

Connection



Toronto Section Newsletter March, 2002 Issue

In This Issue

We are starting a new season with plenty of news, activities, and programs to serve all IEEE Members living within the boundaries of the Toronto Section and/or in nearby sections.

In this issue you will find:

- A quick reminder of the advantages of IEEE membership
- Our internet coordinates and a short reminder of what is offered via Internet
- Announcement of new section executives
- Upcoming conferences
- Section and Chapter reports
- Chapter reports including upcoming activities
- Membership Report
- Call for active participation (volunteer your time by giving talks, offering courses, and being an active IEEE volunteer)

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Remember that, at any time, if you misplace this newsletter, you can find us on our World Wide Web Home Page, <http://www.tor.ieee.ca>, the place to look for up-to-date information, changes of program, etc.

Your IEEE Section Membership

This is your Section. Make good use of all activities we are offering to you. Attend the Society Chapter Meetings. Attend the courses, if they fit into your career maintenance plans, if you find them interesting, or if you feel that you need intellectual stimulation.

Use your IEEE membership as a networking opportunity. Get to know other professionals.

Those who are trapped in the endless cycle of sleep-commute-work-commute-family-sleep, do not keep informed about the most recent changes in technology, business, and society. Above all, they probably do not have a network of friends and colleagues who can give them a lead on job openings in another company.

In today's competitive market, while design and production engineers are busy developing new products, they cannot keep themselves technologically up-to-date and their knowledge may become obsolete. Not being aware of the most recent technologies, these engineers may be unable to innovate and to compete.

IEEE offers a series of seminars (Society Chapter Meetings) where the speakers are professionals who practice what they talk about, so that they can bridge the gap between theory and implementation. These seminars are free of charge and you can take with you also colleagues who are not IEEE members.

IEEE offers a series of courses covering new subjects of new aspects of older technologies. These courses are moderately priced, always below market value, because they are run on a break-even mode, simply on a cost recovery basis.

Even if your employer offers top quality seminars and in-house courses, you may still benefit from actively participating in IEEE events. Your employer may be a leader in a particular segment of the market, but it may be completely outdated within the wider market. If your employer is behind in keeping up with technology and if your employer is your main source of information, you are going to be left behind too.

Any consultant with some years of experience has a definite advantage over a professional who is permanently linked to a company: exposure to a large number of situations and technologies. You can acquire a taste of this exposure by participating to as many local IEEE activities as possible, by mixing with your fellow IEEE members, by talking with them, by talking with the speakers, by connecting with as many colleagues as possible (bring your business cards with you).

In order to keep yourself informed of our events, technical seminars, conferences, etc., please visit our website <http://www.tor.ieee.ca>.

Our Internet Coordinates

The Toronto Section can be contacted by writing to the following Internet addresses:

- sec.toronto@ieee.org

to communicate with the Section for general enquiries (emails reaching this mailbox will be forwarded to the Section Chair in Office)

- webmaster.toronto@ieee.org

to communicate with the Section webmaster for any editorial and advertising enquiries.

The current Section chair, Robert Hanna, is always available to receive suggestions and to answer questions from any member. Robert

Hanna can be reached personally, by sending email to:

r.hanna@ieee.org

The web page of IEEE Toronto is the preferred communication tool of the Section and can be found at: <http://www.tor.ieee.ca>.

Newly Elected Section Executives

The Toronto Section elected new Executive Committee members at the end of 2001. The following candidates have been elected:

Chair:	Robert Hanna
Vice-Chair:	Kostas Plataniotis
Secretary:	Pelle Westlind
Treasurer:	Al Wallis

For the electees, the term of office started on January 2002 and lasts for 2 years.

