

April 2009

IEEE OTTAWA NEWSLETTER - APRIL 2009

Email: ottawanews@ieee.org

Editor: Khalid Mahmood (M'89 SM'08)

Email: kmahmood@ieee.org

News Submission: <http://ottawa.ieee.ca/news/submit.html>

IEEE Ottawa Section Website: <http://ottawa.ieee.ca/>

Newsletter on the Web: <http://ottawa.ieee.ca/news/>

contents list

IN THIS ISSUE:

A. IEEE Ottawa Section Events

1. "Multipoint Real-Time Signal Analysis" April 02, 2009
2. EMC/EMI Issues in Biomedical Research (location 1) April 02, 2009
3. EMC/EMI Issues in Biomedical Research (location 2) April 02, 2009
4. A New Multibase Number Representation and Its Cryptographic Applications April 17, 2009
5. Impact of Renewable Energy Resources on the Electrical Power System Stability April 17, 2009
6. Two presentations on the subject of Radar for Surveillance in Canada's 200 Km ECZ April 21, 2009
7. Marine Renewable Energy - Growing Canada's Renewable Energy Supply April 23, 2009
8. The 2009 Canadian Workshop on Information Theory May 13-15, 2009
9. 2009 IEEE Canada Electrical Power and Energy Conference (2009 IEEE EPEC) October 22-23, 2009
10. IEEE International Conference on Communications (ICC 2012)
11. Call for papers for IEEE International Carnahan Conference on Security Technology 2009 (ICCST 2009) October 5-10, 2009

B. IEEE News

1. New IEEE Senior Members in Ottawa Section
2. TISP (Teacher-In-Service-Program) R7 (Canada) workshop May 15-16, 2009
3. 2nd Climate Change Technology Conference (CCTC 2009) Hamilton, Ontario May 12-15, 2009
4. IEEE Biometric Summer School, Toronto May 24-30, 2009

5. First "Women in Electromagnetics (WiEM)" Workshop June 5 - 8, 2009

Salt Lake City, Utah

6. 22nd IEEE Canadian Conference on Electrical and Computer Engineering 2009 (CCECE 2009) May 3 - 6, 2009

C. Non-IEEE News and Events Announcements

Nothing to report.

D. Manage Your Subscription

1. TITLE: Multipoint Real-Time Signal Analysis

SPEAKER: Dr. Nikhil Adnani, ThinkRF Corp., Ottawa, ON, Canada

DATE: Apr. 2 (Thur.), 2009

TIME: 12:00pm – 1:00pm

LOCATION: Room 4124, Mackenzie Engineering Building, Carleton University

PARKING: applicable charge

ADMISSION: free

REGISTRATION: no

ORGANIZED BY: AP/MTT joint chapter

CONTACT: Qiubo Ye

ABSTRACT: An increase in spectrum utilization is driving the need to use it more efficiently. Digital modulation formats, packet-data, dynamic channel assignments and frequency hopping waveforms are some of the techniques used to achieve this goal. These time-varying transmission signals present new challenges for detection and analysis in real-world operating environments. For instance reliable capture of such waveforms with traditional test equipment such as swept-frequency spectrum analyzers is difficult. As well, newer equipment such as vector and real-time spectrum analyzers are not well-suited to autonomous operation or cost-effective field deployment in real-world settings.

At this seminar a new high-performance, field-deployable, intelligent wireless signal analyzer (WSA) will be introduced. WSA s are low-power, compact, and can be networked with one another to create a multipoint system for waveform detection over large geographic areas. In addition

to time, frequency and amplitude the system adds location information to signal detection and analysis. The WSA enables a broad range of applications including SIGINT, interference analysis, collaborative spectrum sensing and wireless test & measurement. With 100MHz real-time analysis bandwidth and almost 70dB dynamic range, the WSA has key specifications comparable to high-end test equipment.

2.TITLE: Technical presentation by Prof. Ji Chen, Dept. of Electrical & Computer Engr., Univ. of Houston, on "EMC/EMI Issues in Biomedical Research", jointly organized by the the IEEE Ottawa AP/MTT Chapter and the IEEE Ottawa EMC Chapter.

