IEEE VANCOUVER CONTACT

WWW.IEEECONTACT.ORG

OCTOBER 2016
CIRCULATION 3651

VOLUME 47
NUMBER 10

- Tuesday 04 October is IEEE Day
- The coming of age of microfluidics
- Medical device development
- IEEE Day Networking Social with WiE and YP
- Lunch and learn about efficient battery chargers
- IEEE IEMCON 2016
- Tour historic Stave Falls Powerhouse
- 2016 Standards Medallion Award
- Nominations for IEEE Vancouver 2017
- IEEE Vancouver Membership Development

IEEE Day is an annual event

On IEEE Day, IEEE members and friends from around the world celebrate the IEEE and what it means... to us, to our communities, and to the world.

The theme for IEEE Day 2016 is:
Leveraging Technology for a Better Tomorrow

IEEE encourages its members to generate their own unique local celebrations - get together with your fellow IEEE members and plan a local celebration where you are. For additional information on IEEE Day 2016 globally please visit: http://www.ieeeday.org

IEEE Vancouver also encourages its members to celebrate IEEE Day in a fitting way. For those that are not already participating in their own local IEEE Day celebration, IEEE Vancouver is hosting an IEEE Day event for its members and friends of the IEEE.
Please let us know if you are planning your own unique local celebration on IEEE Day, we might be able to offer some support!

For further information about IEEE Day in the Vancouver Section, please contact IEEE Day Coordinator Mr. Guillaume Boisset at guillaume_b9@yahoo.com. Thank you for your support of IEEE, we look forward to celebrating IEEE Day with you!

Come Celebrate IEEE Day 2016 with us!

Tuesday 04 October
16:00 - 18:00
Creekside Community Centre (near Science World)

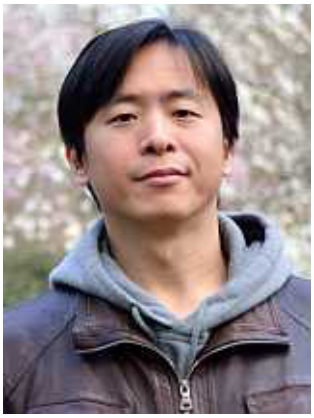
We will hold a celebration complete with food, entertainment, presentations! Then we will proceed as a group to the Vancouver Section Centennial Monument located 5 minutes away, in front of Science World where a photo op will take place at 17:30.

Free food and refreshments for members who register.
For registration and location details visit:
https://events.vtools.ieee.org/m/41129#13

On social media we will encourage all participants to share their IEEE Day experience using #VANIEEEDAY.

For more information and updates visit
online Contact www.ieeecontact.org,
or IEEE Vancouver website http://vancouver.ieee.ca/
and follow @ieeecontact for Twitter updates.

The coming of age of microfluidics: EDA solutions for enabling biochemistry on a chip



Tsung-Yi Ho
Tsing Hua University

Distinguished Lecturer

Tuesday 11 October
2:00 pm to 3:00 pm

ASB 10900 (IRMACS Presentation Studio)
Simon Fraser University

Light refreshments served.
Open to public

Please register to ensure adequate room size and refreshments

Sponsored by IEEE Circuits and Systems Society joint Chapter of the Vancouver/ Victoria Sections IEEE Circuits and Systems Society Distinguished Lecturer Program

Information
Circuits and Systems Chair Ljiljana Trajkovic
ljilja@cs.sfu.ca

This talk offers attendees an opportunity to bridge the semiconductor ICs/system industry with the biomedical and pharmaceutical industries. This talk will first describe emerging applications in biology and biochemistry that can benefit from advances in electronic "biochips". The presenters will next describe technology platforms for accomplishing "biochemistry on a chip", and introduce the audience to both the droplet-based "digital" microfluidics based on electrowetting actuation and flow-based "continuous" microfluidics based on microvalve technology. Next, the presenters will describe system-level synthesis includes operation scheduling and resource binding algorithms, and physical-level synthesis includes placement and routing optimizations.

In this way, the audience will see how a "biochip compiler" can translate protocol descriptions provided by an end user (e.g., a chemist or a nurse at a doctor's clinic) to a set of optimized and executable fluidic instructions that will run on the underlying microfluidic platform. The problem of mapping a small number of chip pins to a large number of array electrodes will also be covered. Finally, sensor feedback-based cyberphysical adaptation will be covered.

