University Student Branch Affinity Group won the "WIE 2009 Student Branch Affinity Group of the Year." This award comes with a prize of \$250.00 US.
- Recognized members by IEEE:
  - David Falconer was announced as the winner of the IEEE Communications Society Award for Public Service in the Field of Telecommunications at GLOBECOM'09 held in Honolulu.
  - Dr. Qinghan Xiao, of DRDC, was appointed as Computational Intelligence Society (CIS)
     Representative on IEEE Biometric Council.
  - Dr. Abdulmotaleb El Saddick, est professeur et titulaire d'une chaire de recherche à l'Université d'Ottawa, received the EIC Fellowship.

Lest we forget the collaboration we continue to nurture with local community, schools, non-profit organisations, the Ottawa Tourism, and the Ottawa Convention Centre.

On a sad note, we all felt the loss this summer of Prof. Nicolas Georganas, IEEE Fellow, distinguished University Professor in Faculty of Engineering, University of Ottawa, and founding dean of the Faculty of Engineering in 1986. May he rest in peace and his family and friends continue to be proud of his contributions to the IEEE and the profession. He inspired me while I was studying engineering.

Thanks you for your interest in the IEEE Ottawa Section and look forward to volunteering with you ©

Cheers,

Raed Abdullah, P.Eng., IEEE SM

Chair, IEEE Ottawa Section (outgoing)

## **Committee Reports**

#### **AGMPC - Annual General Meeting Planning Committee**

Chair: Sreeraman Rajan sreeraman@ieee.org

The AGM Committee works closely with IEEE Ottawa Section chapters and the committees to plan the Annual General Meeting. Last year was IEEE's 125<sup>th</sup> year celebration. So your 66<sup>th</sup> AGM was celebrated on Nov 20<sup>th</sup> 2009 at the Hampton Inn, Ottawa. The theme of the AGM was "A celebration of fellowship and accomplishment" in recognition of the 125<sup>th</sup> Anniversary of the IEEE. Dr. Ferial El. Hawary, IEEE R7 director could not attend and the welcome was read on her behalf. After going through the official business of acceptance of the AGM 2008 report and 2009 agenda, the Chair presented the accomplishments of the section. Following that was the election of the 2010 Executives, followed by the section and fellow awards. Industry awards were presented by the nominations chair and the chair of the section. The key note address was presented by Prof. David Coll, who is also a Life IEEE fellow and he traced the history of IEEE Ottawa Section from 1944. The contributions of several IEEE members, industries, academia, government research laboratories were recognized. A full house of more than 300 people listened to the proud history of the IEEE Ottawa Section. The room was filled with guests including IEEE fellows, IEEE Life Fellows, IEEE Life Senior Members, industrial partners, members of IEEE, student members and their partners. . This was followed by award ceremony and dinner. Following the dinner, we had an entertainment, "Eddie May Mystery", an interactive musical comedy murder mystery play with a theme befitting the crowd - a combination of "The Apprentice" and "Survivor". Some attendees found themselves in the cast! It was a fun-filled night, even though bit long but definitely worth every minute of it.

#### **AC – Awards Committee**

Chair: Wahab Almuhtadi <u>almuhtadi@ieee.org</u>

Members: Executive Officers of the Ottawa Section (Chair, Vice Chair, Secretary, Treasurer, Past Chair).

Website: <a href="http://ottawa.ieee.ca/awards.html">http://ottawa.ieee.ca/awards.html</a>

The Award Committee works closely with IEEE Ottawa Section chapters, committees, affinity groups, and student branches and encourages members, engineering community, academia and Industry to submit their nominations for the IEEE Ottawa Section Awards available on http://ottawa.ieee.ca/awards.html. The Award winners are announced every year at the IEEE Ottawa Section Annual General Meeting- AGM.

The winners for the 2009 IEEE Ottawa Section Awards are as follows:

1. The Outstanding Technology Company Recognition Award 2009:

#### Information and Communications Technologies (ICT) Recipients:

- Mitel for successful leading in providing voice, video, and collaborative communications solutions and services for various businesses.
- BreconRidge for successful leading in innovative design and manufacturing services for electronic products that drive voice, video and data applications.
- OneChip Photonics for successful leading of development and manufacturing optical transceivers for access networks and broadband applications.
- SiGe Semiconductor for successful leading in designing and delivering innovative radio frequency (RF) solutions for next-generation wireless applications.

#### **Clean Tech Recipients:**

- 1. EcoVu for successful leading of innovation and development of new technology of contamination detection and water purification.
- 2. Laflèche Environmental, for successful leading of innovation and development long-term waste disposal solutions today and a sustainable legacy for tomorrow.

#### **Clean Energy Recipients:**

- GridPoint for successful leading of design, development of smart grid software, enables utilities to easily manage the transformation to a Smart Grid.
- Quadra Solar, for successful leading of design, development, and production solar energy generation based on photovoltaic and thermal technologies.
- Delphi Group for successful leading in providing solutions in the areas of climate change and corporate sustainability.
- 2. The Appreciation Award 2009, recipient:
  - Algonquin College for continuous and valuable support of IEEE Ottawa Section activities.
- 3. IEEE Ottawa Section Outstanding Volunteer 2009, recipients:
  - Dr. David Coll, P.Eng., IEEE Fellow for his long term and outstanding service for the IEEE Ottawa Section.
  - Mr. Patrick Couture, for his outstanding service for the IEEE Ottawa Section.
- 4. IEEE Ottawa Outstanding Chapter Award 2009, recipient:
  - The Antennas & Propagation Society and Microwave Theory & Techniques Society Joint Chapter for its outstanding performance in 2009.
- 5. IEEE Ottawa Outstanding Affinity Group 2009, recipient:
  - The Graduates of Last Decade Affinity Group for its outstanding performance in 2009.
- 6. IEEE Ottawa Outstanding Committee Award 2009, recipient:
  - The Robotics Competition Committee for its outstanding performance in 2009.
- 7. IEEE Ottawa Outstanding Student Branch Award 2009, recipients:
  - The IEEE University of Ottawa Student Branch for its outstanding performance in 2009.
  - The IEEE EMBS Carleton University Student Club for its outstanding performance in 2009.

#### **BC- Bylaws Committee**

Chair: Branislav Djokic - branislav@ieee.org, Kexing liu - Kexing.liu@ieee.org

The document was reviewed and no changes were necessary.

#### **CPC - Communications / Publications Committee**

Chair: Mohamad Elbadri -melbadri@gmail.com

Typically, the CPC is responsible for updating the website and preparing the monthly e-newsletter for launch. This year, it took on the challenge of updating the content plus "look and feel" of the IEEE Ottawa Section website. A team of volunteer students from the University of Ottawa, Carleton University and Algonquin College had agreed to revitalize the present site that has served well and has outgrown its time. The intent is to also have the students learn aspects of project management. To date, a few meetings have taken place to scope the requirements, seek approvals, test hypothesis, and start some development. The new website should be completed by mid-year next year!

#### **EAC - Educational Activities Committee**

Chair: Dr. Branislav Djokic, P.Eng. – <a href="mailto:branislav@ieee.org">branislav@ieee.org</a>

Website: <a href="http://ottawa.ieee.ca/ea/">http://ottawa.ieee.ca/ea/</a>

1. Renewable and Sustainable Energy

Date: September 16, 2010 Speaker(s): Mr. Alan Rotz

Description: Technical seminar by Mr. Alan Rotz, IEEE Power and Energy Society (PES) President. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, Educational Activities, and University of Ottawa Student Branch at the SITE, University of Ottawa.

#### 2. Renewable and Sustainable Energy

Date: September 16, 2010 Speaker(s): Mr. Alan Rotz

Description: Technical seminars by Mr. Alan Rotz, IEEE Power and Energy Society (PES) President. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, Educational Activities, Algonquin College Student Branch and INMS-National Research Council (NRC) at the NRC.

#### 3. Intelligent Buildings in an Intelligent Grid – the Next Great Network Build-Out

Date: September 30, 2010 Speaker(s): Mr. Wes Biggs

Description: Technical seminar by speaker Mr. Wes Biggs, President and Chief Executive Officer, Triacta Power Technologies, Inc., Ottawa, Ontario, Canada. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, Educational Activities, and Algonquin College Student Branch.

4. Networked 3-D Virtual Collaboration in Science and Education: Towards 'Web 3.0' (A Modeling

Perspective)

Date: November 19, 2010

Speaker(s): Prof. Michael Devetsikiotis

Description: Distinguished Lecture by Prof. Michael Devetsikiotis, ComSoc Distinguished Lecturer, Electrical and Computer Engineering, North Carolina State University, Raleigh, NC, USA. To be held jointly with

Reliability Chapter, Educational Activities, and Algonquin College Student Branch.

5. Wireless Sensor Networks (WSN) in the Power Grid

Date: November 22, 2010

Speaker(s): Dr. Melike Erol-Kantarci

Description: Technical seminar by speaker Dr. Melike Erol-Kantarci, School of Information Technology and Engineering, University of Ottawa, Ottawa, Ontario, Canada.. To be held Jointly with IEEE Ottawa ComSoc/BTS/CES Society Chapter, Reliability Chapter, Educational Activities, and UOttawa Student Branch.

#### **EiTC - Engineers in Transition Committee**

Chair: Emily Chen - emily.hao.chen@ieee.org

Website: <a href="http://ottawa.ieee.ca/eit">http://ottawa.ieee.ca/eit</a>

1. Survive and Thrive in Tough Job Market

Date: December 9, 2009 Speaker (s): Thomas Lavrisa

Description: Career based talk given by Thomas Lavrisa, Regulatory Program Officer, Canadian Nuclear

Safety Commission.

2. Pitching Yourself in the Elevator and Elsewhere

Date: January 13, 2010 Speaker(s): Harpreet Singh

Description: Soft skills and career based talk given by Harpreet Singh, Principal Consultant.

3. Career Path of an IBM Software Lead Architect

Date: March 9, 2010 Speaker(s): Mike Potter

Description: Career based talk given by Mike Potter, IBM Distinguished Engineer, Chief Architect for Cognos

products and Development Director for the Financial Performance Management products.

4. INNOVATION

Date: June 3, 2010

Speaker(s): Marcellus Mindel

Description: Technical talk given by Marcellus Mindel, Head of IBM Academic Partnerships.

5. Take Ownership of Your Career - How to Land a Job

Date: November 6, 2010

Speakers(s): Dr. Ray Findlay

Description: Career based talk given by Dr.Ray Findlay, Emeritus Professor in McMaster University, Vice

President of JDRF Electromag Engineering Research Inc.

#### **HIC – Humanitarian Initiatives Committee**

HIC Chair: Alfredo Herrera - alfredo.herrera@ieee.org

HIC vice-chair: Dr. Pedro Sanchez

Past-Chair of HIC: (vacant)

Past-President of IEEE Canada: Dr. Ferial El-Hawary IEEE Canada President (ex-officio): Dr. Malik Om HTC Reliable Electricity liaison: Glenn McKnight HTC Data Connectivity liaison: Martin Murillo Eastern Area representative: Gerard Dunphy Centra Area representative: Dr. Alex Bot

Western Area representative: Mooney Sherman

Humanitarian advisor: Joan Kerr

Volunteer: Raed Abdullah Volunteer: Dr. Sri Krishnan

The Humanitarian Initiatives Committee (HIC) was established as an ad-hoc Committee on October 18, 2009, with an initial mandate to support participation in the IEEE Humanitarian Technology Challenge (HTC), and to explore member interest in a sustained support of humanitarian activities by IEEE Canada. The HTC is a three-year project, launched in 2008 as a partnership between the UN and the IEEE and focusing on three problems by humanitarian organizations: Reliable Electricity; Data Connectivity of Rural District Health Offices; Individual ID Tied to Health Records. The HTC planned to grow by coordinating activities at the region level through region representatives; the HIC started in that function.

At the IEEE Canada spring meeting, a motion was unanimously adopted establishing the HIC as a standing committee. The mission that has emerged for the HIC is to support those participating in humanitarian initiatives or building relationships that will enable members to fulfill IEEE's strategic vision: "to be universally recognized for the contributions of technology and of technical professionals in improving global conditions".

The HIC promotes IEEE's core value of advancing technology for the benefit of humanity by raising awareness of how IEEE Canada can best use its strengths and relevant technologies to address societal problems. One way it believes it can effectively accomplish this is by providing leadership, encouragement, and support to Sections and Chapters interested in humanitarian initiatives. The HIC is currently increasing efforts to identify humanitarian activities in Canada and thus focus closer to home but without neglecting current collaborations with IEEE worldwide humanitarian committees. In practice this means that the HIC will support the work of IEEE members involved in: relief assistance during natural disasters like ice storms and floods; socio-economic development abroad like improving affordable electricity access in developing

countries; or awareness initiatives in our communities like earth day or competitions like the one held at the University of Calgary reported above.

