



IEEE

Ottawa Section



Annual Newsletter 2007

REPORT FROM THE SECTION CHAIR

Dear IEEE colleague,

The IEEE Ottawa Section has been established in 1944 and has grown to a large diverse technical and professional section. The IEEE Ottawa Section belongs to IEEE-Region 7, better known as IEEE Canada. The IEEE Ottawa Section consists of 18 Technical Chapters, 11 Committees, 4 Affinity Groups and 3 Student Branches. The Ottawa Section represents more than 2200 individual members and serves to promote local events significant to areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, reliability, electric power and consumer electronics among others. This Section offers great networking opportunities at several events organized throughout the year.

This year, IEEE Canada recognized the IEEE Ottawa Section, by presenting it with an "Exemplary Award", as the best 2006 Section in Canada for its outstanding achievements. In previous years, the IEEE Ottawa Section has twice been recognized with two most prestigious IEEE awards at the international and regional levels. As always, IEEE Ottawa Section continues to maintain the high standard of running a range of various activities to serve its members and the engineering community at large. The major milestones are:

1. The 7th Electrical Power Conference (EPC) 2007 (<http://www.ieee.ca/epc07>) held on October 25-26, 2007 and organized by IEEE Canada, Ottawa Section, and Montreal Section. Within six years of the founding of Electrical Power Symposia (EPS 2001-2006) (e.g. refer to www.ieee.org/EPs2006) in 2001 by IEEE Ottawa Section, PES Chapter, RS Chapter and Educational Activities, EPS has fully bloomed into an international conference: EPC2007. The EPC 2007 theme focused on "Renewable and Alternative Energy Resources". EPC 2007 had six plenary sessions, six panel sessions and a

luncheon session presented by industry and academia experts. There were many oral and poster sessions. EPC 2007 received 119 technical papers (65 from Canada, 4 from US, and 28 from other countries such as Iran, Algeria, Brazil, China, Taiwan, India, Iran, Iraq, Romania, Spain, Sweden, Thailand, Tunisia, and United Arab Emirates) and accepted only 97 of them. The next EPC will be held in Vancouver, BC in October 2008.

2. The 6th Annual Electrical Power Symposium (EPS) 2006 (www.ieee.org/EPs2006) was successfully held on November 9 -10, 2006 in Ottawa. Dr. Bob Hannah was the moderator of the Symposium. A Tutorial and a Field Visit was held on Nov. 9. The Tutorial had 7 speakers, and the Field Visit was to Almonte Hydro, Mississippi River Power Corp.; Canadian Hydro Components Ltd., Almonte; Powerbase Automation Systems Inc., Carleton Place; and Triacta Power Technologies Inc., Almonte, Ontario. The Symposium was held on Nov. 10. The symposium theme was "From Tesla's AC Power System to Distributed Generation and Smart Grid." The Symposium featured 12 speakers from government, industry, and academia, some from USA and Europe. EPS2006 was organized by IEEE Ottawa Section, PES Chapter, RES Chapter and Educational Activities.

3. The Noninvasive Blood Pressure (BP) Measurements & Standardization Workshop 2007 "One Hundred Years Later: Are We Really Measuring Blood Pressure?" was held on February 2, 2007 in Ottawa and organized by IEEE Ottawa Section, IEEE Ottawa Instrumentation and Measurement Society, Chapter, IEEE Ottawa Section Educational Activities, and EPMG-INMS/NRC. It had high attendance and presenters from Europe, USA & Canada. A BP Committee was formed, and is supported by the IEEE IMS TC25. For more

details, please visit the website <http://ottawa.ieee.ca/ims/BPW2007/>.

4. The 5th IEEE Ottawa Robotics Competition was held on May 6, 2007 at the University of Ottawa (UO). The competition was sponsored by SITE, Faculty of Engineering (UO), Larus Technologies Corp, EDA Tech Forum and Hydro Ottawa. The event was targeted towards grade 7 & 8 students. This year each team had 9 weeks to build a robot using a Lego Mindstorms kit to play curling or solve an obstacle course. 24 teams from 9 local schools, with 11 senior teams and 13 junior teams took the challenge. Please see more details at <http://orc.ottawa.ieee.ca>.
5. The IEEE FPGA Workshop 2007 ("FPGA design flows & programming competition kick-off" and "Innovation implementation: challenges and rewards") was organized by the IEEE Ottawa Section, EMS Ottawa Chapter, and Section Ed. Activities, in conjunction with CMC Microsystem's CWSOC 2007. The workshop was held on October 16-17, 2007 at Carleton University, and Crown Plaza Hotel, Ottawa. Please see more details at the Workshop website <http://ottawa.ieee.ca/ems/fpgaworkshop>.
6. The IEEE Eastern Ontario Student Paper Competition held on March 29, 2007 was organized by Algonquin College Student branch, and sponsored by IEEE Ottawa Section and Kingston Section. Winners were Carleton U, RMC, Queens U, and Algonquin College.
7. IEEE Ottawa Section was a technical co-sponsor for three conferences that were held in Ottawa: The 41st IEEE International Carnahan Conference on Security Technology (ICCST), October 8-11, The 2007 International Workshop on RObotic and Sensors Environments (ROSE 2007), October 12-13, and The 6th IEEE International Workshop on Haptic Audio Visual Environments and Games (HAVE 2007), October 12-14. The IEEE International Carnahan Conference Executive Committee was so impressed by the assistance provided by IEEE Ottawa Section that they have asked the IEEE Ottawa Section to provide the technical co-sponsorship for the next [ICCST 2008 conference](#) that will be held in Prague, Czech Republic, on October 13-16, 2008. This is an unexpected request reaching out to another continent, which speaks highly of the quality of the contact established and of the assistance provided.
8. The IEEE Ottawa Section continues to collaborate with other IEEE Sections of R-7, Engineering Institute of Canada (EIC), OCRI, IEEE/IET Ottawa Branch, PEO Ottawa Chapter, Canadian Academy for the Advancement of Science, Ottawa Talent Initiative, and to build relationships with the Partnership Group for Science Engineering (PAGSE) and Royal Society of Canada (RSC).
9. IEEE Ottawa Student Branches of Carleton University, University of Ottawa and Algonquin College held IEEE Connects 2007 on Oct. 12, 2007 under the theme "From Backpack to Briefcase." There were 3 speakers at this event, followed by an hour of networking opportunities for the sponsors, employers and students. <http://www.ieeeconnects.com/>.
10. Ottawa Section Life Member Affinity Group was officially inaugurated on Oct. 4, 2007 at a very successful founding meeting at NRC sponsored by the IEEE Ottawa Section. A big thanks goes to Ron Putt, Hussein Mouftah and all who participated in the meeting. The meeting was welcomed and opened by the Section Chair and followed by election and then concluded by Ron Putt with his very interesting presentation on the Ontario Hydro Tunnel Project. David Coll was elected Chair and John Wilson Vice-Chair. There were 18 Ottawa life members as well as the Section Chair and Past Chair attending. Hussein Mouftah was the organizing chair.
11. IEEE Ottawa Section, IMS Ottawa Chapter, and Section Ed. Activities are planning to organize a 2-day workshop on the hottest topic in health care: Patient Safety that will be held in Feb. 2008. Theme: D2H2 Monitoring System for Adverse Reaction to Medication (ARM); Engineering Principles, Reasons, and Evidence; Role of Engineering in Improving Patient Safety (Analogy with Aviation).
12. The Ottawa Section Membership Development developed Strategic (Battle) Plan to deal with the reduction of Ottawa Section members in arrears (628 from Ottawa; of which 200+ are student