Electronics Newsletter

Our electronic newsletter, IEEE TOR E-News, is published monthly and is sent free of charge to members and non-members alike. If you know someone who would like to stay informed about our meetings, seminars, courses, and other activities, please advise him/her to subscribe to our newsletter at

<http://www.tor.ieee.ca/newsletter.htm>

The following newsgroups carry information about IEEE Toronto events:

- tor.ieee
- ut.engineering.general
- ut.engineering.seminars

Upcoming Conferences

This year, the Toronto Section will be sponsoring the following conferences held in Toronto:

The Energy Business in the New Millennium “Coping with Market Changes” May 6 - May 7, 2002

This conference will be held at the Metro Toronto Convention Center and is cosponsored by IEEE Power Engineering Society (PES) and the IEE. For more information, please visit <http://www.tor.ieee.ca/energy/index.htm>

Pulp and Paper Industry Technical Conference June 17 – June 21, 2002

This conference will be held at the Sheraton Center Toronto and is sponsored by the IEEE Industry Applications Society (IAS). For more information, please visit <http://www.pulpandpaper2002.com>

Section Report

A special dinner/award event was organized to distribute plaques to all 120 senior members. The dinner invitation was extended to senior members and their companions. The dinner event was coordinated with the IEEE Canada regional meeting to maximize the interaction between our members and also for senior members to meet IEEE Canada senior executives. This event took place on Saturday May 12, 2001 at the Delta Chelsea hotel. It was a great success and attended by over 80 IEEE senior members and their guests. The planning of this event took over two months and required considerable efforts by several committee members particularly that of Pelle Westlind who did a remarkable job in organizing this function.

The IEEE Toronto Section recently organized an event in recognition of several distinguished members that were presented with Millennium Medal for their achievements and services to IEEE.

The section Actively participated in the Canadian Conference on Electrical & Computer Engineering (CCECE 2001) that took place on May 13-16, 2001.

The section actively participated in the 47th IEEE/IAS Petroleum and Industrial Chemical conference (PCIC) that was held in Toronto (The Westin Harbor Hotel) on September 24-26, 2001. This conference was a great success and attended by about 700 participants and 250 guests.

On November 10 2001, the section’s Annual General Meeting (AGM) was held in the Old Mill. Over 80 members attended this event as well as invited guests from IEE, PEO, IEEE Foundation, University of Toronto, Ryerson University and executives of CCECE 01 conference. The section was honored to have Dr. Ray Findlay, president of IEEE and Ms. Celia Desmond, President of IEEE Canada, who participated in the award ceremony. Dr. Kim Vincent of University of Toronto was the Keynote speaker who gave a very interesting speech on “Designing Technology that Works for People”.

Plaques were presented to Dr. Ted Sargent, past president of IEEE Toronto section, for his services and outstanding contribution and to Dr. Haran Karmaker for his leadership in chairing CCECE 01 conference.



Ms. Celia Desmond presenting an award to Dr. Ted Sargent

The section continues to provide student grants. This year student grants will be provided to several universities and colleges.



Dr. Ray Findlay presenting an award to Dr. Haran Karmaker



Senior Members plaque award



Mr. Ron Potts, Region 7 life member chair, Dr. Ray Findlay, chair IEEE and Dr. Robert Hanna, chair of IEEE Toronto section at the AGM meeting



Millennium Medal award celebration

Chapters Reports & Updates

IEEE Toronto Circuits and Devices Chapter. By Emanuel Istrate, University of Toronto

The IEEE Toronto Circuits and Devices Chapter is composed of four IEEE societies: The Circuits and Systems Society (CAS), the Components Packaging and Manufacturing Technology Society (CPMT), the Electron Devices Society (EDS) and The Lasers and Electro-Optics Society (LEOS).

The chapter is organizing technical seminars in the above-mentioned areas, with lecturers both from universities and industry. The seminars are organized with a frequency of about 1 per month. Our next seminar, will be given by Dr. Paul Corkum from the National Research Council, on the subject of very short laser pulses. It will take place on April 5, 2002, Please see visit www.tor.ieee.ca/societies/circuits.htm for details of this seminar and future activities.