The HIC was initially created to support HTC activities; and members from the HIC are still committed to some HTC projects. The HTC is on the last year of its mandate and it has provided a good learning experience to the HIC. Since the spring meeting, the HIC:

- Was part of the HTC student competition judging committee (contest where it also was part of organizing committee).
- Continues working on the remaining two HTC projects Reliable Electricity and Data Connectivity.
- Working on the definition of open hardware and the licensing strategy for the prototype and pilot phases for the HTC and Power and Energy Society CSI group: 1kW mobile charging station.
- Worked on use models and business plans for integrated electricity supply and charge management system being developed by the HTC Reliable Electricity workgroup.
- Supporting for the proof-of-concept trial of the long-range Wi-Fi data communications system for small rural outposts. This system is being developed by the HTC Data Connectivity workgroup. The proof-of-concept tests are taking place in Ottawa and -once completed - it will probably be deployed for trials in Bolivia, Thailand or the Philippines
- Members are driving foundational development to enable future humanitarian projects, notably: the definition of terms of reference, creation and use of Open Hardware; and funding mechanisms in collaboration with the IEEE Foundation and the IEEE Canadian Foundation.
- Launched a Canada-wide student competition. The competition consists on improving, optimizing, adding or innovating parts of WE CARE Solar's system. WE CARE Solar promotes safe motherhood and reduces maternal mortality in developing regions by providing health workers with reliable lighting, mobile communication, and blood bank refrigeration using solar electricity. This project builds on the framework created by the HIC and enables Open Hardware for humanitarian projects.
- Initiated monthly meetings in Ottawa and is currently working on expanding them to other section locations. The goal of the monthly meetings it to engage professional members in humanitarian projects. The goal is to have these meetings in sections in the three IEEE-Canada areas, and to coordinate collaborative work on improvements to the WE CARE Solar's solar suitcase.
- Brought online two web portals to enable networking by IEEE Canada members interested in humanitarian projects: a webpage/blog: http://ewh.ieee.org/mu/r7-hic/; and a Virtual Community in the new IEEE platform launched this year: http://ieeecanadahic.oc.ieee.org/. They provide:
- Online collaboration and continued communication between members.
- Central repository of documents with version control/content moderation.

• Discussions/threads on the latest technologies, vital issues, and activities related to the mission and goals.

#### This structure enables the HIC to:

- Respond to the growing need, voiced by members, to address world problems in a tangible manner.
- Enhance sense of belonging and pride in being members; benefiting membership development and member retention.
- Provide members opportunity to use professional skills outside current job, as a career development path.
- Provide opportunity for members to participate in Humanitarian/Social Entrepreneur industry: "to do well while doing good".
- Provide the continuity needed by sections to improve proficiency in humanitarian work

The benefit/value to IEEE Canada's members will be: to help attract new members that want to work on world problems; to improve membership retention by increasing the member's pride in being part of an organization working on humanitarian projects; to provide members an opportunity to use professional skills outside current job, as a career development path; and to bring these opportunities closer to the members by starting collaborative work at the section level.

#### 1. The Global Engineer of the New Millenium

Date: March 30, 2010

Speaker(s): Jen Hiscock (EWB), Matt Retallack (EWB), Alfredo Herrera (IEEE), Glenn McKnight (IEEE)

Description: Joint event with EWB Ottawa Chapter, Ottawa GOLD and IEEE TMC/PCS/SSIT. This event included a panel of three speakers who introduced members to IEEE's new initiatives in the Humanitarian field and the Humanitarian Technology Challenge. Speakers from Engineers Without Borders explored parallels and discussed what it means to be a Global Engineer and how they contribute as volunteers.

#### **MDC - Membership Development Committee**

Chair: Shatha Hamoudi – <u>shatha@rogers.com</u> Vice-chair Md Aminul Islam - <u>tanjir@ieee.org</u>

The committee had changed mid-year with a revitalized agenda. The Chair has the core accountability of coordinating the MDC activities such as doing more outreach work and bringing more value to membership. The Vice-Chair, has the core task of developing the membership metrics for better understanding the needs of our members so we can deliver better value and experiences to them. More results are expected in 2011.

Events participated in includes the Algonquin College Applied Research Day, IEEE Ottawa Student Branch SPAC event, plus the National Career Fairs at the Hampton Inn with the Engineering Institute of Canada, let alone the AGM too.

#### NAC – Nomination and Appointments Committee

Chair: Wahab Almuhtadi - <u>almuhtadi@ieee.org</u> Member: Branislav Djokic - <u>branislav@ieee.org</u> Member: John Grefford - <u>Grefford@ieee.org</u> Member: Tom Lavrisa - <u>lavrisa@ieee.org</u>

The Nomination and Appointments Committee (N&A) is responsible for the nomination and election process of the next year's four executive officers of the Section (Chair, Vice-Chair, Secretary, and Treasurer). N&A is responsible for recommending and appointing qualified candidates for positions in the Section chapters, affinity groups, and committees

#### **ORCC – Ottawa Robotics Competition Committee**

#### • IEEE Members:

Rosalyn Seeton, Vice-Chair, seeton@ieee.org

Mohammed Elbadri, Treasurer, melbadri@ieee.org

Rami Abielmona, Sponsorship Chair, rabielmo@ieee.org

Laura Mutu, Webmaster, laura.mutu@ieee.carleton.ca

Junzhe (Davy) Zou, Webmaster, jzou@ieee.carleton.ca

#### • Community Voluneers:

<u>Ian Dudley, Lego Robotics advisor, ian.dudley@primus.ca</u>
<u>Alan Stewart, Robotics expert and volunteer, alan@site.uottawa.ca</u>

IEEE ORC Webpage <a href="http://orc.ottawa.ieee.ca/">http://orc.ottawa.ieee.ca/</a>

The Ottawa Robot Competition aims at bringing engineering awareness to students in grades five (5) to 12 by presenting a fun and instructive approach to problem solving. Using LEGO® MINDSTORMS NXT® kits, the students have around 8 weeks to design and build an autonomous robot in teams of two to five. They learn engineering concepts with the help of a mentor and come together to produce a working prototype. The teams compete during a one day event where they demonstrate the superiority of their robot by completing a challenge. They are also judged on a poster presentation, a written report, their team spirit, and their ability to answer judge's questions.

Each team is provided with a description of the robot challenge as well as a set of rules. To help the students, workshops will be held by mentors to introduce concepts of robot design and programming. Assistance will be provided for the teams in difficulty, so that each team has a working robot on the date of the competition.

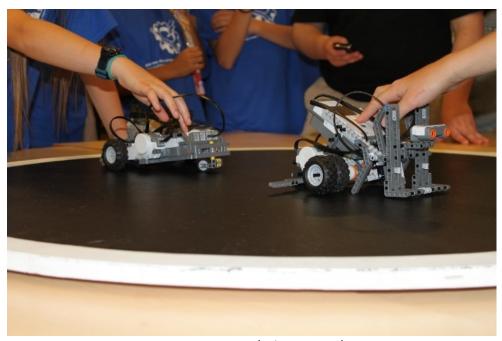
The year 2010 marked the 8th Annual IEEE Ottawa Robotics Competition. It has grown from four (4) teams to 51 teams from 24 different schools. This accounts for over 250 students. The main date was May 29th and took place at Longfields Davidson-Heights Secondary School.



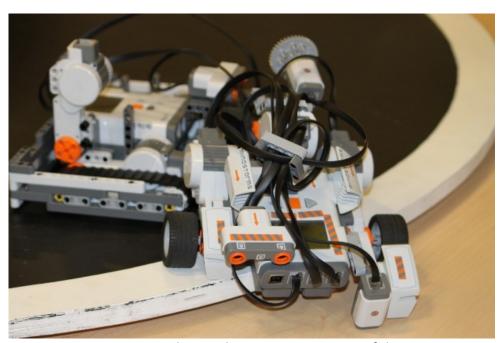
Competition area in the gymnasium



Awards presentation in the foyer



Teams start their sumo robots



A sumo robot pushes its opponent out of the ring.

### **SMC - Senior Membership Committee**

Chair: Dr. Sreeraman Rajan - <a href="mailto:sreeraman@ieee.org">sreeraman@ieee.org</a>

Vice Chair: Dr. Chen Wu

The following members were elevated to Senior Member grade from Nov 2009-Oct 2010: (this may not be the complete list)

- 1. Baker, Darren
- 2. Flueraru, Costel member of Instrumentation and Measurement Society, Photonics Society (formerly LEOS)
- 3. Fiaidhi, Jinan member of Computer Society
- 4. Boukerche, Azzedine member of Communications Society, Computer Society
- 5. Haythornthwaite, Raymond member of Components, Packaging, and Manufacturing Technology Society, Photonics Society (formerly LEOS)
- 6. Klemes, Marek member of Communications Society, Signal Processing Society
- 7. Liang, Xiaodong member of Communications Society, Power & Energy Society
- 8. Ahmadvand, Nima member of Computer Society
- 9. Franks, R member of Computer Society
- 10. Nicholl, Shawn
- 11. Dansereau, Richard
- 12. Kubbar, Osama member of Communications Society
- 13. Xiao, Gaozhi member of Instrumentation and Measurements society

#### **Teacher-In-Service Program Committee**

Chair — Jennifer Ng Ain Kin <a href="mailto:ing@ieee.org">ing@ieee.org</a>

Vice Chair — Rosalyn Seeton — <a href="mailto:seeton@ieee.org">seeton@ieee.org</a>

Website http://ieee.org/go/ottawa-tisp

Facebook Group http://www.facebook.com/group.php?gid=110448835654114

The Teacher In-Service Program (TISP) enables IEEE volunteers to share their technical expertise and demonstrate the application of engineering concepts to support the teaching and learning of science, mathematics and technology disciplines. IEEE offers training workshops for its members on how to provide in-service programs to local pre-university educators.

- Presentation of TISP and IEEE to CECCE STEM leaders/Présentation aux chefs de dossiers de sciences du CECCE (Conseil des Ecoles Catholiques du Centre-Est) — Nov 17, 2009 [link] — en français.
- Presentation of TISP and IEEE to educators at Design Tomorrow's World event Dec 8, 2009 [link] in English and French [link]
- Deuxième présentation du TISP et IEEE aux chefs de dossiers CECCE Feb 10, 2010 [link] en français.
- Workshop to local volunteers April 2010 (dry-run of lessons for CECCE workshop)
  - Pictures and video on the IEEE TISP Ottawa Facebook Group [link]
- Workshop to CECCE STEM educators/ Atelier pour enseignants STEM du CECCE April 2010 en français
  - Leçons choisies:
    - Circuits en série et en parallèle [<u>lien</u>] utilisant un trousse "elenco" (<u>www.elenco.com</u>)
    - L'énergie éolienne [lien]
  - Pictures and video on the IEEE TISP Ottawa Facebook Group [link]

For more information about TISP Ottawa, please visit our website or our Facebook Group.

## **Chapter Reports**

### **Aerospace and Electronic Systems Society - AESS**

Chair: Hugh Reekie - <a href="mailto:h.reekie@ieee.org">h.reekie@ieee.org</a>;

Vice Chair: Tony Ponsford - <a href="mailto:tony">tony</a> ponsford@Raytheon.com
Website: <a href="mailto:http://www3.bell.net/max-com/ottawa.AESS.html">http://www3.bell.net/max-com/ottawa.AESS.html</a>

The Chapter ran a number of meetings and events, all well attended. Tony Ponsford is now Chapter Vice Chair and is heading up a group submitting a bid for an AESS Radar Conference which may be held in Ottawa in 2013.

1. Inmarsat BGAN (Broadband Global Area Network) Services

Date: December 10, 2009 Speaker(s): Marie-Lise Sakkal

Description: Marie-Lise Sakkal of Stratos gave a presentation about Inmarsat BGAN (Broadband Global Area Network) Services; some of the hardware was put to use with a live satellite demonstration, made possible through an open door, as the hi-tech copper film windows of the building attenuated satellite transmission!

2. Tour of the Radarsat 2 Reception and Data Processing Site

Date: June 10, 2010 Speaker(s): N/A

Description: An early summer tour to the Cantley, Quebec Satellite Reception station, with presentations about Radarsat 2, had attendees from as far away as Toronto.

3. A Double Lecture Evening on Advances in Radar

Date: July 14, 2010

Speaker(s): Dr. Jian Wang, Tony Ponsford

Description: Jian Wang and Tony Ponsford of Raytheon talked about Wind Farm Radar Clutter Mitigation and Recent Advances in Primarly Surveillance Radar respectively.

4. Bistatic Radar - Past, Present and Future

Date: July 15, 2010

Speaker(s): Hugh Griffiths

Description: Hugh Griffiths, a Distinguished Lecturer from the UK, presented a Historical Review of Bistatic

Radar the next evening.

### Microwaves/Antennas/Propagation Society - AP/MTT

Chair: Qiubo Ye - <u>qiubo.ye@crc.ca</u> Vice Chair: Kin Sze - <u>kinsze@ieee.org</u>

Webmaster: Kin Sze - kinsze@ieee.org

Website: <a href="http://www.ottawa.ieee.ca/ap">http://www.ottawa.ieee.ca/ap</a> mtt/home/

AP/MTT Joint Chapter sponsored ANTEM/EMREM through the following ways:

- (1). Provide a best student paper award;
- (2). Invite an MTT Distinguished Lecturer to attend the conference as the keynote speaker; and
- (3) Local AP/MTT members help in organizing the conference.

Mr. Cao Wang received the MTT-S Graduate Fellowship \$6000 USD for 2010. He attended IMS 2010 to receive this award. Cao is a Ph.D. Candidate and Vanier Canada Graduate Scholar at Microwave Photonics Research Laboratory, School of Information Technology and Engineering, University of Ottawa. Ottawa AP/MTT members wrote the reference letters to support his application.