DATE: April 02, 2009 (Thursday) at 12:00pm-1:00pm: Room 4124 Mackenzie Engineering Building (ME), Carleton University, 1125 Colonel By Drive, Ottawa (Campus Map: Building #10)

Free admission, but is on a first to reply basis. Preference is given to IEEE AP/MTT/EMC society members. Seating is limited. E-mail reservation is required.

Contact :

Dr. Syed Bokhari, Chairman, IEEE Ottawa EMC Chapter
[Syed.Bokhari@fidus.ca], Office:(613) 828-0063 Ext. 377, Cell: (613) 277-9311

Dr. Qiubo Ye, Chairman of the IEEE Ottawa Joint AP/MTT Chapter
[qiubo.ye@crc.ca]

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

3.IEEE Distinguished Lecturer Presentation hosted jointly by the

IEEE Ottawa EMC Chapter and the IEEE Ottawa MTT/AP Chapters.

Speaker : Prof. Ji. Chen, Dept. Electrical & Computer Eng.,
Univ. of Houston

TITLE : EMC/EMI Issues in Biomedical Research

Date : Thursday April 2, 2009

Time : 6:00 PM to 8:00 PM

Location : FIDUS SYSTEMS Inc., 900 Morrison Drive,
Suite 203, Ottawa, Ontario, K2H 8K7

Admission: Free, and is on a first to reply basis.

Preference given to IEEE EMC/MTT/AP society members.

Seating is limited. E-mail Reservation is required.

Contact : Dr. Syed Bokhari, Chairman, IEEE Ottawa EMC chapter
Syed.Bokhari@fidus.ca,

Office : (613) 828-0063 Ext. 377, Cell: (613) 277-9311

Dr. Quibo Ye, Chairman of the IEEE Ottawa MTT/AP Chapters

Qiubo Ye [qiubo.ye@crc.ca]

Abstract:

The interactions between electromagnetic signals and biomedical systems

lead to safety considerations for medical devices and patients. In this talk, we will present some recent investigations on the EMC/EMI issues related to these scenarios. In particular, we will discuss

(1) safety evaluation for pregnant woman under walk-through metal detector,

(2) thermal and temperature evaluation of pregnant woman models under

MRI RF coil,

(3) effects of implantable devices within human subject models under MRI coils, and

(4) the interactions between vehicular mounted antenna and bystanders with implantable medical devices.

4.TITLE: A New Multibase Number Representation and Its
Cryptographic
Applications

SPEAKER: Dr. Ali Miri, Professor, SITE, University of Ottawa

DATE: Friday April 17, 2009

TIME: 10:00-11:30

LOCATION: Room 5084, SITE Building, University of Ottawa

ADMISSION: Free

ORGANIZED BY: IEEE Computer Society Ottawa Chapter

CONTACT: Rami Abielmona, rabiemo@ieee.org

URL:

http://ottawa.ieee.ca/cs/index.php?option=com_content&view=article&id=16&Itemid=39.

5. Title: Impact of Renewable Energy Resources on the Electrical Power System Stability

Speaker: Prof. Dr. Mo El-Hawary, IEEE Fellow, IEEE PES Distinguished Lecturer, Dalhousie University, Halifax, Nova Scotia, Canada

DATE: Friday April 17, 2009

TIME: Refreshments, Registration and Networking: 06:30 p.m.;

Seminar: 07:00 p.m. – 08:00 p.m.

PLACE: Algonquin College, 1385 Woodroffe Ave., School of Advanced Technology, T-Building, Room T129.

Parking: No fee after 5:00 p.m. at the Visitors' Parking Lots 8 (green) & 9 (red). Please respect restricted areas. Map: to view the map, click here.

ADMISSION: All welcome - Free.

REGISTRATION: pre-registration Registration required. To ensure a seat,

please register by e-mail contacting: almuhtadi@ieee.org,

ORGANIZED BY: IEEE PES Ottawa Chapter, Reliability Chapter, IEEE Ottawa Section Educational Activities, Women in Engineering Affinity Group, and Algonquin College Student Branch.