The IEEE Lasers and Electro-Optics Society has a Graduate Student Fellowship, available to LEOS student members in their penultimate year of a doctorate program. The value of the award is \$5000 US and a \$2500 US travel grant to attend the LEOS Annual Meeting. Nominations are due by May 30, 2002. For more information please visit www.i-leos.org/info/opportunities or contact edsfellowship@ieee.org. For more details about the chapter's future activities, please visit www.tor.ieee.ca/societies/circuits.htm or contact Emanuel Istrate at e.istrate@ieee.org.

Solid-State Circuits Society (SSCS)
By Khoman Phang, University of Toronto

The Solid-State Circuits Society (SSCS) is interested in all aspects of solid-state circuits: the design, testing and application of circuits and subsystems, as well as closely related topics in device technology and circuit theory. The Toronto Chapter of the SSCS was formed in the summer of 2000, and the opening was marked in October 2000 by a special lecture presentation by Professor Asad A. Abidi of UCLA on the fundamentals of RF-CMOS low noise amplifiers and mixers. And in June 2001, the Toronto Chapter was proud to invite Dr. Eric Vittoz of the Swiss Center for Electronics and Microtechnology. Dr. Vittoz, a true pioneer in low-voltage and low-power circuits, gave a special presentation on micropower circuit techniques. This was Dr. Vittoz's first visit to Toronto, and he took the opportunity to meet with long-time colleagues Vice-President and Provost Adel Sedra and Professor Emeritus K.C. Smith.



Dr. Vittoz's Toronto Visit – with Prof. K.C. Smith and the SSCS Chapter committee.

Please contact Raymond Chik (chik@ieee.org) or Khoman Phang (phang@eecg.utoronto.ca) for further information of the chapter. For future and past chapter meetings please visit www.tor.ieee.ca/societies/solidstate.htm

Electromagnetics and Radiation Joint Chapter, by Ramesh Abhari, University of Toronto

The Toronto Electromagnetics and Radiation Joint Chapter, represents IEEE Toronto Microwave Theory and Technique (MTT), Electromagnetic Compatibility (EMC), and

Antennas and Propagation (AP) Societies. The chapter was established by Dr. T. Emilie van Deventer-Perkins and the current chair (since July 1998) is Ramesh Abhari who is affiliated with the Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto.

The chapter has been active during the past year by organizing technical lectures presented by distinguished speakers from academia, industry, and research organizations. The events are open to the IEEE non-members as well, and are mainly held at the downtown campus of the University of Toronto. The abstract of all of the previous meetings, held since July 1998, along with the presentation slides of a number of the lectures are accessible on the web at the following URL address:

www.tor.ieee.ca/societies/electromag.htm

The meetings provide an open forum for discussion, as well as a place to network with fellow engineers. The first lecture of the year 2002 was an interesting talk presented by Dr. Wolfgang Hoefler, professor at the University of Victoria and the president of the Faustus Scientific Corporation. More lectures are being organized for this year, which will be advertised later. New members are welcome to join the Electromagnetics and Radiation chapter and can subscribe to the chapter's mailing list on the web at the above URL to receive the monthly announcements of the upcoming events. For further information contact Ramesh Abhari, E-mail address: rabhari@ieee.org

IEEE Instrumentation & Measurement Society, By Dennis Cecic

The activities of the Toronto Section, IEEE Instrumentation & Measurement Society (IMS) are motivated by technical and business challenges involved in the creation and sale of modern electronic instrumentation and sensing systems. Our educational themes revolve around the following subjects:

- Novel sensing and signal processing approaches in various problem domains
- Emerging electronics implementation techniques & technologies (Analog/Digital, Microprocessors/DSPPS)
- Innovation, and Product Development Practices

- Project Management & Intellectual Property
- Systems Engineering Practices

IMS seminars are held at Ryerson University, located in downtown Toronto. To view and download previous IMS talks, please visit our web site at:
<http://www.tor.ieee.ca/societies/instrument.htm>

If you would like to present a seminar or workshop, or if you have any ideas on how our chapter can be more effective, please contact us. See you at the talks!
 Dennis Cecic, P.Eng. (d.cecic@ieee.org)
 Florin Gagiuf, M.Sc. (gagiuf@dseltd.com)

IEEE Engineering & Human Environment Society

Upcoming Lecture announcement:
Title: *Coupling People And Technology In Complex Systems*
Speaker: Kim J. Vicente, Cognitive Engineering Laboratory, Department of Mechanical & Industrial Engineering, University of Toronto
Date: March 21, 2002,
Time: 6pm-9pm
Location: Mechanical Engineering Building (MC), 5 King's College Road, Clarice Chalmers Conference Room, Room 331.