A representative from local AP/MTT chapter was sent to attend IMS 2010 to report our activities to MTT Society.

1. The Ten Habits of Highly Successful Board Designers

Date: Nov. 2, 2009

Speaker(s): Dr. Eric Bogatin

2. The Emerging Code-Shifted-Reference Transceiver Technology for UWB Impulse Radio Systems

Date: February 25, 2010

Speaker(s): Prof. Zhizhang Chen

3. Electromagnetic Band Gap Structures for Noise Mitigation in Printed Circuit Boards and Packages

Date: May 4, 2010

Speaker(s): Prof. Omar Ramahi

4. Current and Upcoming EMC Standards for ITE and Multimedia Equipment

Date: June 21, 2010

Speaker(s): Ghery S. Pettit

5. Automotive EMC Date: June 29, 2010

Speaker(s): Mark Steffka

6. Design of Microstrip-Fed Slot Antennas

Date: July 2, 2010

Speaker(s): Prof. Zhongxiang Shen

7. Computational Techniques for Antenna Modeling and Placement

Date: July 5, 2010

Speaker(s): Dr. C. J. Reddy

8. How to Protect from the Threat of Intentional Electromagnetic Interference (IEMI)

Date: July 5, 2010

Speaker(s): Dr. William A. Radasky

9. Substrate Integrated Circuits (SICs) for Microwave and Millimeter Wave Systems and Applications

Date: July 7, 2010

Speaker(s): Prof. Ke Wu

## **CI - Computational Intelligence Society**

Chair: Nizar Sakr - <u>nsakr@site.uottawa.ca</u> Vice Chair: Moufid Harb - <u>moufidh@gmail.com</u>

Vice Chair: Julio Valdes - <u>Julio.Valdes@nrc-cnrc.gc.ca</u>

Website: <a href="http://ottawa.ieee.ca/ci">http://ottawa.ieee.ca/ci</a>

Over the past year, the Computational Intelligence Society – Ottawa Chapter has organized numerous events. We continue to build up this chapter to become the meeting place of choice for the computational intelligence community in the Ottawa region. For more information please visit the chapter website at http://ottawa.ieee.ca/ci.

1. Swarm Intelligence: Where We've Been and Where We're Going

Date: November 2, 2009

Speaker(s): Dr. Russell Eberhart

Description: CIS Distinguished Lecture that was presented by Dr. Russell Eberhart, Professor (IEEE Fellow)

at the Indiana University Purdue University Indianapolis (IUPUI).

2. Much To Do About Bidirectional Associative Memory

Date: December 4, 2009

Speaker(s): Prof. Sylvain Chartier

Description: Technical lecture by Prof. Sylvain Chartier Assistant Professor at the University of Ottawa

3. Workshop on Multi-Sensor Systems for Surveillance Applications

Date: December 11-12, 2009

Description: The Chapter helped in the organization and advertisement of the Workshop on Multi-Sensor Systems for Surveillance Applications, that was held at the School of Information Technology and Engineering (University of Ottawa)

4. Risk-Based Multiobjective Optimization for a Vehicle Fleet Mix Problem

Date: February 23, 2010

Speaker(s): Dr. Slawo Wesolkowski

Description: Technical lecture by Dr. Slawo Wesolkowski, Research Scientist at the Defence Research and Development Canada (DRDC), Ottawa.

5. Development of a Robotic Platform for Human Robot Interaction

Date: March 17, 2010 Speaker(s): Dr. Genci Capi

Description: Technical seminar co-organized by CI and presented by Dr. Genci Capi, Associate Professor at

the University of Toyoma, Japan.

6. DRDC Biometrics Activities and IEEE CIS Biometrics Mission

Date: March 25, 2010

Speaker(s): Dr. Qinghan Xiao

Description: Technical lecture co-organized by CI and talk delivered by Dr. Qinghan Xiao, Defence Scientist

at the DRDC, Ottawa.

7. The Use of General Neuron Functions within Neural Networks

Date: May 12, 2010

Speaker(s): Mr. Alan J. Barton

Description: Technical lecture presented by Mr. Alan J. Barton from the National Research Council Canada -

Institute for Information Technology. The talk was available as both, a seminar and a webinar.

### **CompSoc - Computer Society**

Chair: Rami Abielmona - rabielmo@ieee.org

Vice-Chair: Ricardo Villalobos - rvillalobos@ieee.org

Website: <a href="http://ottawa.ieee.ca/cs">http://ottawa.ieee.ca/cs</a>

1. DRDC Biometrics Activities and IEEE CIS Biometrics Mission

Date: March 25, 2010

Speaker(s): Dr. Qinghan Xiao

Description: Dr. Qinghan Xiao, IEEE Senior Member, Defence Research and Development Canada, Ottawa

2. Multicore acceleration of exact string matching for computational mass spectrometry

Date: September 21, 2010 Speaker(s): Dr. James Green

Description: Dr. James Green, PhD, P.Eng., Associate Professor, Systems & Computer Engineering, Carleton

University, Ottawa, Canada

## **ComSoc & BTS - Joint Chapter of Communications Society and Broadcast Technology Society**

Chair: Dr. Wahab Almuhtadi, P.Eng., IEEE SM - almuhtadi@ieee.org

Vice Chair: Claude Brulé, B.Eng., MSc., CD

Vice Chair: Tony Khoury, M.Sc., P.Eng., IEEE SM - tkhoury@ieee.org

Secretary: Scott Barkley - <a href="mailto:scott.barkley@sympatico.ca">scott.barkley@sympatico.ca</a>

Website: <a href="http://ottawa.ieee.ca/comsoc">http://ottawa.ieee.ca/comsoc</a>

ComSoc/BTS/CES Joint Chapter is a very active chapter and serves its members with high discipline in organizing technical and educational seminars, and working on ICC 2012 conference.

The Ottawa ComSoc/BTS/CES Chapter, the Ottawa Section along with the strong support of IEEE Communications Society, TELUS, Ottawa Tourism, Ottawa Convention Centre, and several other local and national industry, and academia are working on hosting the prestigious International Conference on Communications (ICC) in 2012 (<a href="http://www.ieee-icc.org/2012">http://www.ieee-icc.org/2012</a>). ICC 2012 will be held at the Ottawa Convention Centre in Ottawa, Ontario, Canada from June 10 till June 15, 2012. The estimated number of the conference attendees will be 1500 to 2000.

On Wed, September 1, 2010, IEEE Communications Society has announced that IEEE Ottawa ComSoc Chapter is the winner of the 2010 Communications Society Chapter Achievement Award (2010CAA) in North America Region (R1-R7). The Chapter of the Year 2010 winner will be selected from the 4 winners from North America Region 1-7, Europe, Middle-East, & Africa Region 8, Latin America Region 9, and Asia/Pacific Region 10.

On Wed, October 13, 2010, IEEE Communications Society has announced that IEEE Ottawa ComSoc Chapter is the final winner of the Communications Society's 2010 CHAPTER-OF-THE-YEAR (2010 CoY). This is no small achievement and we applaud the accomplishments that led to their being chosen from among all our ComSoc chapters worldwide. Ottawa ComSoc Chapter will be honored in two ways at GLOBECOM (December 6-10, 2010) in Miami, FL: the Chapter will receive the 2010 CoY plaque/honorarium of \$2000, and 2010 CAA plaque/honorarium of \$1000. The ComSoc Society invited the Chapter Chair to attend the Awards Ceremony at IEEE GLOBECOM (December 7, 2010) in Miami, and receive these two Awards.

The ComSoc/BTS/CES Chapter Chair participated as the ICC 2012 Executive Conference Chair in ComSoc GIMS and GITC Committees meetings that held in conjunction with the IEEE International Conference on Communications, May 23-27, 2010, Cape Town, South Africa.

The ComSoc/BTS/CES Chapter Chair participated in the Consumer Electronics Society Chapter Chairs meeting that held in conjunction with the 14th IEEE International Symposium on Consumer Electronics. June 07-10, 2010, Braunschweig, Germany.

1. Multigigabit Wireless Multimedia Communications: Future and Core Technologies

Date: May 12, 2010

Speaker(s): Prof. Dr. Vijay K. Bhargava

Description: Distinguished Lecture by Prof. Dr. Vijay K. Bhargava, FRSC, FIEEE, University of British Columbia, Candidate for IEEE Communications Society President-Elect. Held Jointly with Ottawa Held

Jointly with Signal Processing, Oceanic Engineering, & Geoscience and Remote Sensing (SP, OE, & GRS), IEEE Ottawa Section, and Algonquin College Student Branch.

2. Mobile Agents for Autonomous Wireless Ad Hoc Networks

Date: June 17, 2010

Speaker(s): Dr. Victor C.M. Leung

Description: Distinguished Lecture by Dr. Victor C.M. Leung, ComSoc Distinguished Lecturer, Dept. of Electrical and Computer Engineering, University of British Columbia. Held Jointly with IEEE Ottawa Section and Algonquin College Student Branch on Thursday June 17, 2010.

3. Intelligent Buildings in an Intelligent Grid – the Next Great Network Build-Out

Date: September 30, 2010 Speaker(s): Mr. Wes Biggs

Description: Technical seminar by Mr. Wes Biggs, President and Chief Executive Officer, Triacta Power Technologies, Inc., Ottawa, Ontario, Canada. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, and Algonquin College Student Branch on Thursday September 30, 2010.

4. Based Management of Optical Networks for Next Generation Disaster Recovery Networking Solutions with WDM Systems, and Cloud Computing and Security

Date: October 6, 2010

Speaker(s): Mr. Andrew MacKay

Description: Technical seminar by Mr. Andrew MacKay, Chief Technology Officer of Superna, Ottawa, Ontario, Canada. Held Jointly with Reliability Ottawa Chapter, Algonquin College Student Branch.

5. Distinguished Lecture "Sensing and Identification in the Internet of Things Era"

Date: October 20, 2010

Speaker(s): Prof. Hossam Hassanein

Description: Lecture given by ComSoc Distinguished Speaker Prof. Hossam Hassanein, School of Computing, Queen's University, Kingston, Canada. Held Jointly with Reliability Ottawa Chapter, Algonquin College Student Branch in conjunction with School of Advanced Technology-Algonquin College.

6. Networked 3-D Virtual Collaboration in Science and Education: Towards 'Web 3.0' (A Modeling Perspective)

Date: November 19, 2010

Speaker(s): Prof. Michael Devetsikiotis

Description: Distinguished Lecture by Prof. Michael Devetsikiotis, ComSoc Distinguished Lecturer, Electrical and Computer Engineering, North Carolina State University, Raleigh, NC, USA. To be held jointly with Reliability Chapter, Educational Activities, and Algonquin College Student Branch.

7. Wireless Sensor Networks (WSN) in the Power Grid

Date: November 22, 2010

Speaker(s): Dr. Melike Erol-Kantarci

Description: Dr. Melike Erol-Kantarci, School of Information Technology and Engineering, University of Ottawa, Ottawa, Ontario, Canada. To be held jointly with PES Chapter, Reliability Chapter, Educational Activities, and uOttawa Student Branch.

8. Communications Network Management

Date: TBA

Speaker(s): Dr. Gabe Jakobson

Description: To be held in November/December 2010

## **CPMT - Components, Packaging and Manufacturing Technology Society**

Chair: Prof. Q.J.Zhang, Fellow IEEE, P.Eng.- qiz@doe.carleton.ca

1. The Emerging Code-shifted-Reference Transceiver Technology for Ultra-wide-band (UWB) Impulse Radio Systems

Date: February 25, 2010

Speaker(s): Professor Zhizhang Chen, Dalhousie University, Halifax Canada

2. Design of Microstrip-Fed Slot Antennas

Date: July 2, 2010

Speaker(s): Professor ZhongxiangShen, Nanyang Technological University, Singapore.

3. How to protect from the threat of intentional electromagnetic interference- (IEMI)

Date: July 5, 2010

Speaker(s): Dr. William A. Radasky, Metatech Corporation, Goleta, California, USA.

4.. Advanced Computational Tools for Antenna Design and Placement

Date: July 5, 2010

Speaker(s): Dr. C.J.Reddy, EM Software & Systems (USA) Inc, Hampton, Virgina.

## **DEIS - Joint Ottawa-Montreal Chapter of Dielectrics and Electrical Insulation Society**

Chair: Mahmoud Abou-Dakka – Mahmoud.Abou-Dakka@nrc.ca

We have organized two seminars during the last year, one in Montreal and the other in Ottawa. Please see the following details about them:

1. Was presented by Professor Issouf Fofana at the Ecole de Technologie Superier in Montreal on the 17th of June 2010. The title was: Insulating Oil - Another Vital Part of Transformer Body.

2. Was presented by Dr. Hugues Couderc at the National Research council of Canada on the 25th of October 2010. The title was: On Glass Transition and Use of Broad-band Dielectric Spectroscopy.