members). Strategy of the approach: Every member counts! The MD along with chapter chairs contacted members by phone and e-mail and provided a presentation deck for all chapter / section events targeted to bring back members.

13. Since the last AGM, some of the Section members have been recognized for their achievements and promoted into IEEE Fellows. So Congratulations to Dr. Hui Chun Liu, NRC Canada for his contributions to resonant tunneling and intersubband quantum devices, Dr. Andrew S. Podgorski, ASR Technologies for his contributions to broadband immunity and compatibility certification, Dr. Paris W. Vachon, Defence R&D Canada for his contributions to operational marine applications of imaging radar, Dr. Barry Wood, NRC Canada for his contributions to fundamental electrical measurement standards, and Dr. Charles Woodside (Life Fellow), Carleton University for his contributions to real-time software system performance engineering.
14. Eight members have been elevated to Senior Member level. Hussein Mouftah, received the EIC-F, La Médaille Julian C. Smith Medal, Vijay Narasimhan received the RAB Larry K. Wilson Regional Student Activities Award, and Branislav Djokic has been nominated for the RAB Leadership Award.
15. The IEEE Ottawa Section worked successfully in achieving both the Section goals of year 2007 and the IEEE Canada 2007 Goals and Measurable.
16. Furthermore, our Ottawa Chapters, Committees, Affinity Groups, and Student Branches have been actively organizing several successful meetings including technical meetings where some presentations were done by well-known IEEE Distinguished Lecturers. For more details on the activities, please see the following pages.

Volunteering is not just an act of good will but also a great opportunity for development and advancement in many areas of life. Volunteering benefits not only the IEEE organization or engineering community but also the volunteers, as it provides professional advantages and personal growth.

The IEEE Ottawa Section is continuously improving its service, assists its members in upgrading their knowledge base, professional skills and networking capabilities and providing maximum benefits of belonging to the largest engineering organization in the world.

The IEEE vision is to advance global prosperity, to foster technological innovation, to enable members' careers and to promote community worldwide. The IEEE mission is to promote the engineering process of creating, developing, integrating, sharing, and applying knowledge about electro and information technologies and sciences for the benefit of humanity and the profession. I hope that by working together we will be able to achieve the IEEE vision and mission.

I would like to thank everybody at the Section Executive for their support and hard work, and to our volunteers for their participation in many activities of this vibrant Section. Also, I would like to thank our sponsors, supporters and friends for their financial contributions to support the Section activities.

Sincerely,

Wahab Almuhtadi, Ph.D., P.Eng., SMIEEE

Ottawa, October 27, 2007



The IEEE Ottawa Section Executives

L-R-Bottom-Up: Y. Hussain, P. Raman, B. Djokic, W. Almuhtadi, Gh. Kadri, Q. Ye, F. Khan, K. Liu, Sh. Nijhawan, G. Yee, V. Narasimhan, J. Valdes, Jurek Sasiadek, A. Gupta, S. Rajan, R. Abielmona, R. Abdullah, V. Groza, A. Quirt, A. Herrera, C. Plett, B. Christian, Y. Pakzad, H. Reekie, H. Mouftah, C. Cantlie, QJ. Zhang, J. Grefford, T. Lavrisa

Ottawa Section Chapters and Groups Report

Currently in our Section there are: 18 technical Chapters, 11 Committees, 4 Affinity Groups and 3 Student Branches. Some representative briefs on activities since AGM 2006 are provided here:

CHAPTERS:

Aerospace and Electronic Systems Society (AESS):

We have held a number of talks and site visits over the past year. Many were held in conjunction with other IEEE local Chapters or with the Ottawa Branch, IET-UK. Often they were run in conjunction with an optional pub-style supper:

- RFID tags - John Rivenel
- Fugro Site Visit - printed in AESS magazine
- An RAF Aircraft Engineer - some reminiscences
- The North West Passage - is Canada's Sovereignty over its Waters at Risk? by Gerry Kenney
- Superdarn an HF Radar for Ionospheric investigations - George Sofko

Among other meetings being planned for the coming year, we intent to host a Distinguished Lecturer in early 2008

Antennas / Propagation / Microwaves Society (AP/MTT):

The Chapter has run 21 technical meetings during the past year; many of which were co-organized with the Dept. of Electronics of Carleton U. Some of the meetings were co-organized with other chapters.

- How Ferromagnetism Really Works: a Simple Physical Theory by Dr. Robert G. Harrison, Carleton University
- A DSP-Based Retrodirective Array System for Digital Communications at 2.4GHz by Dr. Zhizhang (David) Chen, Dalhousie University
- Metamaterials for Miniaturization of Narrowband and Ultra-Wideband Antennas by Prof. John Volakis, an AP DL, Ohio State University
- Hybrid Frequency Domain Methods for Electromagnetics: From Analysis to Design by Prof. John Volakis
- Overview of Computational Electromagnetics: from Very Low Frequency to Ultra Large Scale Problems by Dr. Weng Cho Chew, an AP DL, University of Illinois
- Complex Coordinate Stretching for Absorbing Boundary Condition by Prof. Weng Cho Chew
- Electromagnetics is Fun? by Dr. James Rautio, a Microwave DL, Sonnet Software, Inc.