IEEE Communications Society By Steve Hranilovic

The communication society is the second largest technical society within the IEEE. The range of interest of ComSoc spans the communications technology area encompassing topics such as communication theory, networks, personal communications and communications algorithms. The Communications Magazine is provided to every member and provides a valuable survey of current communications technologies and techniques.

The Toronto Chapter of ComSoc has been active this year in promoting a series of talks on a wide range of topics. Topics discussed included LMDS architecture, Telecommunications OSS, Traffic Modeling over IP, Adaptive Digital

Communications Receivers, Law in Telecommunications and Iterative Coding Schemes. ComSoc has also benefited by a close relationship with our local sister society the Laser and Electro-Optics society. A series of co-sponsored talks covered the areas of Optical CDMA, optical network architecture, dynamic optical networks as well as future looking talk on Network Technologies by David Vickers, Director of Disruptive Network Technologies, Nortel Networks.

We look forward to improving the event, which ComSoc Toronto provides to its members. In order to better serve our membership, we require input from our society members and from the section at large regarding topics of interest for future events. In order to see some of our previous and future events consult <http://www.tor.ieee.ca/societies/commsoc.htm>. Please feel free to email either of the co-Chairs Steve Hranilovic (hranilovic@ieee.org) or Andrew Eckford (eckford@comm.utoronto.ca) to voice your ideas.

Life Member Chapter for Central Canada, By Ron Potts, Life Member Chapter Coordinator for Region 7

We now have a Life Member Chapter for Central Canada and a representative Life Member in all the Ontario Sections of region 7. Toronto Section has over 200 Life Members. If you are a life member and would like to assist Neil Magrath who has volunteered to represent Toronto Section in the Chapter please contact Ron Potts (potts@caninet.com) or Neil (Magraths@rogers.com). Our first objective is to contact by email or newsletter and update our life member database of email, telephone number and postal addresses.

Membership Report By Pelle Westlind

Application: Please visit our website: www.ieee.org or contact:
 Pelle Westlind
 Tel 416 234 0777
 Fax: 416 234 1767
 Email: pell.westlind@sympatico.ca

Your Senior Member Elevations are a vital part of the IEEE. Take the step to upgrade your membership today! Becoming an IEEE Senior Member is a significant milestone in the career of an IEEE Member. Senior Member status indicates a high professional competence that is recognized throughout the world.

How are we doing? We need your feedback to guide us towards improvements in Membership satisfaction! Where does the IEEE Toronto Section stand? Your volunteers are working hard to meet the high standard requested by the members. Now we need your feedback with suggestions for improvement.

How do you like the chapter meetings? Time and location? Speakers? Are you kept informed? Please take a few minutes to give us a call, email or Fax. You are part of the biggest Section in Canada.

Toronto IEEE Members (Active Only)

Grade	Count
Associate	475
Affiliate	265
Fellow	23
Life Associate	13
Life Fellow	14
Life Member	141
Life Senior Member	56
Member	1851
Pending Member	39
Student	454
Senior Member	88
TOTAL	3419

Call for Active Participation

IEEE is a volunteer organization. Everything is done by volunteers, with the exception of some, very few, clerical tasks performed mainly in the Head Office in Piscataway, N.J.

We need people who have something to offer. Volunteer your time by:

- giving talks in your area of practice;
- offering courses in your area of expertise;
- being an IEEE volunteer in the Toronto area.

While the Section Executive may not let you do immediately everything you may want to do, you will have the opportunity to try.

Volunteer work is a bit like normal work:

- you have to apply;
- you may be accepted;
- you may be rejected;
- you are trained;
- you are moved through various positions.