## EDS, CAS, & SSCS - Joint Chapter of Electron Devices Society, Circuits and Systems Society, and Solid-State Circuits Society

Chair: Ram Achar - <u>achar@doe.carleton.ca</u>
EDS Vice Chair: Ihsan Erdin - <u>ierdin@ieee.org</u>
SSCS Vice Chair: Sreedhar Natarajan - <u>sn@ieee.org</u>

CAS Vice Chair: Dharmendra Saraswat - dsaras68@yahoo.com

Website: <a href="http://ottawa.ieee.ca/eds">http://ottawa.ieee.ca/eds</a> cas sscs/

The CASS/EDS/SSC joint chapter of Ottawa has been active in organizing and promoting the events/activities of importance to the Ottawa IEEE members. 7 talks from experts of international repute were arranged under this chapter during Sept. 15 2009 –Sept. 2009, with speakers coming from various parts of the world (out of which 2 were DLs). Typical attendance for the talks ranged between 10 or higher.

Total of 7 talks (2 DLP) from Eminent speakers (either directly arranged or cosponsored with other chapters). Volunteers of the CASS society significantly helped in organizing the CASS sponsored 1st and 2nd Microsystems and Nanoelectronics Research Conference (Oct. -2009) in Ottawa. This conference was a grand success and helped to promote the CASS significantly in the Ottawa area. Volunteers of the Ottawa chapter were also instrumental in getting the CASS sponsorship for this conference.

1. Low Power Asynchronous-Logic Circuit Design

Date: September 29, 2009

Speaker(s): Dr. Gwee Bah Hwee

Description: Distinguished Lecturer Dr. Gwee Bah Hwee - A CASS Distinguished Lecturer - Associate

Professor, Nanyang Technological University, School of EEE, Singapore

2. Reverse Engineering in the Semiconductor Industry

Date: January 20, 2010

Speaker(s): Randy Torrance, Dick James

Description: Technical lecture by Randy Torrance, B.A.Sc.E.E., M.A.Sc.E.E. and Dick James, B.Sc, M.Sc (Chipworks). Co-sponsored by: IET Ottawa Chapter, IEEE Ottawa EDS/CAS/SSCS Joint Chapter and IEEE

Ottawa Section.

3. Intracortical Multichannel Recording for Efficient Prosthetic Implementation

Date: May 19, 2010

Speaker(s): Dr. Mohamad Sawan

Description: Technical lecture by Dr. Mohamad Sawan, Professor of Microelectronics and Biomedical Engineering, Polytechnique Montréal, QC. Co-sponsored by: IEEE Ottawa EDS/CAS/SSCS Joint Chapter and IEEE Ottawa EMBS

4. Computational Techniques for Antenna Modeling and Placement

Date: July 5, 2010

Speaker(s): Dr. C.J. Reddy

Description: Technical lecture by Dr. C.J. Reddy, EM Software & Systems (USA) Inc., Hampton, VA. Co-

sponsored by: IEEE Ottawa CAS/EDS/SSC, AP/MTT, EMC, & CPMT Chapters

5. How to Protect from the Threat of Intentional Electromagnetic Interference (IEMI)

Date: July 5, 2010

Speaker(s): Dr. William A. Radasky

Description: Technical lecture by Dr. William A. Radasky Ph.D., P.E., Metatech Corporation, Goleta,

California. Co-sponsored by: IEEE Ottawa CAS/EDS/SSC, AP/MTT, EMC, & CPMT Chapters

6. Reliability of Nanoscale CMOS Devices with TiN/High-k Gate Stacks [DLP]

Date: August 9, 2010

Speaker(s): Prof. Durga Misra

Description: Technical lecture by Professor Durga Misra, IEEE EDS Distinguished Lecturer, Electrical and

Computer Engineering Department, New Jersey Institute of Technology, Newark, NJ.

7. Electrical Modeling of Photonic Crystal Defects and its Applications (upcoming)

Date: October 12, 2010

Speaker(s): Prof. Raghunath K. Shevgaonkar

Description: Technical lecture by Prof. Raghunath K. Shevgaonkar, Vice Chancellor, University of Pune,

India. Co-Sponsored by: IEEE Ottawa EDS/CAS/SSCS Chapters, IEEE Ottawa photonics society, IEEE Ottawa

Section

### **EMC - Electromagnetic Compatibility Society**

Chair: Syed Bokhari - bokhari@ieee.org

The IEEE Ottawa EMC chapter conducted five technical presentations in 2010 including two distinguished lecturer presentations. Further, the bid for the 2016 International EMC Symposium was won by Ottawa.

1. Electromagnetic Band Gap Structures for Noise Mitigation in Printed Circuit Boards and Packages

Date: May 4, 2010

Speaker(s): Prof. Omar Ramahi

Description: Distinguished Lecturer presentation by Professor Omar Ramahi from the University of

Waterloo.

2. Current and Upcoming EMC Standards for ITE and Multimedia Equipment

Date: June 21, 2010

Speaker(s): Ghery S. Pettit

Description: Technical lecture by Ghery S. Pettit of Intel Corporation.

3. Distinguished Lecturer Presentation

Date: June 29, 2010 Speaker(s): Mark Steffka

4. Computational techniques for Antenna Modeling and Placement

Date: July 5, 2010

Speaker(s): Dr. C.J. Reddy

Description: Technical lecture by Dr. C.J. Reddy of EM Software and Systems Inc.

5. How to protect from the threat of Intentional Electromagnetic Interference

Date: July 5, 2010

Speaker(s): Dr. William Rradasky

Description: Technical lecture by Dr. William Rradasky of Metatech Corporation.

### **EMBS - Engineering in Medicine and Biology Society**

Chair: Sreeraman Rajan - <u>Sreeraman@ieee.org</u>
Vice Chair: Yuu Ono - <u>yuuono@sce.carleton.ca</u>
Secretary: James Green - <u>jrg@sce.carleton.ca</u>

Webmaster: Adrian Chan - adcchan@sce.carleton.ca

Website: http://ottawa.ieee.ca/embs/

1. Computer-Aided Diagnosis of Breast Cancer: Towards the Detection of Early and Subtle Signs

Date: November 12, 2009

Speaker(s): Dr. Raj Rangayyan

Description: Distinguished Lecture Series: Dr. Raj Rangayyan, University Professor, University of Calgary,

Calgary, Alberta, Canada

2. Technologies for Self-Monitoring, Analysis and Reporting of Adverse Response to Medication (SMART

ARM)

Date: November 12-13, 2009

Speaker(s): Series of talks (17 Lectures), see description.

Description: Nov 12, 2009

a) Rafik Goubran, Frank Knoefel "Smart Environments and Monitoring for the Independent Living of Seniors"

- b) Alessandro Ferrero\*, Why Uncertainty in Biomedical Measurements?
- c) Sreeraman Rajan, "On detection of signals"
- d) Hilmi Dajani, "Physiological Indicators for Health Monitoring"
- e) Adrian Chan, "Question of large data?"
- f) Emil Petriu "Context-Aware Multi-Sensor Systems for Mission Critical Healthcare Applications"
- g) Khaled El-Emam "Privacy implications from sharing adverse event data"
- h) Octavian Postolache\* "Non-invasive and unobtrusive sensing solutions for human homeostasis assessment"
- i) Raj Rangayyan, "ECG waveforms and specific signal processing for HRV" (1)
- j) Raj Rangayyan, "ECG waveforms and specific signal processing for HRV" (2)

Nov 13, 2009

- k) Rajamani Doraiswami, "Design and implementation of a fault detection and isolation (FDI) scheme for physical systems"
- I) Alain Mouttham, "Personal cardiac monitoring technology for assessing the efficiency of anti-arrhythmic drugs and Implantable CardioVertor Defibrillator devices"
- m) Liam Peyton, "Collection, Integration and Analysis of Electronic Health Information for Monitoring Patient Outcomes"
- n) George Mihalas\*, "Patient Safety in European e-Health Projects"
- o) Miodrag Bolic "Measurement Uncertainty in Self-Monitoring"
- p) Voicu Groza, "Trends in Self-Monitoring"
- q) Radu Leca, "Automated Detection of Adverse Responses"
- r) Concluding Panel
- s) Closing Remarks
- 3. A 3-D Target Tracking Technology Using Positron Emission Isotopes for Medical Applications

Date: November 16, 2010

Speaker(s): Dr. Tong Xu

Description: Technical lecture by Dr. Tong Xu, Assistant Professor, Department of Physics, Carleton

University, Canada

4. Low field, Portable MRI for Medical and Non-medical applications

Date: January 13, 2010

Speaker(s): Dr. Andrew Marble

Description: Technical lecture by Dr. Andrew Marble, Assistant Professor, Department of Systems and

Computer Engineering, Carleton University, Canada

5. Personal Heart Monitoring System for Prevention of Sudden Cardiac Death

Date: January 27, 2010

Speaker(s): Mr. Alain Mouttham

Description: Technical lecture by Mr. Alain Mouttham, School of Information Technology and Engineering,

University of Ottawa Canada.

6. Re.search (r- sûrch, rsûrch)? Where does one even begin?

Date: March 17, 2010

Speaker(s): Dr. Adrian D.C. Chan

Description: Technical lecture by Dr. Adrian D.C. Chan, Associate Professor, Department of Systems and

Computer Engineering, Carleton University, Canada.

7. Wear Particle-induced Periprosthetic Osteolysis and Bone Tissue Engineering Using Fibrin Gels

Date: March 24, 2010

Speaker(s): Dr. Isabelle Catelas

Description: Technical lecture by Dr. Isabelle Catelas, Associate Professor, Department of Mechanical

Engineering, University of Ottawa, Canada.

8. DRDC Biometrics Activities and IEEE CIS Biometrics Mission

Date: March 25, 2010

Speaker(s): Dr. Qinghan Xiao

Description: Technical lecture by Dr. Qinghan Xiao, Defence Scientist, DRDC Ottawa.

9. Modeling in cardiovascular mechanics

Date: September 15, 2010

Speaker(s): Dr. Michel Labrosse

Description: Technical lecture by Dr. Michel Labrosse, Associate Professor, Department of Mechanical

Engineerign and Division of Cardiac Surgery, Heart Institute, University of Ottawa.

10. Acceleration of Exact String Matching for Computational Mass Spectrometry

Date: September 21, 2010 Speaker(s): Dr. James Green

Description: Technical lecture by Dr. James Green, Assistant Professor, Department of Systems and

Computer Engineering, Carleton University, Canada

11. Methods and technologies for detecting and preventing the stroke

Date: September 29, 2010

Speaker(s): Dr. Yasheng Maimaitijiang

Description: Technical lecture by Dr. Yasheng Maimaitijiang, Postdoctoral Fellow, Department of Systems

and Computer Engineering, Carleton University, Canada

12. Decision Support Systems for Care & Management of Epilepsy

Date: October 6, 2010

Speaker(s): Mr. Rajeev Yadav

Description: Technical lecture by Mr. Rajeev Yadav, Centre for Signal Processing and Communication,

Concordia University, Montreal, QC

### **IMS - Instrumentation and Measurement Society**

Chair: Dr. Voicu Groza - vgroza@ieee.org

Vice Chair: Dr. Branislav Djokic - branislav@ieee.org

Website: <a href="http://ottawa.ieee.ca/ims/">http://ottawa.ieee.ca/ims/</a>

Since the last year's AGM, the IEEE IMS Ottawa Chapter organized and sponsored or co-sponsored three workshops and three technical talks, as follows:

1. Technologies for Self-Monitoring, Analysis and Reporting of Adverse Response to Medication (SMART ARM 2009)

Date: November 12-13, 2009 Speaker(s): 18 presenters

Description: School of IT and Engineering, University of Ottawa, Ottawa, Ontario, Canada. Event chaired by Rafik Goubran, Professor and Dean, Faculty of Engineering and Design, Carleton University, Ottawa. Attracted 74 PARTICIPANTS: (43 IEEE members and 31 guests) and 18 PRESENTERS, such as Alessandro Ferrero, President, IEEE Instrumentation and Measurement Society, Professor, Politecnico di Milano, Italy and George Mihalas, President, European Federation of Medical Informatics.

2. Multi-Sensor Systems for Surveillance Applications - MUSES'09

Date: December 11-12, 2009

Speaker(s): Multiple

Description: Event chaired by Emil Petriu, IEEE Fellow, Chair TC-15 Virtual Systems in Measurements and TC-28 Instrumentation for Robotics and Automation, Professor and Director, SITE, University of Ottawa, Faculty of Engineering, SITE. Participation in event attracted 16 IEEE Members and 8 guests.

3. IEEE International Workshop on Medical Measurements and Applications (MeMeA)

Date: April 30 - May 1, 2010

Speaker(s): Multiple

Description: IEEE International Workshop on Medical Measurements and Applications (MeMeA), sponsored by TC25 Technical Committee on Medical and Biological Measurements of the IEEE Instrumentation Measurement Society. General Chair: Voicu Groza, Chair, IEEE Ottawa IMS Chapter and TC25 Subcommittee on Blood Pressure Measurement of IEEE Instrumentation and Measurement Society, University of Ottawa, Lees Campus. Event attracted 50 participants, 36 presentations.

4. Development of a Robotic Platform for Human Robot Interaction

Date: March 6, 2010

Speaker(s): Dr. Genci Capi

Description: Technical talk given by Dr. Genci Capi, Associate Professor, Department of Electrical and Electronic Systems Engineering, University of Toyama, Japan. Event participated in by 13 IEEE members and 28 guests.