- The Life of James Clerk Maxwell by Dr. James Rautio
- Optimizing the Performance of Electrically Small Antennas by Dr. Steven Best, an AP Distinguished Lecturer, MITRE Corporation
- The Performance Properties and Limitations of Antenna Elements Spaced Closely to PEC, PMC, and Electromagnetic Bandgap Ground Planes by Dr. Steven Best
- EMC in Switched Mode and Un-interrupted Power Supplies, by Prof. S.B. Deosarkar, Dr. Babasaheb Ambedkar Technological University, Lonere, India
- Design of UHF RFID Systems with the aid of Computational Electromagnetics, by Dr. C. J. Reddy, EM Software & Systems (USA) Inc.
- Modeling of Interconnects on Multilayer Lossy Silicon Structures with Thin-metallic Ground, by Prof. Jiming Song, Iowa State University
- A Review of the Improved Wheeler Cap Efficiency Measurement Method for Small Antennas, by Prof. Ronald H. Johnston, Professor Emeritus, University of Calgary
- Electrically Small Antennas, by Prof. Hiroyuki Arai, Yokohama National University, Japan
- Multilevel Modeling Techniques for Time Domain Analysis of Microwave and High Speed Circuits, by Dr. Huilian Du, University of Victoria
- Reconstruction of Polygonal Cylindrical Targets from Their Monostatic RCS, by Prof. Hiroshi Shirai, Chuo University, Japan
- Nature Inspired Optimization Techniques in Engineering: Let Darwin and the bees help improve your antenna designs, by Prof. Yahya Rahmat-Samii, Distinguished Lecturer, UCLA
- Personal Communication Antennas including Human Interactions: Handheld, Wearable and Implanted Devices, by Prof. Yahya Rahmat-Samii
- Microwave Antennas for Medical Applications, by Prof. Koichi Ito, Distinguished Lecturer, Chiba University, Japan
- Phantoms for Evaluation of Interactions Between Antennas and the Human Body, by Prof. Koichi Ito.
- Technical presentation by Prof. John Litva, on "Indoor Propagation Modeling".
- More events are being planned for this fall.
- Among others, Chapter Chair Qiubo Ye was awarded AP-S Chapter Chair Travel Grant to attend IEEE AP-S Symposium. We have also elected a Vice Chair. During this last year, we

have launched and updated our chapter web site.

http://www.ottawa.ieee.ca/ap_mtt/home/

Communications Society and Broadcast Technology Society (ComSoc/BTS): Our chapter has held one activity during the year

- Cooperative and Opportunistic Communication, by Prof. Behnaam Aazhang, a Distinguished Lecturer, Rice University, Houston
- Chapter is currently working to bring another DL speaker in December.

Computational Intelligence Society (CIS): During the past year (Sept 2006 through August 2007), the Computational Intelligence society Chapter has held five talks.

- "Graph Mining and its Applications" was presented on September 15, 2006 by Professor Jian Pei of Simon Fraser University
- "Information Retrieval from Automatic Speech Transcripts" was presented on November 17, 2006 by Professor Diana Inkpen of the University of Ottawa
- "Lying, Deception and Face Familiarity with Visual Evoked Potentials" was presented on December 04, 2006 by Professor Evangelia Micheli-Tzanakou (Distinguished Lecturer) of Rutgers University.
- "Information Technologies Applied to Medicine" was presented on February 07, 2007 by Professor Monique Frize of the University of Ottawa (also affiliated with Carleton University)
- "Current Applied Research in Machine Learning: Medical Abstracts and Digital Games" was presented on Tuesday July 17, 2007 by Professor Stan Matwin of the University of Ottawa
- The chapter's web site (<http://ottawa.ieee.ca/ci>) continues to grow with the chapter and the society as a whole.

Computer Society (CompSoc): Our chapter has a new vice chair - web master this year, Dr Fernand Boudreau. We have hosted six technical meetings and one speech for a student chapter event

- Java class loading and verification - what really happens before printing "Hello World!", by Mark Bottomley, IBM Software Lab (A joint seminar with IEE/IET)
- Architectural Techniques for Interoperability and Coexistence, by Dr Bob Gezelter, Distinguished Visitor Program (A joint technical meeting with the NRC-IIT)
- Research in Secure Software, by Dr George Yee, Chapter Chair

- IEEE Computer Society and Careers in Computing by Dr George Yee, Chapter Chair (feature speech at the 2007 Awards Ceremony of IEEE Code Jam, a first year programming contest, Carleton University).
- Protecting Privacy by Spying on Users by Andrew Patrick, Senior Scientist, Information Security Group, NRC on Wednesday, October 17, 2007
- Business Value Driven Engineering and Management of Web Services and their Compositions by Vladimir Tasic, Researcher, NICTA (Australia), at Carleton University on Monday, October 22, 2007
- Enforcing Data Retention Time in E-Commerce Data Mining by Juan Pablo Yopez, Systems Engineer, Canadian Bank Note Company, at Carleton University on Wednesday Nov. 21, 2007
- All our meetings were well attended by both IEEE members and non-members alike, and all benefited from these learning opportunities.

Components, Packaging and Manufacturing Technology Society (CPMTS): This Chapter held a total of 9 technical presentations at Carleton University that were given by invited speakers.

- "Overview of Computational Electromagnetics: from Very Low Frequency to Ultra Large Scale Problems" and "Complex Coordinate Stretching for Absorbing Boundary Condition by W. C. Chew, University of Illinois held on Nov. 6, 2006
- "Optimization the Performance of Electrically Small Antennas" and "Performance Properties & Limitations of Antenna Elements Spaced Closely to PEC, PMC, and EM Bandgap" by Steven Best, MITRE Corporation, Bedford, MA held on Nov. 9, 2006
- "Modeling of Interconnects on Multilayer Lossy Silicon Structures with Thin-metallic Ground" by Jiming Song, Iowa State University
- "A Review Of The Improved Wheeler Cap Efficiency Measurement Method For Small Antennas" by Ronald Johnston, University of Calgary held on July 24, 2007.
- "Electrically Small Antennas" by Prof. Hiroyuki Arai, Yokohama National University, Japan and "Multilevel Modeling Techniques for Time Domain Analysis of Microwave and High Speed Circuits" by Dr. Huilian Du, University of Victoria held on July 26, 2007
- "Reconstruction of Polygonal Cylindrical Targets from Their Monostatic RCS" by Prof. Hiroshi Shirai, Chuo University, Japan

Dielectrics and Electrical Insulation Society (DEIS): We have hosted a meeting, jointly with Montreal, about nano-materials. There are two more planned this October and November.