CONTACT: details - Wahab Almuhtadi, Branislav Djokic, Raed Abdullah and

Patrick Couture. <http://www.ewh.ieee.org/soc/pes/ottawa>

ABSTRACT: Renewable energy resources for electric power generation are gaining momentum as the next great, green hope to substitute for less environmentally-friendly electrical energy sources. This trend places new challenges to the electric system operator in assuring both angle and voltage stability of the system. This need becomes more significant with the increase in penetration levels of renewable generation sources. The generator types, their dynamic performance, and interactions with electric grid will be discussed at this presentation. Reference will be made to situations where special devices and mitigation technologies are deployed successfully.

6. TITLE: Workshop: Radar for Canada's 200Km Economic Zone
TOPIC 1: Overview of Tracking and Data Fusion Techniques
SPEAKER 1: Dr Zhen Ding - DRDC Ottawa
TOPIC 2: HF Surface Wave Radar for Surveillance in Canada's 200 Km ECZ
SPEAKER 2 : Dr Tony Ponsford, Raytheon Canada
DATE: Tuesday April 21, 2009
TIME: Presentation 1 - 19.30; bar break 20.15;
Presentation 2 - 20.30
Meet and greet - from 19.00; bar opens 19.15
LOCATION: Naval Officer's Mess, 78 Lisgar St - Crowsnest, upstairs.
PARKING: on street or use City Hall underground parking
ADMISSION: free of charge
REGISTRATION: appreciated - h.reekie@ieee.org 613-728-5343
ORGANIZED BY: IEEE Ottawa Chapters, AESS, Computational Intelligence,
Robotics & Control Systems, and IET-UK Ottawa Network.
CONTACT: Hugh Reekie - h.reekie@ieee.org 613-728-5343
ABSTRACT: 1 - A review is given to the current technical solutions and future trends for multiple target tracking and data fusion. Applications are presented from Maritime Domain Awareness (MDA) with HF Surface Wave Radar and Above Water War (AWW) for navy ships.
ABSTRACT: 2 - There is a need to locate and identify ships operating within the Canadian 200 nautical mile Exclusive Economic Zone (EEZ). Recent advances in technology provide more systematic surveillance of targets. This talk presents a overview of a network-centric approach to maintaining a Canadian dynamic picture of surface activity within the EEZ. Details: <http://members.allstream.net/~max-com/ottawa.AESS.html>

7. TITLE: Marine Renewable Energy - Growing Canada's Renewable Energy Supply
SPEAKER: Melanie Nadeau, P.Eng., Manager, Marine Energy CanmetENERGY, Natural Resources Canada
DATE: Thursday, April 23, 2009
TIME: registration/refreshment (18:30 - 19:00); seminar (19:00 - 20:00)

LOCATION: Algonquin College, 1385 Woodroffe Ave., Advanced Technology Building (T), Room T129
(<http://www.algonquincollege.com/main/yourAlgonquinTab/directions/woodroffeMap.htm>)
PARKING: No fee at the parking lots 8 and 9 at the time of seminar. Please respect restricted areas.
ADMISSION: Free
REGISTRATION: branislav@ieee.org, almuhtadi@ieee.org, <http://ottawa.ieee.ca/ea/>
ORGANIZED BY: Educational Activities, Power and Energy Chapter, Women in Engineering Affinity Group, and Algonquin College Student Branch
CONTACT: Branislav Djokic and Wahab Almuhtadi
ABSTRACT: In Canada, marine energy R&D and technology demonstrations are occurring on both the Pacific and Atlantic coasts, keeping Canada at the forefront of marine energy device development. Canadian technologies and research facilities are on the leading edge in several of the areas within this emerging industry. The marine energy R&D aims to advance the commercialization of wave, tidal, and water current energy technologies with potential for a strong and sustained future in manufacturing, deployment and power generation.