5. Sensors for Military Structural Health Monitoring Applications.

Date: April 23, 2010 Speaker(s): Nezih Mrad

Description: Technical talk given by Nezih Mrad, Defence R&D Canada (DRDC), Department of National

Defence (DND)

6. AC Current Measurements Using Rogowski Coils - The Applications, Design, and Calibrations of Rogowski

Coils

Date: October 21, 2010

Speaker(s): Dr. Dr. Branislav Djokic, P.Eng.

Description: Technical talk given by Dr. Branislav Djokic, P.Eng., Institute for National Measurement

Standards, National Research Council of Canada

## **LEOS - Photonics Society**

Chair: Kexing Liu – <u>kexing.liu@ieee.org</u>
Website: <u>http://ottawa.ieee.ca/leos/</u>

1. Electrical Modeling of Photonic Crystal Defects and its Applications

Date: October 12, 2010

Speaker(s): Prof. Raghunath K. Shevgaonkar

Description: Technical lecture by by Prof. Raghunath K. Shevgaonkar, Vice Chancellor, University of Pune, India, and Professor of Electrical Engineering, IIT Bombay, India. Held jointly by the IEEE Ottawa EDS/CAS/SSCS joint chapters, the Photonics Society chapter, the Reliability Society chapter, and the Department of Electronics, Carleton University.

<u>№</u>	Activity Type (Technical Meeting, etc)	Title/Speaker or Workshop Name	Attend Total	Joint Act. Sponsors
1	October 30, 2009  Symposium on Recent Advancements in Photonics - Celebrating 125th Anniversary of IEEE	<ul> <li>Program</li> <li>12:00pm Registration and Networking (Free lunch provided)</li> <li>1:00pm Opening Remark - Celebrating 125th Anniversary of IEEE</li> <li>1:05pm 2009 IEEE Photonics Society Ottawa Chapter Best Student Paper Awards Presentation</li> <li>1:20pm Invited Speaker: Dr. Maurice O'Sullivan, Nortel, Canada, "Progress in Real-Time, DSP Assisted, Coherent Optical Transmission"</li> <li>2:10pm Invited Speaker: Dr Adam Densmore, NRC-IMSS, Canada, "Silicon Photonics: a New Approach to Label-Free Molecular Sensing"</li> <li>3:00pm Break (Free coffee provided)</li> <li>3:15pm 125th Anniversary of IEEE Presentation: Prof David Coll, IEEE Life Fellow, Professor Emeritus, Carleton University, Canada, "Introduction to History of IEEE Ottawa Section"</li> <li>3:30pm IEEE PS Distinguished Lecturer: Prof. Nabeel Riza, CREOL, University of Central Florida, USA, "Hybrid</li> </ul>	<u>71</u>	OPRA OPIN- OPC NRC

<u>No</u>	Activity Type (Technical Meeting, etc)	Title/Speaker or Workshop Name	Attend Total	Joint Act. Sponsors
		Optical Sensors for Extreme Temperature Measurement in Next Generation Higher Efficiency Greener Power Plants"  4:30pm Closing Remark and Door Prize		
2	January 22, 2010 Symposium on Recent Advancements in Photonics	<ul> <li>Speakers and Titles of Presentation</li> <li>IEEE PS Ottawa Chapter Guest Speaker: Dr Jackson Klein of Optiwave, Canada: "OptiSPICE, An Opto-Electronic Circuit Design Software for the Self-Consistent Simulation of Optical, Electrical and Thermal Energy Domains"</li> <li>IEEE PS Distinguished Lecturer: Prof Tetsuya Mizumoto of Tokyo Institute of Technology, Japan: "Optical Nonreciprocal Devices for Integrated Photonics"</li> </ul>	<u>57</u>	OPRA OPIN- OPC NRC
3	April 14, 2010, Technical Meeting	"Measurements of State-of-the-Art Solar Cells and Modules" By Dr. Cristian I. Popescu, President of Spectra-Nova Technologies, Inc. Canada	<u>59</u>	OPRA OPIN- OPC NRC
4	June 19, 2010 <u>Chapter Planning</u> <u>Meeting</u>	<ul> <li>Meeting attended by 3 executives of the chapter</li> <li>Agenda</li> <li>Initiative to supporting the Algonquin College Photonics Program and engaging pre-college students and parents</li> <li>Planning for 2011 Ottawa Photonics Week</li> <li>International Conference OFS21 – Ottawa, May 15 to 20, 2011</li> <li>Conference Photonics North – Ottawa, May 16 to 18, 2011</li> <li>International Topical Meeting on Information Photonics – Ottawa, May 18 to 20, 2011</li> <li>Photonics Expo (exhibition) – Ottawa, May 17 to 18, 2011</li> <li>Planning for chapter student paper competition</li> <li>Chapter subsidy request and planning</li> </ul>	N/A	N/A
5	October 12, 2010  Symposium on  Recent  Advancements in  Photonics	<ul> <li>8:30am Registration and Networking</li> <li>9:00am Opening Introduction</li> <li>9:05am Invited Speaker: <u>Dr. Pavel Cheben</u>, NRC, Canada, <u>"Subwavelength Silicon Photonics"</u></li> <li>9:50am Invited Speaker: <u>Dr. Juan (Tito) C. Scaiano</u>, Distinguished Professor, University of Ottawa, Canada, <u>"Can surface plasmon fields provide a new way to photosensitize organic photoreactions?"</u></li> <li>10:35am Coffee Break</li> <li>10:50am IEEE PS Distinguished Lecturer: <u>Dr. Sarath Gunapala</u>, NASA JPL, California Institute of Technology, USA, <u>"III-V Quantum Structures for Infrared Detection"</u></li> <li>11:50am Closing Remark, Announcements, and Door Prizes</li> </ul>	~30	OPRA OPIN- OPC NRC

## **PES - Power and Energy Society**

Chair: Dr. Wahab Almuhtadi, P. Eng., IEEE SM - almuhtadi@ieee.org

Vice Chair: Dr. Branislav Djokic, P.Eng., IEEE SM - branislav@ieee.org

Secretary: Karl Cropp - KROPPCARL@aol.com

Treasurer: Raed Abdullah, P.Eng., IEEE SM - RaedAbdullah@ieee.org

Website: <a href="http://www.ewh.ieee.org/soc/pes/ottawa">http://www.ewh.ieee.org/soc/pes/ottawa</a>

PES Chapter is a very active chapter and serving its members with high discipline in organizing technical and educational seminars, symposia, and conferences.

The Ottawa PES Chapter Vice Chair attended the 2010 PES Regions 1-7 Chapter Chair Training Meeting. on July 25, 2010. This meeting was in conjunction to the PES General Meeting 2010 that will be held from July 25-29, in Minneapolis, Minnesota, USA.

In May 2010, the Ottawa PES Chapter received IEEE PES Outstanding Engineer Award for Mr. Colin L. Clark, Managing Partner & Chief Technical Officer, Brookfield Asset Management Inc.

The Ottawa PES Chapter is planning to hold a technical session in December 2010 on a new approach to "Net Zero" homes that combines a 10 kW Solar PV rooftop system with an Atmospheric Energy system. Speaker: Ron Tolmie.

1. Electrical Power & Energy Conference 2010 (EPC2010)

Date: August 25-27, 2010

Speaker(s): Multiple

Description: The Ottawa PES Chapter along with the Ottawa Section provided technical co-sponsorship Electrical Power & Energy Conference 2010 (EPC2010) " Sustainable Energy for an Intelligent Grid"www.ieee.ca/epec10, held on 25-27 August, 2010 at Halifax Marriott Harbourfront Hotel, Halifax, Nova Scotia, Canada.

2. Pyrolysis Oil: Heat, Electricity, Green Transportation Fuel, and Chemicals too

Date: May 13, 2010

Speaker(s): Mr. Randal R. Goodfellow

Description: Technical seminar by Mr. Randal R. Goodfellow, Senior Vice President Corporate Relations, Ensyn Technologies Inc., Ottawa, Ontario. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter and Algonquin College Student Branch.

3. Renewable and Sustainable Energy

Date: September 16, 2010 Speaker(s): Mr. Alan Rotz

Description: Technical seminar by Mr. Alan Rotz, IEEE Power and Energy Society (PES) President. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, Educational Activities, and University of Ottawa Student Branch at the SITE, University of Ottawa.

4. Renewable and Sustainable Energy

Date: September 16, 2010

Speaker(s): Mr. Alan Rotz

Description: Technical seminars by Mr. Alan Rotz, IEEE Power and Energy Society (PES) President. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, Educational Activities, Algonquin College Student Branch and INMS-National Research Council (NRC) at the NRC.

5. Intelligent Buildings in an Intelligent Grid – the Next Great Network Build-Out

Date: September 30, 2010 Speaker(s): Mr. Wes Biggs

Description: Technical seminar by speaker Mr. Wes Biggs, President and Chief Executive Officer, Triacta Power Technologies, Inc., Ottawa, Ontario, Canada. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, Educational Activities, and Algonquin College Student Branch.

6. AC Current Measurements The Applications, Design, and Calibrations of Rogowski Coils

Date: October 21, 2010

Speaker(s): Dr. Branislav Djokic, P.Eng.

Description: Technical seminars by IEEE IMS Distinguished Speaker, Dr. Branislav Djokic, P. Eng., Institute for National Measurement Standards, NRC, Ottawa, Ontario, Canada. Held Jointly with EEE Ottawa Section, IMS Chapter, PES Chapter, Reliability Chapter, IEEE Ottawa Section, and Algonquin College Student Branch.

7. Wireless Sensor Networks (WSN) in the Power Grid

Date: November 22, 2010

Speaker(s): Dr. Melike Erol-Kantarci

Description: Technical seminar by speaker Dr. Melike Erol-Kantarci, School of Information Technology and Engineering, University of Ottawa, Ottawa, Ontario, Canada.. To be held Jointly with IEEE Ottawa ComSoc/BTS/CES Society Chapter, Reliability Chapter, Educational Activities, and UOttawa Student Branch.

## RAS & CSS - Joint Chapter of the Robotics & Automation, and Control Systems Societies

Chair: Jurek Z. Sasiadek., P Eng - jsas@ccs.carleton.ca

1. Blood pressure waveform sensor

Date: April 30, 2010

Speaker: Dr. Krzysztof Tomczuk

## R - PEL – Joint Chapter of the Reliability and Power Electronics Society

Chair: Raed Abdullah, P.Eng., IEEE SM

Vice Chair, Reliability: Dr. George Yee, IEEE SM

Vice Chair, Power Electronics: Dr. Kasim Rashid

Website: <a href="http://www.ottawa.ieee.ca/rl/">http://www.ottawa.ieee.ca/rl/</a>

In September 2010, the Power Electronics Society became represented as a joint chapter with the Reliability Society.

1. Intelligent Buildings in an Intelligent Grid – the Next Great Network Build-Out

Date: September 30, 2010 Speaker(s): Mr. Wes Biggs

Description: Technical lecture by Mr. Wes Biggs, President and Chief Executive Officer, Triacta Power Technologies, Inc. Held jointly by IEEE Ottawa PES Chapter, Reliability Chapter, IEEE Ottawa Section, and Algonquin College Student Branch.

2. Renewable and Sustainable Energy

Date: September 16, 2010 Speaker(s): Alan Rotz

Description: Technical lecture by Alan Rotz, IEEE Power & Energy Society President. Held jointly with IEEE Ottawa PES and Reliability Chapters, Educational Activities, and EPMG of INMS/NRC.

3. Based Management of Optical Networks for Next Generation Disaster Recovery Networking Solutions Date:

Speaker(s):

Description: Held jointly by the IEEE Ottawa EDS/CAS/SSCS, DEIS & Reliability Seminar, the Reliability Society chapter and the Department of Electronics, Carleton University.

4. DRDC Biometrics Activities and IEEE CIS Biometrics Mission

Date: March 25, 2010 Speaker(s): Qinghan Xiao

Description: Technical lecture by by Qinghan Xiao, Senior Member, IEEE, Defence Research and Development Canada, Ottawa. Held jointly with the IEEE Ottawa Reliability, Computational Intelligence, Computer, Engineering in Medicine and Biology Chapter Societies and the Algonquin College Student Branch.

5. Pyrolysis Oil: Heat, Electricity, Green Transportation Fuel, and Chemicals too

Date: May 13, 2010

Speaker(s): Randal R. Goodfellow

Description: Technical lecture by Randal R. Goodfellow, Senior Vice President Corporate Relations, Ensyn Technologies Inc. Jointly organised by the IEEE PES Ottawa Chapter, Reliability Chapter, IEEE Ottawa Section, and Algonquin College Student Branch.

6. Reliability of Nanoscale CMOS Devices with TiN/High-k Gate Stacks

Date: August 9, 2010

Speaker(s): Prof. Durga Misra

Description: Technical lecture by by Professor Durga Misra, IEEE EDS Distinguished Lecturer, Electrical and Computer Engineering Department, New Jersey Institute of Technology, Newark, NJ.

7. Achieving Software Reliability: A Look at Security Testing

Date: September 16, 2010 Speaker(s): Dr. George Yee

Description: Technical lecture by by Dr. George Yee. Held jointly by the IEEE Reliability Society, Power

Electronics Society, and Algonquin College Student Branch.

8. Electrical Modeling of Photonic Crystal Defects and its Applications

Date: October 12, 2010

Speaker(s): Prof. Raghunath K. Shevgaonkar

Description: Technical lecture by by Prof. Raghunath K. Shevgaonkar, Vice Chancellor, University of Pune, India, and Professor of Electrical Engineering, IIT Bombay, India. Held jointly by the IEEE Ottawa EDS/CAS/SSCS joint chapters, the Photonics Society chapter, the Reliability Society chapter, and the Department of Electronics, Carleton University.