Electromagnetic Compatibility Society (EMCS): Our chapter has held two events this year:

- Advances in IC design for EMI Control, by Prof Etienne Sicard, Distinguished Lecturer, INSA, Toulouse, France
- EMC in Switched Mode and Un-interrupted Power Supplies by Prof S.B. Deosarkar of the university of Maharashtra, Lonere, India

Our events were well attended. And we will continue organize similar events.

Electron Devices Society, Circuits and Systems Society, and Solid-State Circuits Society (EDS/CAS/SSCS): Our technical meetings during the last year mainly include distinguished lecturer series:

- Design of UHF RFID Systems with the aid of Computational Electromagnetics, by Dr. C. J. Reddy, EM Software & Systems (USA) Inc
- State Space Realization of a 3D Image Set with Application to Noise Reduction of Fluorescent Images, by Prof. Lin Zhiping, Electrical and Electronic Engineering, Nanyang Technological University (NTU), Singapore
- Object-Oriented Computational Electromagnetics, by Dr. Poman So, Assistant professor, University of Victoria
- Nanoengineered Thin Film Research and Nanofabrication Facilities, by Dr. Michael Brett, Dept. of Electrical and Computer Engineering, University of Alberta
- Electromagnetics is Fun? by Dr. James Rautio, Sonnet Software, Syracuse
- The Life of James Clerk Maxwell, by Dr. James Rautio, Sonnet Software, Syracuse
- Power Minimization in Digital ICs, by Prof Carl Sechen, University of Texas at Dallas
- University-Industry Linkage Programs in India by Prof L. K. Maheshwari, Birla Institute of Technology & Science, Pilani, India
- Fiber to the X: When, Where and How?, by Dr. Wei-Ping Huang, Dept. of Electrical and Computer Engineering, McMaster University
- Fundamentals of modeling/analysis of power electronic circuits, by Dr. Vijay K. Sood, Senior Researcher, IREQ (Hydro-Québec)

More meetings are planned in the fall.

Engineering Management Society/Society on Social Implications of Technology (EMS/SSIT): We have organized the following well-attended events:

- Business Case: a workshop provided an insight on some of the techniques, tools and frameworks that top tier management consulting firms use to address their clients business issues.
- Engineering Management Today: a seminar offered participants a better understanding of what Engineering Management is today as well as a forum to discuss the trends in Engineering Management and what it takes to a good manager and Innovation Management.

We are now planning events for the next year. The first is an FPGA Workshop jointly with our Section, the Educational Committee, and the CMC Microsystems's CWSOC 2007. The main goal of the FPGA Workshop 2007 is to increase understanding and knowledge of Field Programmable Gate Arrays (FPGAs) and encourage growth and development in the field.

Engineering in Medicine and Biology Society (EMBS): Our chapter has elected a new chair Dr. Sreeraman Rajan along with other executives. By the end of October 2007, we have technical presentations.

- Lying, Deception and Face Familiarity with Evoked Potentials by Dr. Evangelia Micheli-Tzanakou, Rutgers University
- A piezoelectric and ultrasonic membrane sensor for non-invasive biomedical monitoring and diagnosis, by Prof. Yuu Ono, Carleton University
- Biometrics, RFID and Smartcard in Healthcare by Dr. Qinghan Xiao, DRDC Ottawa
- Analysis of gene expression in two human-derived cell lines exposed in vitro to a 1.9 GHz pulse-modulated radiofrequency field by Sami Qutob, Health Canada on Sept 21.
- Human Motor Control: Where neurophysiology meets signal processing by Dr. Ramesh Balasubramanian on October 24.
- We have scheduled 2 more meetings in the fall. Also, we plan to work closely with OCRI to attract speakers.

Instrumentation and Measurement Society (IMS): Our chapter has been actively involved in organizing multiple technical events including seminar, workshop and distinguished lecturer seminars:

- Seminar "High-Voltage/High-Current Measurement Equipment," Dr. Alexander Bulinski
- Full-Day Workshop: "Noninvasive Blood Pressure Measurements & Standardization"

- Distinguished Lecturers Seminar: organized jointly by IM and AP / MT & T Chapters: (1) Prof. Yahya Rahmat-Samii, "Nature Inspired Optimization Techniques in Engineering: Let Darwin and the bees help improve your antenna designs"; "Personal Communication Antennas including Human Interactions: Handheld, Wearable and Implanted Devices"; (2) Prof. Koichi Ito, "Microwave Antennas for Medical Applications"; "Phantoms for Evaluation of Interactions Between Antennas and the Human Body"
- JEMIC Seminar (1) "The Role of JEMIC in Japan's Electrical Power Industry", Mr. Usa Kakinuma, VP; (2) "Calibration of Active/Reactive Power/Energy Meters at JEMIC" Dr. Kunihiro Takahashi, Director, Technical Research Laboratory, both are from JEMIC, Tokyo, Japan

Lasers and Electro-Optics Society (LEOS): Our chapter had another successful year. We had 5 events with an average attendance of more than 53 per meeting. We have also celebrated LEOS 30th anniversary and sponsored a student paper awards in collaboration with the Section to support the Photonics North 2007, an international conference.

- Symposium on Recent Advancements of Photonics (1) IEEE LEOS Distinguished Lecturer "Table-Top Soft X-Ray Lasers" - Prof. Jorge J. Rocca, Colorado State University (2) "Organic Light Emitting Devices: Materials and Physics" - Dr. Ye Tao, IMS, NRC (3) IEEE LEOS Distinguished Lecturer "Photonic Crystal, Nanolaser, Slow Light, Negative Index Optics, Silicon Photonics" - Prof. Toshihiro Baba, Yokohama National University
- IEEE-LEOS Distinguished Lecturer "Photonic Crystal Devices" - John O'Brien, University of Southern California
- Precision Control of Light - The Photonic Local Oscillator distribution within the ALMA Telescope - Dr. Michel Tetu, Teraxion
- IEEE LEOS Distinguished Lecture "All-Optical Control of Light in Photonic Crystals" - Masaya Notomi, NTT
- Symposium on Recent Advancements in Photonics - Celebrating IEEE LEOS 30th Anniversary with Meet the Speakers Breakfast and the Announcement of 2007 IEEE Ottawa Section LEOS Chapter Photonics North Student Paper Awards Winners. Speakers include (1) Special Presentation - Dr. John Alcock, IEEE LEOS Fellow, Senior Scientist Emeritus, NRC "Progress in Lasers and Electro-Optics during the past 30 years: a brief overview" (2) Invited Speaker - Prof. Rejean

Munger, Clifford, Gladys and Lorna J. Wood Chair for Vision Research, U. of Ottawa Eye Institute and Ottawa Health Research Institute "Light as a practical non-invasive health assessment tool in medicine" (3) NRC-IMSS Colloquium Speaker - Prof. Peter Eklund, Departments of Physics and Materials Science & Engineering, The Pennsylvania State University "Photon Confinement and Antenna Effects in Semiconducting Nanowires" (4) Special Feature Speaker - Dr. Colin J. McKinstrie, LEOS Distinguished lecturer, Bell Laboratories, "Optical Parametric Devices".