8. TITLE: The 2009 Canadian Workshop on Information Theory
SPEAKER: There will be probably over 50 speakers. However, the program will only be available after the submission deadline and the review process.
DATE: Wednesday, May 13, 2009 to Friday, May 15, 2009
TIME: registration/refreshment Information can be found on the workshop web site.
LOCATION: School of Information Technology and Engineering (SITE), University of Ottawa <http://www.uottawa.ca/maps/maincampus.html>
PARKING: See <http://www.protection.uottawa.ca/en/parking-map.html>
ADMISSION: Applicable fees. Consult the workshop web site for the regular and the student registration fees.
REGISTRATION: <http://www.site.uottawa.ca/CWIT09>

ORGANIZED BY: Canadian Information Theory Society

CONTACT: Ali Miri, Email: Ali.Miri@uottawa.ca

ABSTRACT: This workshop provides an opportunity for researchers in Information Theory to meet and discuss aspects of their work. Work presented would include new results in (but not limited to) the following areas: information theory and statistics, coding theory and practice, communication systems, cryptology and data security, signal processing, and Data networks.

9. Title: 2009 IEEE Canada Electrical Power and Energy Conference (2009 IEEE EPEC)

Date: October 22 - 23, 2009

Location: The Conference will be held at the Hotel Holiday Inn

Select Located at 99 Viger Ave West, Montreal, Quebec, Canada.

Website: TBA

For more information contact:

Anader Benyamin <anader.benyamin@ieee.org>

10. IEEE International Conference on Communications (ICC 2012)

The IEEE Ottawa Section and Communications Society Ottawa Chapter are

preparing a bid for hosting the prestigious ICC event in 2012. This event is held annually somewhere in the world and attracts over 1000 registrants. Winning this event will undoubtedly help our engineers, the industry, and Ottawa as a whole. Your contribution will be appreciated - contact RaedAbdullah@ieee.org

11. Call for papers:

IEEE Ottawa Section is a Technical Sponsor for the following:

Topic: IEEE International Carnahan Conference on Security Technology

2009 (ICCST 2009)

Date: October 5 - 10, 2009

Location: Renaissance Hotel, Zurich, Switzerland

Important Dates:

Abstract Submission: April 4, 2009

Notice of Acceptance: May 29, 09;

Early Registration: July 24, 09;
Camera Ready: July 31, 09
Website: <http://www.iccst2009.com>
For more information contact: science@iccst2009.com

B. IEEE News

1. New IEEE Senior Members in the Ottawa Section

No A & A meetings were held since the previous meeting in February 2009

** IEEE Senior Member Program Page:
<http://www.ieee.org/web/membership/senior-members/index.html>

For details and updated news about Senior Membership elevation in Ottawa, visit IEEE Ottawa Section Senior Members Page
<http://ottawa.ieee.ca/sm>

2.TITLE: TISP (Teacher-In-Service-Program) R7 (Canada) workshop
SPEAKER: Various speakers from local Montreal government officials and academia

DATE: Friday May 15th – Saturday May 16th 2009

TIME: Friday 430PM to Saturday 4PM

LOCATION: Montreal Marriott Chateau Champlain link

REGISTRATION: Deadline April 17 – please contact Jennifer Ng,
jng@ieee.org

ORGANIZED BY: IEEE EAB (Education Activities Board) and Montreal Section

CONTACT: Jennifer Ng (member of EAB PECC and Ottawa Section executive

member S'91 M'95 SM'07) jng@ieee.org

ABSTRACT:The purpose of this workshop is to help IEEE members improve

the teaching of and in pre-university schools (primary schools, middle schools and high schools). In this workshop, IEEE members will learn how

to work with teachers of pre-university schools, and how to conduct hands-on sessions for these teachers on engineering topics. The teachers

will then use these sessions on a regular basis with their own students. The expectation is that IEEE members who completed the workshop will

contact local schools in months and years to come, and will work with their teachers on lesson plans that demonstrate engineering and engineering

design. Examples of such lesson plans are available at <http://www.tryengineering.org/lesson.php>

3. TITLE: The 2nd Climate Change Technology Conference 2009

SPEAKERS: on the web site.