## SP, OE, & GRS - Joint Chapter of Signal Processing, Oceanic Engineering, and Geoscience and Remote Sensing

Chair: Balakumar Balasingam – balasing@site.uottawa.ca

Report was not received at time of publishing; the chair had received permanent work in the US.

# TM, PCS, & SSIT - Joint Chapter of the Technical Management Council, Professional Communications Society, and Society on Social Implications of Technology

Chair: Jean Couillard - <a href="mailto:couillard@telfer.uottawa.ca">couillard@telfer.uottawa.ca</a>
Vice Chair: Alfredo Herrera - alfredo.herrera@ieee.org

Past Chair: John Grefford - <a href="mailto:grefford@ieee.org">grefford@ieee.org</a> Website: <a href="mailto:http://ottawa.ieee.ca/tmpcsit/">http://ottawa.ieee.ca/tmpcsit/</a>

1. The Global Engineer of the New Millenium

Date: March 30, 2010

Speaker(s): Jen Hiscock (EWB), Matt Retallack (EWB), Alfredo Herrera (IEEE), Glenn McKnight (IEEE)

Description: Joint event with EWB Ottawa Chapter, Ottawa GOLD and IEEE TMC/PCS/SSIT. This event included a panel of three speakers who introduced members to IEEE's new initiatives in the Humanitarian field and the Humanitarian Technology Challenge. Speakers from Engineers Without Borders explored parallels and discussed what it means to be a Global Engineer and how they contribute as volunteers.

2. Risk Management for Engineers

Date: September 20, 2010

Speaker(s): Dr. Jean Couillard, John Grefford, P.Eng., SMIEEE, PMP

Description: The seminar provides an overview of Engineering Risk Management fundamentals, Risk Management Frameworks such as the Enterprise Risk Management (ISO 31000) and Systems Engineering

Risk Management for engineers.

## **VTS - Vehicular Technology Society**

Chair: Hugh Reekie - h.reekie@ieee.org

Vice Chair: Isaac Ginsburg - <a href="mailto:iginsburg@sympatico.ca">iginsburg@sympatico.ca</a>
Website: <a href="mailto:http://www3.bell.net/max-com/ottawa.vts.html">http://www3.bell.net/max-com/ottawa.vts.html</a>

Chapter members assisted Halim Yanikomeroglu of Carleton University who was Generl Chair of the successful VTC2010-Fall Conference; it was held at the Westin Hotel in September; over 600 attended. More chapter events are planned for later in the year.

1. Inmarsat I-4 and BGAN Services

Date: December 10, 2009 Speaker(s): Marie-Lise Sakkal

Description: Joint meeting with AESS Ottawa Chapter given by Marie-Lise Sakkal of Stratos, demonstrating

the new BGAN Inmarsat portable communications devices.

2. Electromagnetic Compatibility – EMC – for Automobiles – an Overview

Date: June 29, 2010 Speaker(s): Mark Steffka

Description: Joint meeting, with the EMC Ottawa Chapter, described Electromagnetic Compatibility

Measures for Vehicles; it was given by Mark Steffka of General Motors, Detroit, Michigan.

## **Affinity Groups**

## **AICN - Alliance of IEEE Consultant Network**

Chair: Abhay Raman

Presentations were made to enthusiastic crowds on how to reduce stress, how to improve your tax situation, how to take advantage of the Scientific Research and Scientific Research and Experimental Development (SR&ED) program by KPMG.

1. TITLE: Personal Tax Issues Facing Technology Sector Workers

SPEAKER: KPMG Ottawa

DATE: Wednesday, February 24, 2010

TIME: 6:30 PM -7:30 PM

LOCATION: Ottawa Public Library Meeting Hall, Emerald Plaza Branch, 1547 Merivale Road Ottawa K2G

4V3

2. TITLE: SR&ED

SPEAKER: Geoff McDonald and Alex Concettini [KPMG Ottawa]

DATE: Wednesday, February 03, 2010

TIME: 7:00 PM to 8:00 PM

LOCATION: Ottawa Public Library Meeting Hall, Emerald Plaza Branch 1547 Merivale Road Ottawa K2G

4V3

3. TITLE: Stress Reduction through meditation and breathing

SPEAKER: Anantha Mahadevan

DATE: Monday, November 09, 2009

TIME: 7:00 PM -8:00 PM

LOCATION: Ottawa Public Library Meeting Hall, Emerald Plaza Branch, 1547 Merivale Road Ottawa K2G

4V3

## **GOLD - Graduates of the Last Decade**

Chair: Anissa Shaddy - anissa@ieee.org

Vice Chair and Treasurer: Sarah Tolledo - sarah.tolledo@ieee.org

Secretary: Ahmer Gulzar - <a href="mailto:ahmer.gulzar@gmail.com">ahmer.gulzar@gmail.com</a>
Webmaster: Kyle Brett - <a href="mailto:kylebrett3145927@gmail.com">kylebrett3145927@gmail.com</a>

GOLD participated in SPAC 2010 by presenting an introduction to GOLD to student members at the event. GOLD will also be supporting the student branches by proctoring at the IEEE Extreme programming contest.

1. The Global Engineer of the New Millenium

Date: March 30, 2010

Speaker(s): Jen Hiscock (EWB), Matt Retallack (EWB), Alfredo Herrera (IEEE), Glenn McKnight (IEEE)

Description: Joint event with EWB Ottawa Chapter, Ottawa GOLD and IEEE TMC/PCS/SSIT. This event included a panel of three speakers who introduced members to IEEE's new initiatives in the Humanitarian field and the Humanitarian Technology Challenge. Speakers from Engineers Without Borders explored parallels and discussed what it means to be a Global Engineer and how they contribute as volunteers.

## 2. STEP Graduation Party

Date: June 28, 2010

Speaker(s): Raed Abdullah

Description: New graduates from 2010 were welcomed to GOLD with a speech from Raed Abdullah. A

discussion also provided an introduction to GOLD, member benefits and future events.

#### 3. Annual BBQ

Date: August 26. 2010

Speaker(s): N/A

Description: GOLD once again held its annual BBQ. This event was a meet and greet between GOLD

members, student branch executives and OS executives. This was the most well attended BBQ to date.

## LM - Life Member

Chair: David Coll - dccoll@ieee.org

Vice Chair: John Wilson - jamwilso@allstream.net

Life members continued to be active in supporting the section's initiatives in 2010...

## WiE - Women in Engineering

Chair — Jennifer Ng Ain Kin <a href="mailto:ing@ieee.org">ing@ieee.org</a>

Vice Chair — Rosalyn Seeton — <a href="mailto:seeton@ieee.org">seeton@ieee.org</a>

Website http://ieee.org/go/ottawa-wie or http://ottawa.wie.ca/wie

Facebook Group http://www.facebook.com/group.php?gid=87647921824&ref=ts

The IEEE WIE Ottawa chapter is our local affinity group of the IEEE Women in Engineering Committee (WIEC) that is dedicated to important issues for Women Engineers.

Summary of activities from November 2009 to Nov 2010:

After the successful and well-received first *Book Club Session* whereby speakers are invited to review books following a pertinent theme, WIE Ottawa co-sponsored a second one in November 2009 with the theme: Personal Growth. The format appealed to many and WIE Ottawa plans to co-sponsor a few more sessions in the coming months and giving other women's groups to take the lead. <a href="http://sites.google.com/site/womeninleadershipcarletonclub/wil-s-activities/book-club">http://sites.google.com/site/womeninleadershipcarletonclub/wil-s-activities/book-club</a>

The WIE Ottawa Chair was invited as a guest speaker about mentoring by the IEEE Montreal Section <a href="http://ewh.ieee.org/r7/montreal/index.php?q=node/83">http://ewh.ieee.org/r7/montreal/index.php?q=node/83</a> as she is a mentor for McGill University (her Alma Mater) as well as for IEEE. She also attended the IEEE Montreal AGM where her mentee was recognized at this event <a href="http://www.alumnilive365.mcgill.ca/2010/05/12/a-mentoring-success-story-jennifer-ng-ain-kin-and-yiming-xiao/">http://www.alumnilive365.mcgill.ca/2010/05/12/a-mentoring-success-story-jennifer-ng-ain-kin-and-yiming-xiao/</a>

In December 2009, WIE Ottawa jointly sponsored the launch of Dr. Monique Frize's (IEEE Senior Member) book "The Bold and the Brave" <a href="http://ottawa.ieee.ca/wie/events/2009/mfrize.html">http://ottawa.ieee.ca/wie/events/2009/mfrize.html</a>. It was a great honour for us to have someone so accomplished locally and be able to showcase her first book while amongst family, friends and colleagues. An interview with her was featured in the January 2010 IEEE Canada newsletter <a href="http://www.ieee.ca/news/2010/jan2010.htm">http://www.ieee.ca/news/2010/jan2010.htm</a> as well as the Winter 2010 IEEE Canada Review print magazine (Page 27) <a href="http://www.ieee.ca/canrev/cr62/IEEECanadianReview no62.pdf">http://www.ieee.ca/canrev/cr62/IEEECanadianReview no62.pdf</a>. Dr. Frize and her book were also featured in the June 2010 printed WIE magazine, distributed to 12000+ WIE members worldwide.

In January, the WIE Ottawa Chair was invited to participate in Moving It Up Ottawa! – A workshop for middle career women engineers from academia, industry or government brought about by the uOttawa Centre for Academic Leadership where she shared her work/life experience. http://www.academicleadership.uottawa.ca/movingup/

March 2010 was a busy month for WIE Ottawa co-sponsorships, namely:

- WISE Steps at Carleton University where female students heard from experts on networking and negotiation as well as have the opportunity to speak to mentors from industry, to meet other students in their respective fields, and to build or refine skills. <a href="http://ottawa.ieee.ca/wie/events/2010/wise steps.html">http://ottawa.ieee.ca/wie/events/2010/wise steps.html</a>
- SPAC (Student Professional Awareness Conference) <a href="http://www.ieee.carleton.ca/spac">http://www.ieee.carleton.ca/spac</a> with the keynote speaker, Celia Desmond, past Region 7 Director/IEEE Canada President who shared her experience and wisdom to the attendees.
- uOttawa Wine&Cheese uOttawa WIE was recently founded in 2010 and this is their first event and well-attended.

During April, WIE members conducted two TISP workshops (one for volunteers and one for teachers of the CECCE). See TISP Ottawa report for more details.

The big event of 2010 was the TD Waterhouse Canada sponsored talk given by Patti Lovett Reid, Senior VP of TD Waterhouse Canada. The title of her talk was "Get Real! The Secret to Authentic Success where she shares her perspective on what she believes contributes to real success and also excerpts of her various books. <a href="http://ottawa.ieee.ca/wie/events/2010/plovettreid.html">http://ottawa.ieee.ca/wie/events/2010/plovettreid.html</a>

On October 7, WIE Ottawa provided "WIE cupcakes" to uOttawa WIE and Carleton WIE student branches to celebrate IEEE Day. <a href="http://www.ieeeday.org/index.php/local-event/upcoming-events">http://www.ieeeday.org/index.php/local-event/upcoming-events</a>

The two remaining events with WIE Ottawa participation for 2010 will be Go Eng Girl 2010 — an exciting opportunity for Grade 7—10 girls across Ontario to visit their local university to learn about the wonderful world of engineering: "A Caring Profession" and NCWIE — National Conference on Women In Engineering which will be hosted at uOttawa this year.

http://www.ospe.on.ca/goenggirl/

Watch the *Events* section in our website for more details. Also check out our Facebook Group for pictures.

WIE Recognitions:

a) Rosalyn Seeton won the IEEE Canada WIE Prize 2010 for her active IEEE WIE contributuions

- b) WIE Carleton won the worldwide WIE Student Affinity Award for their leadership and initiative activities for 2009.
- c) Carleton University's WIE Student Chapter is one of the 10 winners worldwide in the IEEE Day Photo Contest

As you renew your IEEE membership for next year, I would like to encourage you to add WIE membership (only \$25USD/year). Recent surveys indicated that over 25% of WIE membership is male. They responded that while they did not require directly services from WIE, they paid the dues in order to support the women in the profession and also the women in their lives who consider/will consider engineering as a career.

# **Student Branches**

# **Algonquin College**

Chair: Patrick Couture

Faculty Advisor: Abdul A- Azzawi

1. IEEE Student Professional Awareness Conference SPAC 2010

Date: March 4, 2010

Speaker(s): Celia Desmond, Peter Kuciak, David Ritonja

Description: <a href="http://ieee.engsoc.org/spac/index.php">http://ieee.engsoc.org/spac/index.php</a> Organized by IEEE Carleton Student Branch, IEEE

UOttawa Student Branch, and IEEE Algonquin Student Branch

2. DRDC Biometrics Activities and IEEE CIS Biometrics Mission

Date: March 25, 2010 Speaker(s): Qinghan Xiao

Description: Technical lecture by by Qinghan Xiao, Senior Member, IEEE, Defence Research and Development Canada, Ottawa. Held jointly with the IEEE Ottawa Reliability, Computational Intelligence, Computer, Engineering in Medicine and Biology Chapter Societies and the Algonquin College Student Branch.