- Our meetings, particularly in the form of symposiums, are well attended. We are planning to continue these traditions; which prove to be popular among our members and guests.

Power Engineering Society (PES): Since the AGM 2006, this chapter has supported seminars, workshop, and symposium. It has continued to do so in cooperation with several of the Ottawa RS chapter, and Ottawa EA committee. The events are as follows:

- Seminar: "Software in Safety Critical Aeronautical Products" by Branimir Dulic, Transport Canada, Oct. 31, 2006.
- Symposium: The 6th Annual IEEE Electrical Power Symposium 2006 "From Tesla's AC Power System to Distributed Generation and Smart Grid", held on Nov. 9-10, 2006. The EPS 2006 had two days event the tutorial and field visit on Nov. 9 and the symposium on Nov. 10, 2006 (details: www.ieee.org/EPS2006)
- Seminar: "On-site Tests and Calibrations for High-Voltage/High-Current Measurement Equipment by Dr. Alexander Bulinski, National Research Council, Ottawa held on Nov. 23, 2006.
- Seminar: "Networked Hi-Density Smart Electricity Meters for Power Management" by Wes Biggs, Triacta, Almonte, Ontario held on Feb. 15, 2007 (Joint seminar with IET - Ottawa)
- Workshop: "RoHS Reliability Impact and "Value Stream Mapping" by Larry Akre, Sr. Procurement Quality Engineer for Emerson Process Management, Rosemount Flow Division, USA held on May 17, 2007.
- Seminar: "The Role of JEMIC in Japan's Electrical Power Industry" and "Calibration of Active/Reactive Power/Energy Meters at JEMIC" by Usa Kakinuma, Vice President, Japan Electric Meters Inspection Corporation (JEMIC), and Dr. Kunihiro Takahashi, Director, Technical Research Laboratory, JEMIC held on July 03, 2007.

- Conference: Electrical Power Conference 2007 (EPC 2007) "Renewable and Alternative Energy Resources" to be held in Montreal October 25- 26, 2007. Organized by IEEE Canada, IEEE Montreal Section, and Ottawa Section. (details: www.ieee.ca/epc07).

Robotics & Automation Society/Control Systems Society (RAS/CSS): This Chapter had organized the following well-attended events since AGM 2006:

- "UAV Design and Control" – Seminar by Professor D. Neculescu, Dept. of Mechanical Engineering, University of Ottawa, Place: Faculty Board Room, Carleton University; held on 17 November 2006.
- "RoHS Reliability Impact", Seminar by Larry Akre, Emerson Process Management; Place: Algonquin College, held on 17 May 2007 co sponsored with Reliability Society.
- "Value Stream Mapping", Seminar by Larry Akre, Emerson Process Management; Place: Algonquin College, held on 17 May 2007 co sponsored with Reliability Society.
- "UAV Intelligent Control", Seminar by J.Z. Sasiadek, Place: Faculty Board Room, Carleton University; held on 23 September 2007.

Reliability Society (RS): This chapter has supported technical meetings, and one symposium. It has continued to do so in cooperation with other chapters. The events are as following:

- Seminar titled "The Role of JEMIC in Japan's Electrical Power Industry" by Mr. Usa Kakinuma, Vice President, Japan Electric Meters Inspection Corporation (JEMIC), Tokyo, Japan, and another titled "Calibration of Active/Reactive Power/Energy Meters at JEMIC" by Dr. Kunihiro Takahashi, Director, Technical Research Laboratory, JEMIC, Tokyo, Japan, both on Tuesday, July 03, 2007.
- Professional Presentation titled "RoHS Reliability Impact" by Larry Akre, on May 17, 2007.
- Professional Presentation titled "Value Stream Mapping" by Larry Akre, on May 17, 2007.
- Seminar "On-site Tests and Calibrations for High-Voltage/High-Current Measurement Equipment" by Dr. Alexander Bulinski, NRC, on Nov. 23, 2006.
- Symposium titled "Electrical Power Symposium 2006: From Tesla's AC Power System to Distributed Generation and Smart Grids" on November 09 - 10, 2006. On the first day, registrants participated in tutorials and field visits to the following Almonte companies: Canadian Hydro Components Ltd., Almonte Hydro's Mississippi

River Power Corp., Powerbase Automation Systems Inc., Triacta Power Technologies Inc.

- Conference titled "Establishing IEEE Standard on Blood Pressure Measurements" by Dr. Voicu Groza and a group of participants on Nov. 4, 06.

Signal Processing Society/Oceanic Engineering Society/Geoscience and Remote Sensing Society (SP/OE/GRS): This year, we have organized the following events:

- Seminar: "Forensic Audio Processing - Challenges & Solutions," by Dr. Boyczuk on Feb 8.
- Distinguished lecture series for signal processing: "Re-Live the Movie "The Matrix": From Harry Nyquist to Image-Based Rendering," Prof. Tsuhan Chen, October 29.
- Field trip - Diesel engines (NR Canada)

There is a possibility for one more seminar before the end of the year.

Vehicular Technology Society (VTS): We have run a number of talks and site visits over the past year. Many were held in conjunction with other IEEE local Chapters or with the Ottawa Branch, IET-UK:

- Light Rail in Ottawa
- Electronic controls for diesel engines
- Field trip - Diesel engines (NR Canada)
- The North West Passage - is Canada's Sovereignty over its Waters at Risk? by Gerry Kenney

On the average this year's meeting attendance was higher than previous years. We intend to maintain the momentum.

COMMITTEES:

Awards: The Awards Committee supported presented at the AGM 2006 many Awards.