The Section Executive examines the credentials, references, and past records of all speakers and instructors. However, there are many opportunities to build experience within IEEE even for those who do not have experience.

Being an IEEE volunteer is a marvelous way to expand on one's people skills, management skills, and administrative skills. It is no coincidence that all IEEE Toronto Chairs have served a period ranging from 12 to 16 years before becoming Chairs. There is a lot to be learnt. But it is a good experience, which comes useful in our real jobs, the ones that pay our bills.

The IEEE Is...

...A World of Technology

The Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional society. Founded in 1884 by a handful of practitioners of the new electrical engineering discipline, today's Institute is comprised of more than 320,000 members who conduct and participate in its activities in 147 countries. The men and women of the IEEE are the technical and scientific professionals making the revolutionary engineering advances, which are reshaping our world today.

...Achieving Goals

The technical objectives of the IEEE focus on advancing the theory and practice of electrical, electronics and computer engineering and computer science. To realize these objectives, the IEEE sponsors technical conferences, symposia and local meetings worldwide; publishes nearly 25% of the world's technical papers in electrical, electronics and computer engineering, provides educational programs to keep its members' knowledge and expertise state-of-the-art. The purpose of all these activities is two fold: (1) to enhance the quality of life for all peoples through improved public awareness of the influences and applications of its

technologies; and (2) to advance the standing of the engineering profession and its members.

...Being a Leader

The IEEE, through its members, provides leadership in areas ranging from aerospace, computers and communications to biomedical technology, electric power and consumer electronics. For the latest research and innovations in the many diverse fields of electrical and electronics engineering, industry and individuals look to the IEEE.

If You Qualify, You Should Be a Member!

IEEE membership is open to professionals with varying levels of academic accomplishment and work experience. Member, Senior Member and Fellow grades are limited to those who have achieved professional competence and recognition, as demonstrated by the college degrees they have received and/or by their work experience. Associate grade is open to certain technical and non-technical applicants who may benefit by membership and participation in the IEEE and, also, to those individuals progressing through education and work experience toward Member grade. All members - Associate, Member, Senior Member and Fellow pay the same low membership dues and receive the same IEEE membership benefits and services, although Associates may not vote in IEEE elections or hold volunteer offices for which the grade of Member or higher is required. Student member applications are available upon request. Student members have substantially discounted dues and fees far below what other members pay.

Working With A Competitive Edge Makes All The Difference In The World.

IEEE --The Institute of Electrical and Electronics Engineers, Inc.
-- Your personal edge on technology.

Join us! Become an IEEE Member!

Toronto Section Executives Roster
(January 01, 2002 to December 31, 2004)

Chair	Robert (Bob) Hanna
Vice-chair	Kostas Plataniotis
Secretary	Pelle Westlind
Treasurer	Al Wallis
Past Chair	Edward (Ted) H. Sargent
Educational Activities	Randy Park
Student Activities	Wai Tung Ng
Membership & Awards	Pelle Westlind
Member Communication	Raymond Y.V. Chik
Member at Large	Wallas Khella, Bruno Di Stefano
Circuits and Devices Communication	Emanuel Istrate Steve Hranilovic, Andrew Eckford
Computer	Robert Hudyma
Dielectrics & Insulation	Hugh Zhu
Electromagnetic Eng & Human Envir.	Ramesh Abhari Walter Zessner, Mati Lehela
Inst. & Measurement	Dennis Cecic, Florin Gagi
Power Engineering	Vince Green
Signal Processing	Michael McGuire
Solid State Circuits	Raymond Y.V. Chik Khoman Phang

Invitation to advertise.

Advertising rates for monochrome ads:

- \$ 83 for a business card size ad;
- \$ 125 for 1/4 page ad;
- \$ 500 for a full page ad;
- \$ 900 for a double page ad;
- \$ 1,800 for a center fold ad.

IEEE, at the sole discretion of a majority of the Officers, reserves the right not to publish ads deemed to be contrary to IEEE and/or Canadian Rules, Regulations, Laws, and Bylaws.