Date: May 12, 2009 - May 15, 2009

TIME: <http://www.cctc2009.ca>

Location: The CCTC2009 will be held on the campus of McMaster University in Hamilton, Ontario, Canada.

PARKING: <http://www.cctc2009.ca>

ADMISSION: <http://www.cctc2009.ca>

REGISTRATION: <http://www.cctc2009.ca>

ORGANIZED BY: The CCTC2009 is organized by the Engineering Institute

of Canada (EIC) in association with nine of its member societies.

DETAILS: <http://iee.ca/news/2008/jun2008.htm> and <http://www.cctc2009.ca>

CONTACTS: <http://www.cctc2009.ca> and click on Contact

ABSTRACT: The 2nd Climate Change Technology Conference (CCTC 2009)

is a Canadian/ international forum for engineers, scientists, policy advisors, industry and other stakeholders to share and exchange new information and ideas for dealing with climate change and global warming. It also provides an opportunity for participants to keep abreast of emerging techniques and technologies for the mitigation of, and adaptation to, the impacts of climate change.

The conference theme: Climate Change Deal with It! emphasizes the needs to develop practical engineering and administrative responses to address issues associated with the impacts of climate change and global warming. For more details, visit the "Call for Papers" page.

4. IEEE Biometric Summer School, Toronto. May 24-30, 2009

Application deadline – March 13, 2009. This is part of the 2009 IEEE Emerging Technologies Summer Series, an ongoing set of intensive programs that exposes “emerging” and cross-disciplinary fields to young scholars (i.e.: graduate students, post-docs and new faculty) at higher education institutions. The school is an intensive week of lecture, panels, labs and interactive group work designed to provide a comprehensive overview of current topics in biometrics with emphasis on technologies, applications and research issues. For online application and additional details please visit the website at <http://www.ipsi.utoronto.ca/events/ieee2009>.

5. The First "Women in Electromagnetics (WiEM)" Workshop will be held at the University of Utah, in Salt Lake City, Utah June 5 - 8, 2009. The workshop will feature sessions covering many topics of current interest in electromagnetics and antennas. A training session on the use of the ANSOFT simulation package, in addition to sessions related to career development will also be included in the program. The name WiEM suggests ONLY that most of the lecturers will be female, but all participants are very welcome to the workshop.

All participants are asked to present a poster on their research. An abstract of the poster needs to be submitted along with the registration form. Details are provided on the WiEM Workshop website. <http://wiem.eecs.ucf.edu>

The registration fee is \$120 and the registration deadline is January 23, 2009.

Some funds are available for covering domestic travel and expenses for the participants. Due to limited seating, the registration may close early. The Workshop is sponsored by the IEEE Antennas and Propagation Society.

6. Title: 22nd IEEE Canadian Conference on Electrical and Computer Engineering 2009 (CCECE 2009)

Date: May 3-6, 2009

Location: Delta Hotel, St. John's, Newfoundland and Labrador, Canada

Important Dates:

Submission of Papers for Review Friday December 5 Monday,
December 22, 2008

Notification of Acceptance Friday February 6, 2009

Final Paper Submission Deadline Friday March 6, 2009

Author's Registration Deadline Friday March 6, 2009

Advance Registration Deadline Friday April 3, 2009

Website: <http://www.iccst2009.com>

For more information contact: CCECE '09 Conference Secretariat,
Faculty of Engineering, Memorial University, St. John's, NL A1B 3X5;
Ph: (709) 737-7467, Fax: (709) 737-4042, Email: contact@ccece09.org

C. Non-IEEE News and Events/Announcements

Nothing to Report.

=====

D. Manage Your Newsletter Subscription:

You have received this mailing because you are a member of IEEE and/
or one of the IEEE Technical Societies.

To unsubscribe, please go to
<http://ewh.ieee.org/enotice/options.php?SN=Almuhtadi&LN=SECTION>
and be certain to include your IEEE member number.

If you need assistance with your E-Notice subscription,
please contact k.n.luu@ieee.org

If you are not IEEE member please visit:
<http://ottawa.ieee.ca/news/about.html#subscribe>

=====