- IEEE Ottawa Section Volunteer Recognition Awards presented to Branislav Djokic, Preeti Raman, Rami Abielmona, Ramiro Liscano, Hussein Mouftah, John Grefford, and Sreeraman Rajan.
- IEEE Ottawa Best Chapter Award presented to Engineering Management Society Chapter, Lasers and Electro-Optics Society Chapter, Reliability Society Chapter, Power Engineering Society Chapter, and Educational Activities Committee
- IEEE Ottawa Best Student Branch Award presented to IEEE Carleton Student Branch
- IEEE Ottawa Section Best Ottawa High Tech Companies presented to: Avoca Semiconductor for their innovation in developing voice interface platform solutions Avoca VIP™, Liquid Computing for their innovation in developing a new class of computer systems LiquidIQ, TenXc Wireless for their innovation in developing Intelligent RF solutions for wireless

mobility networks, Iogen Corporation for their innovation in developing an advanced biotechnology products, Plasco Energy Group for their innovation in developing Plasma Arc Technology and Plasma Gasification Process, and Triacta Power Technologies for their innovation in developing and manufacturing smart meters.

- IEEE Ottawa Section Recognition Awards presented to: Hydro Ottawa, Algonquin College, TELUS, and Alcatel for their continuous and valuable support of the IEEE Ottawa Section activities.

CPC: The Communications & Publications Committee takes care of the section website, the e-newsletter and the mailing lists. This year, the monthly and annual newsletters were archived and presented for display to the public. The committee is also undertaking a French-language translation of the website, as well as a more automated entry mechanism for its chapter officer listings and event disseminations. The committee's new Vice-Chair is Mohammed Elbadri.

EA: The Educational Activities Committee supported and/or organized since AGM 2006:

- Seminar: "Software in Safety Critical Aeronautical Products" by Branimir Dulic, Transport Canada, Oct. 31, 2006.
- Symposium: The 6th Annual IEEE Electrical Power Symposium 2006 "From Tesla's AC Power System to Distributed Generation and Smart Grid", held on Nov. 9-10, 2006. The EPS 2006 had two days event the tutorial and field visit on Nov. 9 and the symposium on Nov. 10, 2006 (details: www.ieee.org/EPS2006)
- Seminar: "On-site Tests and Calibrations for High-Voltage/High-Current Measurement Equipment by Dr. Alexander Bulinski, National Research Council, Ottawa held on Nov. 23, 2006.
- Seminar: "Networked Hi-Density Smart Electricity Meters for Power Management" by Wes Biggs, Triacta, Almonte, Ontario held on Feb. 15, 2007 (Joint seminar with IET - Ottawa)
- Workshop "Noninvasive Blood Pressure Measurements and Standardization" with the theme "One Hundred Years Later: Are We Really Measuring Blood Pressure?" Speakers from Industry, Government, Research Institutions and Academia held on February 2, 2007.
- Workshop: "RoHS Reliability Impact," and "Value Stream Mapping" by Larry Akre, Sr. Procurement Quality Engineer for Emerson Process Management, Rosemount Flow Division, USA held on May 17, 2007.

- Seminar: "The Role of JEMIC in Japan's Electrical Power Industry" and "Calibration of Active/Reactive Power/Energy Meters at JEMIC" by Usa Kakinuma, Vice President, Japan Electric Meters Inspection Corporation (JEMIC), and Dr. Kunihiro Takahashi, Director, Technical Research Laboratory, JEMIC held on July 03, 2007.

EIT: The Engineers in Transition Committee attended the executives meeting of the Section. The EIT submitted a proposal for training programs that will serve and help unemployed IEEE engineers in Ottawa to gain new skills.

MD: The Ottawa Section Membership Development's primary goal is to help our members develop themselves technically and professionally. Our membership development committee, both locally and globally, has been working to increase our membership base and expand the benefits existing members receive. Improvements to myIEEE, IEEE.tv, the IEEE Mentorship Connection, and the IEEE Job Site have all been brought online in the past months. Locally, our membership team has developed a new booth setup to allow us to connect with current and prospective members at local meetings, workshops, talks, and conferences. Examples of events we attended this year include the Nortel Women's Day Event, the FPGA Workshop and CMC Symposium, and the IEEE Carnahan Conference on Security Technology. For feedback or questions on membership benefits, please e-mail our MD Chair at vijay_narasimhan@ieee.org.

RC: The Robotics Competition Committee held in 2007 the 5th IEEE Ottawa Robotics Competition. The event is targeted towards grade 7 & 8 schools. This year each team had 9 weeks to build a robot using a Lego Mindstorms kit to play curling and resolve an obstacle course. On Sunday May 6, 2007, the IEEE Ottawa Section ran the two challenges at the SITE Building of the University of Ottawa. The competition, sponsored by SITE and the Faculty of Engineering at the University of Ottawa, was a huge success. We would like to also thank our industrial sponsors:

- Larus Technologies Corp,
- EDA Tech Forum
- Hydro Ottawa, for their continued support.

This year, we had 24 teams from 9 local schools, with 11 senior teams and 13 junior teams. As this activity is growing, a large number of volunteers are needed to support the projects at the schools. As well, sponsorships are required to sustain this project. More information can be found on the competition's IEEE web site: <http://orc.ottawa.ieee.ca>. Contact: Dr. Rami

Abielmona, Robotics Competition Committee Chair, rabielfmo@ieee.org.

RM: The Retired Member Committee came to life as the result of the funding chair Dr Hugh Reekie's continued effort. However, with the inclusion of the IEEE Retired Members form the section, we have generated a critical mass and a good momentum to serve our members. We have held one event this past season, a lunchtime presentation:

- The North West Passage - is Canada's Sovereignty over its Waters at Risk? by Gerry Kenney

Our group is not an officially registered affinity group; hence we have no direct access to dedicated funds. Our events are usually run in conjunction with selected local IEEE Chapters, who cover the cost of the meeting. We will continue operating in this way for the foreseeable future.

SM: The IEEE Ottawa Section Senior Membership (SM) Committee has been formed with nine members and a chair (all IEEE senior members) to assist qualified IEEE members to be elevated to the grade of Senior Member. The Committee chair reviews the candidate's SM application and resume. If the candidate is deemed qualified, the chair nominates the candidate for senior membership on behalf of the Section. The Committee members familiar with the candidate's field of work serve as referees if (and only if) a SM candidate cannot find the needed referees who have direct knowledge of the candidate and his work. In 2007, the Committee has so far assisted five IEEE members to successfully become IEEE SMs.