Speaker: Tsung-Yi Ho received his Ph.D. in Electrical Engineering from National Taiwan University in 2005. He is a Professor with the Department of Computer Science of National Tsing Hua University, Hsinchu, Taiwan. His research interests include design automation and test for microfluidic biochips and nanometer integrated circuits.

He has been the recipient of the Invitational Fellowship of the Japan Society for the Promotion of Science (JSPS), the Humboldt Research Fellowship by the Alexander von Humboldt Foundation, and the Hans Fischer Fellow by the Institute of Advanced Study of the Technical University of Munich. He was a recipient of the Best Paper Awards at the VLSI Test Symposium (VTS) in 2013 and IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems in 2015. He served as a

Distinguished Visitor of the IEEE Computer Society for 2013-2015, the Chair of the IEEE Computer Society Tainan Chapter for 2013-2015, and the Chair of the ACM SIGDA Taiwan Chapter for 2014-2015. Currently he serves as an ACM Distinguished Speaker, a Distinguished Lecturer of the IEEE Circuits and Systems Society, and Associate Editor of the ACM Journal on Emerging Technologies in Computing Systems, ACM Transactions on Design Automation of Electronic Systems, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, and IEEE Transactions on Very Large Scale Integration Systems, Guest Editor of IEEE Design & Test of Computers, and the Technical Program Committees of major conferences, including DAC, ICCAD, DATE, ASP-DAC, ISPD, ICCD, etc.

CAS
IEEE CIRCUITS AND SYSTEMS SOCIETY
IEEE VANCOUVER/VICTORIA JOINT CHAPTER

Medical device development - from concept to commercialization

This professional talk by DTG Partners is a great opportunity for those interested in joining or starting a medical device company.

27 October
3:00pm

Fred Kaiser Bldg
Rm 5505
University of British Columbia

Registration is free and open to all but due to limited seating priorities will be given to IEEE members. To register email sarak@ieee.org and mention if you are an IEEE member. Registration closed on October 15th.

Engineering in Medicine & Biology Chair
Sara Khosravi
sarak@ieee.org

When is a device a medical device and when isn't it?

- Definition
- Classification
- Advantages and disadvantages of being classified as medical device
- Medical device approval options in the US, EU and Canada.
- Differences and similarities
- ISO 13485 vs FDA
- QSR vs CE Mark
- Case study questions and comments

Presenter: DTG Partners is a medical product development consultancy located in the Greater Vancouver area of British Columbia. We specialize in helping innovative medical device start up companies bring their products to market in the most fiscally and time efficient fashion. We are a small mobile and highly skilled group that can provide focused personalized service to address customer needs. Together with our associates, the partners at DTG have more than 70 years of experience in the development of specialized medical products including medical devices and drug-device combinations. We can help you negotiate the substantial product development, manufacturing, quality system and regulatory hurdles to bring your product from the lab to the marketplace. All of our services are tailored to the requirements of your product and the realities of your business.

Key personnel: Val Rubinchik M.Eng P.Eng, Experienced medical device professional with proven technical, leadership and management skills. Skilled in complex medical device design, project management, ISO 13485/FDA QSR compliant Quality System development.

Rick Kjellbotn P.Eng Medical device engineer with 20 years of experience in medical device development. Proven experience in design, testing, manufacturing, quality systems and regulatory submissions.

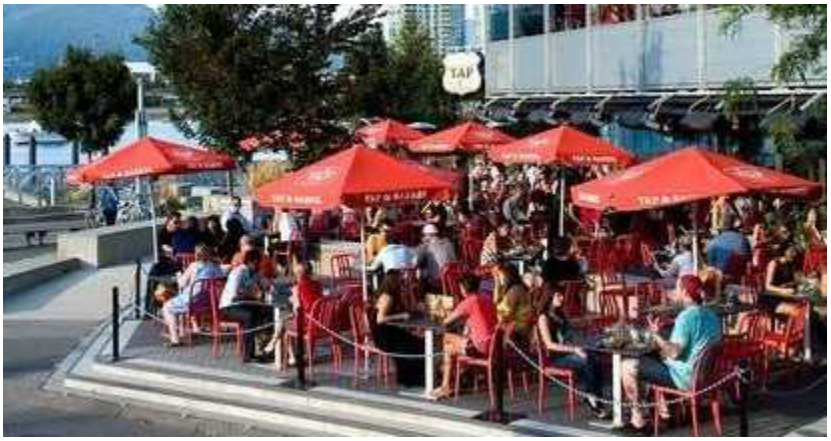
IEEE Engineering in Medicine and Biology

IEEE Day Networking Social with IEEE WiE and IEEE YP

To continue the IEEE Day celebration, IEEE Vancouver Women in Engineering and Young Professionals are hosting an after party. Join us for an evening of connections and conversations.