3. Multigigabit Wireless Multimedia Communications: Future and Core Technologies

Date: May 12, 2010

Speaker(s): Prof. Dr. Vijay K. Bhargava

Description: Distinguished Lecture by Prof. Dr. Vijay K. Bhargava, FRSC, FIEEE, University of British Columbia, Candidate for IEEE Communications Society President-Elect. Held Jointly with Ottawa Held Jointly with Signal Processing, Oceanic Engineering, & Geoscience and Remote Sensing (SP, OE, & GRS), IEEE Ottawa Section, and Algonquin College Student Branch.

4. Pyrolysis Oil: Heat, Electricity, Green Transportation Fuel, and Chemicals too

Date: May 13, 2010

Speaker(s): Mr. Randal R. Goodfellow

Description: Technical seminar by Mr. Randal R. Goodfellow, Senior Vice President Corporate Relations, Ensyn Technologies Inc., Ottawa, Ontario. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter and Algonomic College Student Branch

Reliability Chapter and Algonquin College Student Branch.

5. Mobile Agents for Autonomous Wireless Ad Hoc Networks

Date: June 17, 2010

Speaker(s): Dr. Victor C.M. Leung

Description: Distinguished Lecture by Dr. Victor C.M. Leung, ComSoc Distinguished Lecturer, Dept. of Electrical and Computer Engineering, University of British Columbia. Held Jointly with IEEE Ottawa Section and Algonquin College Student Branch on Thursday June 17, 2010.

6. Renewable and Sustainable Energy

Date: September 16, 2010 Speaker(s): Mr. Alan Rotz

Description: Technical seminars by Mr. Alan Rotz, IEEE Power and Energy Society (PES) President. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, Educational Activities, Algonquin College Student Branch and INMS-National Research Council (NRC) at the NRC.

7. Achieving Software Reliability: A Look at Security Testing

Date: September 16, 2010 Speaker(s): Dr. George Yee

Description: Technical lecture by by Dr. George Yee. Held jointly by the IEEE Reliability Society, Power

Electronics Society, and Algonquin College Student Branch.

8. Intelligent Buildings in an Intelligent Grid – the Next Great Network Build-Out

Date: September 30, 2010 Speaker(s): Mr. Wes Biggs

Description: Technical seminar by Mr. Wes Biggs, President and Chief Executive Officer, Triacta Power Technologies, Inc., Ottawa, Ontario, Canada. Held Jointly with IEEE Ottawa Power and Energy Society Chapter, Reliability Chapter, and Algonquin College Student Branch on Thursday September 30, 2010.

9. Based Management of Optical Networks for Next Generation Disaster Recovery Networking Solutions with WDM Systems, and Cloud Computing and Security

Date: October 6, 2010

Speaker(s): Mr. Andrew MacKay

Description: Technical seminar by Mr. Andrew MacKay, Chief Technology Officer of Superna, Ottawa, Ontario, Canada. Held Jointly with Reliability Ottawa Chapter, Algonquin College Student Branch.

10. Distinguished Lecture "Sensing and Identification in the Internet of Things Era"

Date: October 20, 2010

Speaker(s): Prof. Hossam Hassanein

Description: Lecture given by ComSoc Distinguished Speaker Prof. Hossam Hassanein, School of Computing, Queen's University, Kingston, Canada. Held Jointly with Reliability Ottawa Chapter, Algonquin College Student Branch in conjunction with School of Advanced Technology-Algonquin College.

11. AC Current Measurements The Applications, Design, and Calibrations of Rogowski Coils

Date: October 21, 2010

Speaker(s): Dr. Branislav Djokic, P.Eng.

Description: Technical seminars by IEEE IMS Distinguished Speaker, Dr. Branislav Djokic, P. Eng., Institute for National Measurement Standards, NRC, Ottawa, Ontario, Canada. Held Jointly with EEE Ottawa Section, IMS Chapter, PES Chapter, Reliability Chapter, IEEE Ottawa Section, and Algonquin College Student Branch.

12. Networked 3-D Virtual Collaboration in Science and Education: Towards 'Web 3.0' (A Modeling Perspective)

Date: November 19, 2010

Speaker(s): Prof. Michael Devetsikiotis

Description: Distinguished Lecture by Prof. Michael Devetsikiotis, ComSoc Distinguished Lecturer, Electrical and Computer Engineering, North Carolina State University, Raleigh, NC, USA. To be held jointly with Reliability Chapter, Educational Activities, and Algonquin College Student Branch.

13. Wireless Sensor Networks (WSN) in the Power Grid

Date: November 22, 2010

Speaker(s): Dr. Melike Erol-Kantarci

Description: Technical seminar by speaker Dr. Melike Erol-Kantarci, School of Information Technology and Engineering, University of Ottawa, Ottawa, Ontario, Canada.. To be held Jointly with IEEE Ottawa ComSoc/BTS/CES Society Chapter, Reliability Chapter, Educational Activities, and UOttawa Student Branch.

The Student Branch also participated in the Algonquin College Applied Research Day on April 15<sup>th</sup> where the Section had provided two judges, set-up a membership development booth and provided awards funding. This annual event highlights to the community, industry and supporting organisations the great research student teams at the college undertake that have practical application.

# **Carleton University**

Carleton University <a href="mailto:ieee@doe.carleton.ca">ieee@doe.carleton.ca</a>

 ${\it Chair-Laxman\ Pradhan-\underline{laxmanpradhan@ieee.carleton.ca}}$ 

Faculty Advisor - Calvin Plett - cp@doe.carleton.ca

IEEE Carleton University Student Branch http://www.ieee.carleton.ca

IEEE EMBS Carleton University Student Club <a href="http://www.embs.engsoc.org/">http://www.embs.engsoc.org/</a>

Some of our events that have been conducted through the year are:

1. Orientation Day

2. Volunteer Training Session

3. SPAC, speakers: Celia Desmond, Peter Kuciak and David Ritonja

4. FPGA Programming competition & workshop with judges from industry

5. Alcatel-Lucent Tour

6. Introduction to micro-controllers workshop where students learned about microcontrollers, servos, motors, photo transistors and more.

7. Tech Venture Challenge

8. Battle Royale LAN Party - 24 hours computer gaming event hosted jointly by the IEEE Branches from Carleton U, Ottawa U & Algonquin College.

9. IEEE CodeJam 2010 First year students from Carleton & Ottawa University clashed their minds in this coding competition in order to win top prize.

10. IEEE Student Papers Competition

11. IEEE Webpage competition won first place in Canada, third place in world-wide competition

12. IEEE Team Building Weekend, Executive Training Weekend at Mt. Tremblant

13. Fourth Year Information Session - how to succeed in your fourth year project.

14. IEEE Extreme

15. Numerous WIE events, some with WIE Ottawa, including two book club events, bowling evening participating in WISE ?Steps to Success? Initiating the Engfrosh event ?Women in Engineering and Design Meet and Greet?, booth for IEEE Day, collaborating with WIE U. Ottawa on a mentoring event planned for the end of November.

# **University of Ottawa**

#### **Current Executives:**

Daniel Godfrey – Chair Kevin MacAulay Vacheresse – Vice-Chair Kyle Takman – Treasurer Alex Ayala – McNaughton Administrator Jeffrey Arcand – Communications Kristopher Rodriquez – VP Extrenal Devon Ferrier – VP Internal Lydia Hunter – VP Social

Alexandra Phillips – **Promotions Liason** Somto Ibe – **VP Academic**  Jake Swart – **Webmaster** Andrea Bourdeau – **WIE Chair** 

**Events (November 2009 – November 2010)** 

Battle Royale

**Location**: Porter Hall, Carleton University

**Datetime**: Sat, 2010-11-6 17:00 to Sun, 2010-11-7

#### **Description:**

Battle Royale is a LAN party involving various computer games and gaming consoles. The competition last for a full 24-hours. The goal of the LAN party is to bring together all the future engineers and computer scientists across the City of Ottawa to share their gaming passion in a relaxed environment.

Hosted at the lovely campus of Carleton University, this event has become an annual tradition for the university students in Ottawa studying not just Engineering and Computer Science, but other discipline as well.

Battle Royale offers a unique opportunity to companies to expose themselves to over a hundred engineering and computer science students from both the University of Ottawa and Carleton University. It had been a huge success over the past years.

## Code and Coffee!

Location: 366 Bank St

**Datetime**: Sun, 2010-10-31 17:00

#### Description:

Code and Coffee is an event for students and alumni which began on Oct 31. Students meet at the Bridgehead Coffeehouse at 366 Bank St to enjoy coffee, while coordinating their programing efforts to learning a new technology, become involved in on-going development projects etc... The event is planned on being hosted every two weeks on Sunday so that students can attend. The first week's theme was Javascript and Greasemonkey, a FireFox extension.

#### **Fall Elections**

Location: IEEE uOttawa Website

**Datetime:** Wed, 2010-10-13 (All day) - Fri, 2010-10-15 (All day)

#### Description:

In the Fall, the uOttawa branch held their intermittent election. Below are the newly elected members to the four new positions on our council:

Position: VP Social Position: Promotions Liaison

Lydia Hunter Alexandra Phillips

Position: VP Academic Position: WIE Chair Somto Ibe Andrea Bourdeau

<u>Open Source Technology Showcase - SC2010</u> **Location:** University of Ottawa - Desmarais

**Datetime:** Sat, 2010-08-14 10:00 - 22:00

#### **Description:**

FOSSLC in partnership with the University of Ottawa IEEE hosted the third annual conference on Saturday, August 14th, 2010. This open source technology showcase featured technical, legal, and business aspects of open source use in private industry, community, and government.

With over 21 speakers confirmed in attendance, attendees enjoyed a fantastic day of lectures from some of the finest professionals in the industry.

#### Elections

Location: IEEE uOttawa Website

**Datetime:** Wed, 2010-04-14 (All day) - Fri, 2010-04-16 (All day)

#### **Description:**

In the Spring, the uOttawa branch held their elections for the new year. Below are the candidates and the results.

Position: Chair Position: Mcnaughton Admin

Daniel Godfrey (Elected) Alex Ayala (Elected)

Position: Vice-Chair Position: Webmaster Kevin MacAulay Vacheresse (Elected) Jake Swart (Elected)

Position: VP External VP Communications
Kristopher Rodriquez (Elected) Jeffrey Arcand (Elected)

#### **Oral Paper Competition**

**Location:** University of Ottawa

**Datetime:** Fri, 2010-03-26 19:00

## **Description:**

This year the University of Ottawa IEEE Student Branch hosted the 2010 IEEE Oral Paper Competition! The competition involves a 15-20 min presentation followed by a Q&A session. The topic has to be anything within the IEEE realm. Competition is open to all undergraduate students in Engineering (SITE) and Computer Science. The local uOttawa competition was held Friday March 26 at 7pm in the uOttawa IEEE office (SITE 2021). The winner of that competition was then able to compete at the Eastern Ontario IEEE Oral Competition being held at the University of Ottawa Colonel By building, CBYA707, March 30th at 7pm.

#### <u>CodeJam! Programming Competition Registration</u>

**Location:** University of Ottawa - SITE 2021

**Datetime:** Fri, 2010-03-26 10:00

#### **Description:**

Competing with other students for prizes and cash by solving a number of problems using C/C++ or Java, students from uOttawa coded head to head with Carleton University students.

#### Women in Engineering Wine and Cheese

**Location:** Desmarais 12th Floor - University of Ottawa

Datetime: Fri, 2010-03-12 19:00 - 22:00

#### **Description:**

A classy event for professional and student women engineers hosted by the uOttawa WIE celebrating women in engineering since 1876. Attended by Personal Relations representatives from large corporations such as IBM, students were able to discuss technology and business on a personal level with professors, entrepreneurs, and professionals alike while enjoying delicious wine, and cheese.

#### Student Start-ups 5

**Location:** The Code Factory, Ottawa ON

**Datetime:** Mon, 2010-03-22 18:00 - 20:00

#### **Description:**

Students and Startups is about connecting students looking for meaningful and relevant work experience with startups looking for energetic and enthusiastic candidates. Students and Startups took place at TheCodeFactory where students from Carleton University, Algonquin College and University of Ottawa were welcomed and encouraged to attend. The event served as a great way for interested students, geared specifically to those in 3rd and 4th year engineering and computer science, to find meaningful and exciting employment. Students and Startups is geared towards."

#### IEEE SPAC (Student Professional Awareness Conference ) 2010

**Location:** Fenn Lounge, Residence Commons, Carleton University

**Datetime:** Thu, 2010-03-04 18:00 - 22:00

#### Description:

IEEE Student Professional Awareness Conference (SPAC) is a formal dinner event that aims to bridge the gap between students and their career goals. SPAC offers students and employers a unique opportunity to network with each other in a professional environment along with professionals and academics

representing the field of Engineering. Students were welcomed to attend and listen to professionals talk on specific topics to aid in professional development.

#### Hacking Techniques and Network Security Counter-Measures

**Location:** Fauteux 227

**Datetime:** Mon, 2010-01-18 19:00 - 22:00

#### Description:

Network Security, the most common attacks, how they are done and how to prevent them are were discussed for free the University of Ottawa. A demonstrative presentation with clear examples on a live network was given by DEF CON invitee Rob Postill, a prestigious White-Hat Hacker who began giving network lectures at the age of 16. Students learned about common attacks (such as man-in-the-middle), how they are performed (such as ARP Poisoning) and how to prevent them (such as structured firewalls).