AFFINITY GROUPS:

AICN: The Alliance of IEEE Consultant Network is an affinity group of IEEE Ottawa and provides members with the opportunity to learn and network with other consultants. Special presentations allow members to share experiences, develop new skills or techniques, or hunt down leads on potential contract work. The new Ottawa AICN web site and database will be launched in 2008. New registration is required. Please email your name, IEEE#, and summary CV to gmida@ieee.org.

The following presentations are planned:

- Government of Canada procurement
- Process Improvement Initiatives
- How to Buy or Sell a Company

GOLD: The Graduate of the Last Decade organizing a free online seminar: "Career Decisions: Academia Vs Industry". The session is scheduled for Thursday, 24 May 2007 at 21:00 UTC/GMT or 5:00pm Eastern, New York. The seminar will be one hour. For more information for this seminar please visit <http://ottawa.ieee.ca/gold/>.

LM: The Ottawa Section Life Member Affinity Group was officially inaugurated on Oct. 4, 2007 at NRC, Ottawa. The LM has a plan to hold some meeting for its members. For more information, contact LM Chair David Coll at dccoll@ieee.org.

WIE: The Women In Engineering Affinity group organized a number of activities since AGM 2006:

- "When Good Enough is Perfect" by Richard Deadman on Jan 29, 2007 at the Ben-Franklin Place in Centreponte. This talk sparked interesting discussions among the participants.
- WIE also supported the University of Ottawa SB to start its own WIE student group. The formal approval letter for this is dated 2 March 2007
- On March 8 2007, the group participated in Nortel's International Women's day, together with the student branches and MD committee
- Carolyn McIssac was appointed the Vice-Chair of the group earlier this year
- WIE website has been updated to reflect the group's current events and vision.

The group is planning two other events this year, one being a networking event, and the other a technical knowledge sharing forum

STUDENT BRANCHES:

Algonquin College Student Branch: The SB had a successful year since AGM 2006:

- "EPS2006 Tutorial Day" on November 9, 2006: Algonquin provided the venue and 4 volunteers for the EPS 2006 tutorial day., the event was scheduled as follows (below) and was successful. Tutorial 1: Communication System Selection & Application in Distribution Systems. Tutorial 2: Protection and Control Issues with Distributed Generation. Lunch Tutorial: The Evolution of Fault Detection & Restoration. Tutorial 3: Converter Fed Microgrids: Challenges and Solutions.
- The Ontario Association of Certified Engineering Technicians and Technologists Ottawa chairman Eric P. Leitner gave a presentation on "Introducing OACETT and the Advantages of Membership and Certification" on November 28, 2006.
- "Photonics Safety Certification event" sponsored by Algonquin College SB on December 19th , 2006 , well attended more than 85 participants.
- Tour of Telesat Canada on March 7th , 2007: The branch was given a 3 hour tour of the Telesat Canada location located on Blair road. The tour consisted of visiting the media lab, the mission control and development centre.
- "Eastern Ontario Student Paper Competition" on March 29, 2007: the branch hosted the Finals for

the region 7 student papers competition. The finalists were gathered from the previous winners of the local paper competitions that were held in Ottawa and Kingston

- "RoHS Reliability Impact" and "Value Stream Mapping" on May 17, 2007: These presentations provided an insight into the reliability concerns in the use of non-lead platings. Discussion centered on the impact of RoHS in the areas of failure mechanisms, whisker growth, solder joint strength, and shelf life
- Every second week, ACSB members met to plan and discuss branch activities and other topics of interest. Pizza/drinks were provided by the branch
- Cooperating with Carleton SB and Ottawa SB in organizing IEEE Connects on October 12, 2007.

Carleton University Student Branch: We had another great year with the help of many volunteers and a dedicated executive team. This summer we were profiled in IEEE Potentials July/August issue and are honoured by this recognition. Other highlights include the successful launch of the IEEE Carleton Computer Society which has already held numerous events including a programming contest and Linux tutorials. Our main professional event of the year was an evening with Canadian Astronaut Dr. Marc Garneau on October 19, 2006.

- Orientation Day & Volunteer Training Session
- The Future for Canada in Space, keynote speaker Dr. Marc Garneau.
- Microsoft Imagine Cup Information Session, hosted by Microsoft representative and organized by Carleton's IEEE Computer Society student chapter.
- Volunteer Appreciation Party
- Tech Venture Challenge & IEEE Code Jam
- Graduate Information Session
- AGM and Fourth Year Information Session
- 3500 & 4706 Design and Papers Competitions
- Exec Retreat Weekend & Volleyball/BBQ

We will start our new academic year again with IEEE Connects! This networking event aims to bridge the gap between students and their career goals with Rasmus Lerdorf, the author of PHP, as the keynote speaker. Events already planned include the annual Orientation Day, IEEE Connects! 2007, & Go Eng Girl

University of Ottawa Student Branch: We have been very successful in gaining more student members this past year. We have organized well attended events every month, including:

- 101 Week, annual event with the Faculty of Engineering

- Movie Night "Nacho Libre"
- Industry Tour (NRC-IAR)
- Tech Venture Challenge, co-hosted with the University of Ottawa Engineering Competition (uOEC) with the Engineering Students' Society
- Tech Venture Challenge, the winning teams were sent to the Ontario Engineering Competition (OEC). One of the teams won second place and represented the University at the Canadian Engineering Competition (CEC) in Saskatoon
- Tech Date, a networking event and helped matching students and employers
- AGM, with excellent speakers from the section, also a showcase to our ideas and services, signed up more members
- Entry to IEEE Telus Competition, submitted the project: Autonomous Flight Controller System
- Joint social, Carleton and Ottawa SB BBQ

One of our goals for the coming school year is to work more closely with Carleton SB and Algonquin SB. Already this year we have planned to work together on IEEE Connects 12 October 2007, as well as a uOttawa vs. Carleton LAN Party this coming February. The new executive is very excited for this upcoming school year.

Various Event Pictures (2007-2008)



IEEE Ottawa Section Volunteer Recognition Awards presented by Wahab Almuhtadi to Branislav Djokic.



The IEEE Ottawa Section AGM held in October 2006 at the National Art Centre, Ottawa.

PLANNED ACTIVITIES FOR 2007-2008

The following are the major events planned for the near future in Ottawa section. For an updated list of the upcoming events in Ottawa section at any time, please visit the Ottawa section newsletter at <http://ottawa.ieee.ca/news/>.

EPC 2007

The 7th annual Electrical Power Conference 2007 is to be held in Ottawa on November 25-26, 2007. For more information visit: <http://www.ieee.ca/epc07>.

ORC 2008

The 6th Annual IEEE Ottawa Robotics Competition (ORC) is to be held in Ottawa spring, 2008. Please visit: <http://orc.ottawa.ieee.ca>.



Robotics Competition

IEEE Ottawa Executive 2007

The current IEEE Ottawa Section Executive Officers:

Chair: Dr. Wahab Almuhtadi, almuhtadi@ieee.org
Vice-Chair: Raed Abdullah, raedabdullah@ieee.org
Treasurer: Dr. Sreeraman Rajan, sreeraman@ieee.org
Secretary: Kexing Liu, kexing.liu@ieee.org
Past Chair: Dr. Branislav Djokic, branislav@ieee.org

A complete list of the IEEE Ottawa Section Officers is posted at:
<http://ottawa.ieee.ca/officers.html>.

IEEE Ottawa Section Elections 2008

The Section officers proposed by the Nomination Committee for the Ottawa Section Executive in 2007:

Chair: Dr. Wahab Almuhtadi, almuhtadi@ieee.org
Vice-Chair: Raed Abdullah, raedabdullah@ieee.org
Treasurer: Dr. Sreeraman Rajan, sreeraman@ieee.org
Secretary: Alfredo Herrera, alfredo.herrera@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 Branislav Djokic <branislav@ieee.org> no later by Nov. 9, 2007.

Section's E-Communications

<http://ottawa.ieee.ca/publications.html>

Web:

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

Newsletter:

The current news and upcoming events in Ottawa Section are available on the Section's events page at <http://ottawa.ieee.ca/news/>. We also announce our news and upcoming events via email to the IEEE members in the Ottawa area. You can make sure that you receive our e-newsletter by keeping your IEEE profile up to date (see below). For more information about our newsletter visit:

<http://ottawa.ieee.ca/news/about.html>.

Contact: ottawanews@ieee.org

Updating Your IEEE Profile:

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

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

IEEE Email Alias with Virus Scanning:

We strongly recommend to all members to use the IEEE email alias service. With the help of this service you stay better connected even when you change your email address. It is free for members and easy to acquire, remember, and update. For more information, please check: <http://eleccomm.ieee.org/>.

List of IEEE Ottawa Section Chapters, Committees, Affinity Groups, and Student Branches

To find out more about the Ottawa Section Chapters Committees and Affinity Groups and their activities please visit <http://ottawa.ieee.ca/officers.html>.

CHAPTERS

CHAPTER	CHAIR	URL
AESS	Hugh Reekie, h.reekie@ieee.org	http://members.allstream.net/~max-com/ottawa.AESS.html
AP/MTT	Quibo Ye, quibo.ye@crc.ca	http://www.ottawa.ieee.ca/ap_mtt/home/
ComSoc/BTS	Burt Christian - b.christian@ieee.org	http://ottawa.ieee.ca/comsoc/
CompSoc	George Yee, g.m.yee@ieee.org	http://ottawa.ieee.ca/cs/
CI	Julio Valdes, Julio.Valdes@nrc-cnrc.gc.ca	http://ottawa.ieee.ca/ci/
CPMT	Qi-jun Zhang, qjz@doe.carleton.ca	
DEIS	M. Abou-Dakka Mahmoud.Abou-Dakka@nrc.ca	
EDS/CAS/SSCS	Ram Achar, achar@doe.carleton.ca	http://ottawa.ieee.ca/eds_cas_sscs/
EMCS	Syed Bokhari, bokhari@ieee.org	
EMS	Jean Couillard, couillard@management.uottawa.ca	http://ottawa.ieee.ca/ems/
EMBS	Sreeraman Rajan - sreeraman@ieee.org	http://ottawa.ieee.ca/embs/
IMS	Voicu Groza, vgroza@ieee.org	http://ottawa.ieee.ca/ims/
LEOS	Kexing Liu, kexing.liu@ieee.org	http://ottawa.ieee.ca/leos/
PES	Wahab Almuhtadi, almuhtadi@ieee.org	http://www.ewh.ieee.org/soc/pes/ottawa/
RS	Raed Abdullah, RaedAbdullah@ieee.org	
RAS/CSS	Jurek Sasiadek, jsas@ccs.carleton.ca	
SP/OE/GRS	Miodrag Bolic, mbolic@site.uottawa.ca	http://ottawa.ieee.ca/grsoesp/
VTS	Hugh Reekie, h.reekie@ieee.org	http://members.allstream.net/~max-com/ottawa.vts.html

COMMITTEES

COMMITTEE	CHAIR	URL
AGM Planning	Raed Abdullah, RaedAbdullah@ieee.org	
Awards	Wahab Almuhtadi, almuhtadi@ieee.org	http://ottawa.ieee.ca/awards.html
Bylaws	Branislav Djokic, branislav@ieee.org	http://ottawa.ieee.ca/bylaws.html
Communications/ Publications	Rami Abielmona, rabiemo@ieee.org	http://ottawa.ieee.ca/publications.html
Educational Activities	Branislav Djokic, branislav@ieee.org	http://ottawa.ieee.ca/ea/
EiT	Colin Cantlie, colin.cantlie@ieee.org	
Membership Development	Vijay Narasimhan, vijay_narasimhan@ieee.org	
Nomination	Branislav Djokic, branislav@ieee.org	
Robotics Competition	Rami Abielmona, rabiemo@ieee.org	http://ottawa.ieee.ca/orc/
Senior Membership	George Yee - g.m.yee@ieee.org	

AFINITY GROUPS

Group	CHAIR	URL
AICN	Gidon Mida, gmida@ieee.org	
GOLD	Rob Woolley, rcwoolley@ieee.org	http://ottawa.ieee.ca/gold/
Life Member	David Coll - dccoll@ieee.org	
WiE	Preeti Raman, praman@eidsglobal.com	http://ottawa.ieee.ca/wie/

STUDENT BRANCHES

Branch	CHAIR	URL
Algonquin College	Jason Tang, jtang613@ieee.org	http://ewh.ieee.org/sb/ottawa/algonquin/
Carleton University	Anissa Shaddy - amshaddy@connect.carleton.ca	http://www.ieee.engsoc.org/v2.0/
University of Ottawa	Sarah Tolledo - sarah.tolledo@ieee.org	http://www.ewh.ieee.org/sb/ottawa/uottawa/