#### Researching, Writing, Publishing, and Succeeding

**Location:** LAMOUREUX 219

**Datetime:** Wed, 2010-01-20 18:00 - 19:00

#### **Description:**

Guest lecturer Daniel Shapiro Ph.D. Candidate, presented his tips and tricks to students covering topics such as: choosing a professor; obtaining grants; Searching for Publications; The anatomy of a literature review; and finding educational resources hidden deep within Subversion repositories. Finally, the lecture concluded on a LaTeX tutorial.

#### IEEE uOttawa Student Branch Meet and Great

Location: SITE

**Datetime:** Tue, 2010-01-19 08:00 - 10:00

#### **Description:**

Taking advantage of the free time usually accompanying a new semester's start, the Student branch executives offered free coffee and cookies in order to give students a chance to find out what the IEEE is, which event & activities were upcoming, and answer questions.

#### CUSEC GOTO 2010

**Location:** Montreal

**Datetime:** Thu, 2010-01-21 (All day) - Sat, 2010-01-23 (All day)

**Description:** 

CUSEC is the Canadian University Software Engineering Conference, an annual conference about the mointeresting topics in software engineering organized for and by students from universities across Canad What makes CUSEC unique is that it is the only software specific conference that targets students. The lectures given are told by many of the figureheads of software engineering and it's culture to date including talks from: Richard Stallman, David Lorge Parnas, Kathy Sierra, Ralph Johnson, Kent Beck, Alistair Cockbut Dave Thomas, Tim Bray and many more. This year, the University of Ottawa IEEE Student Branch provides a bus to and from CUSEC courtesy of the EEF.	da. Γhe ing rn,
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# **IEEE Ottawa Section Noteworthy Details**

#### 1. IEEE Ottawa Section won hosting of ICC 2012

Thanks to hard work of Wahab Almuhtadi (past Section Chair, and Communications Society Ottawa Chapter Chair), plus the strong support of Telus, Ottawa Tourism, Ottawa Convention Centre, and many many other local industry and academia supporters, the Ottawa Section has won the right to host the prestigious International Conference on Communications in 2012. It may seem so long away; however, this effort has taken a year to get to this point and a lot of work is yet to come. More detail will be provided on our website. In the next few months, we will be looking forward to contacting those who have already come forward to help.

The announcement was made on June 17, 2009, at the International Conference on Communications (ICC) 2009 in Dresden, Germany. Ottawa beat out other bidding major international cities. ICC 2012 will be held at the Ottawa Convention Centre in Ottawa, Ontario, Canada from June 10 till June 15, 2012. The estimated number of the conference attendees will be 1500 to 2000. The conference will have a significant impact in regaining the reputation and business of the Canadian telecom and high tech companies that are facing many challenges during these recent years, and would raise the profile and visibility of these companies. As well as the conference will benefit the academia, scientific and engineering research, industry and local business in Ottawa.

ICC2008 was held in Beijing, China http://www.ieee-icc.org/2008/. ICC2009 was held in Dresden, Germany http://www.ieee-icc.org/2009/. ICC2010 will be held in Cape Town, South Africa http://www.ieee-icc.org/2010/, and ICC2011 will be held in Kyoto, Japan http://www.ieee-icc.org/2011/.

#### 2. Ottawa wins hosting the Electromagnetic Compatibility Society Symposium 2016

Electromagnetic Compatibility Symposium is the EMC Society's flagship event that is held annually in North America. Attendees are between 1500 and 2000. The local team made of Qiubo Ye (leader), Syed Bokhari, Kin Sze, Wahab Almuhtadi, Sreeraman Rajan, and Gregory Hiltz were instrumental to the bid success. This is one of many events the IEEE Ottawa Section continue to pursue for the benefit of local members and economy within its service area. Also, thanks for the active and strong support from the IEEE Ottawa Section Executives in many ways, together with the great support from Jacques Drury, Account Manager Ottawa Convention Centre, and coordinator of this site inspection, and Barbara Cross, Senior Convention Sales Manager, Ottawa Tourism.

#### 3. IEEE Eastern Ontario Oral Student Paper Competition

On March 30, 2010, the University of Ottawa hosted the two decade tradition of the IEEE Eastern Ontario Oral Student Paper Competition. This events brings the first place oral paper winners from each of Queens University, Royal Military College, Carleton University, Algonquin College, and the University of Ottawa. Summary of Results, and Presentation Topics ...

First Place: Royal Military College, Multiple Stage Linear Mass Accelerator

Second Place: Queens University, Efficient LED Lighting Ballast
Third Place: University of Ottawa, USB -to -USB Communication

Fourth Place (Tie): Algonquin College, Hybrid FibreOptic Lighting System Carleton University, Internet

**Controlled Automated Home** 

Organizers Sponsors for Prizes (total \$600), and Food Daniel Godfrey and the IEEE IEEEOttawa Section Student Branch at U. Ottawa. IEEE Kingston Section

## 4. Recognition - IEEE WIE Carleton University Student Branch Affinity Group

IEEE WIE Carleton University Student Branch Affinity Group has been awarded the WIE 2009 Student Branch Affinity Group of the Year and has won a prize of \$250.00 US. Congratulations to WIE Carleton Unviersity Student Branch Affinity Group for their commendable performance.

#### 5. Recognition - Mr. Cao Wang

Ottawa AP/MTT joint chapter congratulates our member Mr. Cao Wang on being selected to receive an MTT-S Graduate Fellowship for 2010. The award consists of a check for \$6,000 and a certificate of recognition from the society and is presented at a special Student's Luncheon held during the IMS (May 24-28, 2010). Chao is a Ph.D. Candidate and Vanier Canada Graduate Scholar, Microwave Photonics Research Laboratory, School of Information Technology and Engineering, University of Ottawa.

#### 6. IEEE Canadian Foundation Awards

- The Board has awarded Rosalyn Seeton (Ottawa Section) the IEEE Canadian Foundation 2010 Women In Engineering Prize. This Prize in the amount of \$1000 is awarded to a female IEEE Canada member who received her first professional degree within the last ten years and who is active in IEEE activities. Her nominator was Jennifer Ng-Ain-Kin. For detail on this award, please visit ... <a href="http://ieeecanadianfoundation.org/EN/clift prize.php">http://ieeecanadianfoundation.org/EN/clift prize.php</a>.
- The Board has awarded Carleton University Student Mohammed Haggag the IEEE Canadian Foundation Scholarship in the amount of \$5,000. It is intended to pay a major portion of the final year tuition fees and related academic expenses of a student who has demonstrated a previous commitment to the IEEE McNaughton Learning Resource Centre and related IEEE activities, and who indicates a desire to continue this activity. Mohammed is the IEEE Carelton University Student Branch Events Coordinator and is in his fourth year Communications Engineering. His nominator was Professor, Doctor Calvin Plett. For detail on this scholarship, please visit ... <a href="http://ieeecanadianfoundation.org/EN/mcn\_sch.php">http://ieeecanadianfoundation.org/EN/mcn\_sch.php</a>.

#### 7. Recognition - David Falconer

Dr. Falconer was announced as the winner of the IEEE Communications Society Award for Public Service in the Field of Telecommunications at GLOBECOM'09 held in Honolulu.

Exact wording of the citation is as follows:

Citation: "For outstanding public service in advancing the theory and practice of wired and wireless data communication and mentoring a generation of communication engineers"

#### 8. Recognition - Dr. Qinghan Xiao

Dr. Xiao, of DRDC, who has been appointed as Computational Intelligence Society (CIS) Representative on IEEE Biometric Council. He replaces Prof. Evangelia Micheli-Tzanakou, a CIS Distinguished Lecturer who lectured in Ottawa two years back.

#### 9. Fellowship

The Engineering Institute of Canada Awards Recipients (Conferred on Feb 27, 2010, in Ottawa by the EIC): Dr. Abdulmotaleb El Saddick - Fellow EIC; est professeur et titulaire d'une chaire de recherche à l'Université d'Ottawa

#### 10. Technical Sponsorship:

IEEE Ottawa Section is a Technical Sponsor for the following:

Topic: IEDate: August 25-27, 2010

Location: Halifax Marriott Harbourfront Hotel, Halifax, NS, Canada EE Electrical Power and Energy

Conference 2010 (EPEC 2010)

IEEE Ottawa Section is a Technical Sponsor for the following: Topic: IEEE International Carnahan Conference on Security

Technology 2010 (ICCST 2010) Date: October 12 - 15, 2010

Location: Dolce Hayes Mansion Hotel, San Jose, California, USA IEEE Ottawa Section is a Technical Sponsor for the following:

Topic: IEEE Vehicular Technology Conference (Fall)

Date:Sept 6-9, 2010

Location: Westin Hotel, Ottawa, Canada

2010 IEEE International Workshop on Medical Measurements and Applications (MeMeA) April 30-May 1, 2010 University of Ottawa.

The Workshop focuses on all the issues related to sensors and measurements in the medical field. The non-exhaustive list topics to be covered includes: sensors for medical systems and medical specific instrumentation; embedded systems and signal processing; sensor fusion and calibration; standards and medical applications; digital imaging and communication in medicine (DICOM) issues; automatic monitoring of health parameters. http://memea.ieee-ims.org

#### 11. We have an Ottawa Section Member winner:

IEEE T-shirt Giveaway ... IEEE shirt Congratulations to our June 2010 IEEE Merchandise Giveaway winners. Five random IEEE Members are selected each month: Mario Lefebvre Ottawa, Canada

#### 12. In Memorium - Prof. Nicolas Georganas

IEEE Ottawa Section is mourning the loss of Prof. Nicolas Georganas, IEEE Fellow. Prof. Nicolas Georganas was a Distinguished University Professor in Faculty of Engineering, University of Ottawa. He was appointed © IEEE Ottawa Section 2010

founding dean of the Faculty of Engineering in 1986, where he served a seven-year term. He was appointed associate vice-president, research (external) on May 1, 2005. Nicolas Georganas published over 400 technical papers, co-authored a book on computational algorithms and was editor-in-chief of ACM Transactions on Multimedia Computing, Communications and Applications, as well as an editorial board member for many respected computing journals. Some of the many prestigious honours he received include the Humboldt Research Award (2010), the Queen Elizabeth II Golden Jubilee Medal (2003) and the Killam Prize for Engineering (2002). He was named secretary of the Academy of Science, Royal Society of Canada (2008); Officer of the Order of Canada (2007) and Pioneer of Computing in Canada (2005). He held a Canada research chair in information technology from 2001 to 2005 and was inducted as a Fellow of the Institute of Electrical and Electronics Engineers (1990), the Engineering Institute of Canada (1994), the Canadian Academy of Engineering (1997) and the Royal Society of Canada (1997). Professor Georganas received an honorary doctorate from the Darmstadt University of Technology, in Germany, and from the National Technical University in Athens, Greece.

IEEE Ottawa Section and its members offer their sincere condolences to Prof. Georganas's wife, Jacynthe, and his two sons, Emmanuel and Nikita, and to the other members of his family.

#### 13. IEEE Day Oct 7-8, 2010

The inaugural edition of IEEE Day will be held 7-8 October 2010, global event to celebrate the achievements of IEEE members. IEEE Day recognizes IEEE members - past, present, and future - on the anniversary of the first time IEEE members gathered to share their technical ideas back in 1884 (when it was two different organisations).

IEEE Members and organizational units around the world (Regions, Sections, Societies, Chapters, Affinity Groups, Student Branches, etc.) are encouraged to take an active role in organizing celebration events. IEEE Day provides an exceptional opportunity to recognize existing members, and introduce potential members to IEEE.

IEEE Ottawa Celebrated the IEEE Day on the 6th Oct 2010, due to scheduling logistics.

# **IEEE Ottawa Executive 2010**

The current IEEE Ottawa Section executive officers are as following:

• Chair: Mr. Raed Abdullah, P.Eng. raedabdullah@ieee.org

• Vice-Chair: Dr. Sreeraman Rajan, sreeraman@ieee.org

Treasurer: Dr. Rami Abielmona, P.Eng. - rabielmo@ieee.org
 Secretary: Ms. Carolyn MacIsaac, Carolyn\_macisaac@ieee.org
 Past Chair: Dr. Wahab Almuhtadi, P.Eng., almuhtadi@ieee.org

A complete list of the Ottawa Section officers follows in the next section.

## **Ottawa Elections 2011**

The Section officers proposed by the Nomination Committee for the Ottawa Section Executive in 2011:

Chair: Dr. Sreeraman Rajan, sreeraman@ieee.org
 Vice-Chair: Dr Rami Abielmona, P.Eng. - rabielmo@ieee.org

Treasurer: Ms Anissa ShaddySecretary: Mr. Boban Petrovic

• Past Chair: Mr. Raed Abdullah, P.Eng. raedabdullah@ieee.org

Other nominations supported by a petition of at least 10 IEEE Ottawa full members are welcome too, and should be sent to the Nominations Committee Chair Wahab Almuhtadi <u>almuhtadi@ieee.org</u> no later by Nov. 1, 2010.

Voting will take place after presentation of the candidates at the Annual General Meeting. The results will be announced at the Annual General Meeting.