6:00 pm

Tap & Barrel - Olympic Village



Registration
https://www.eventbrite.ie/e/ieee-day-networking-social-with-ieee-wie-and-ieee-yp-tickets-28205809335

Information
WIE Chair
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Sean Garrity, Chair
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IEEE Women in Engineering WIE

IEEE youngprofessionals

IEEE PELS Industry/academia Series
Lunch and learn about efficient battery chargers

Improvements in power conversion efficiency
is a key requirement to advance electric vehicles.
Join us at Delta-Q technologies for two presentations
from academia and industry on this emerging topic.

Wednesday 05 October

12:00pm - 2:00pm

Delta-Q Technologies
3755 Willingdon Avenue,
Burnaby

Speaker 1
Chris Botting
Delta-Q Technologies

Regulatory drivers for energy efficiency in battery chargers

Battery chargers are an important growing power electronics application, and have seen substantial improvements in energy efficiency and power density in recent years, enabled by modern switch-mode power supply techniques. Drivers for increased efficiency include energy cost, hardware cost, size, and weight, but new battery charger efficiency regulations are increasingly important, including standards from the California Energy Commission and the US Department of Energy.

An overview of these standards will be provided, how they are tested and measured, and where energy losses occur. A system design approach will highlight gaps and opportunities to increase efficiency for industrial battery chargers.

Speaker 2
Mehdi Mohammadi
University of British Columbia

Synchronous rectification for extreme efficiency of electric vehicle charging systems

Electric vehicles first appeared in the 19th century. For over two centuries, electric vehicle performance and cost showed steady improvement as innovations in battery and power electronic converter technologies paced the growing need for a better quality in our daily lives. Every electric vehicle has a battery charger system, which uses a power electronic converter. Due to the limited space in an electric vehicle, size and weight (conversion density) of the power converter employed to charge the bank of batteries are crucial. The conversion density is basically dependent on switching and conduction losses. LLC resonant converters have gained popularity in a variety of applications including battery chargers, due to their natural ability to eliminate switching losses. Although LLC features good efficiency, conductive losses in the output rectifier remains a barrier to achieve enhanced efficiency, especially for high output current-low output voltage applications.

Information
Power Electronics chair
Martin Ordonez
mordonez@ieee.org

pels
IEEE POWER ELECTRONICS SOCIETY
Powering a Sustainable Future

IEEE IEMCON 2016

7th IEEE Annual Information Technology, Electronics and Mobile Communication Conference

13 - 15 October 2016 - University of British Columbia

Continuing from the outstanding success of IEMCON 2015, we are proud to present IEEE IEMCON 2016 which will provide an opportunity for researchers, educators and students to discuss and exchange ideas on issues, trends, and developments in Information Technology, Electronics and Mobile Communication.

The conference aims to bring together scholars from different disciplinary backgrounds to emphasize dissemination of ongoing research in the fields of in Information Technology, Electronics and Mobile Communication. Contributed papers are solicited describing original works in the above mentioned fields and related technologies. The conference will include a peer-reviewed program of technical sessions, special sessions, business application sessions, tutorials, and demonstration sessions.

All accepted papers will be presented during the parallel sessions of the Conference and papers will be submitted for publication at IEEE Xplore ® Digital Library.

Day 1 - 13 October

08:00 Registration, Great Hall North Lobby
09:00 Inauguration, Room 2306/09
09:45 Keynote: David Michelson, UBC, CAN, Room 2306/09
10:30 Keynote: Rodney Vaughan, SFU, CAN, Room 2306/09
11:15 Coffee break, Great Hall North
11:45 Keynote: Motoharu Fujigaki, U of Fukui, JPN, Rm2306/09
12:30 Lunch Great Hall North
02:00 Technical Sessions for IEMCON 2016
05:30 Networking and poster session Great Hall North
06:30 Banquet dinner Great Hall North

Day 2 - 14 October

08:00 Registration, Great Hall North Lobby
09:00 Keynote: Raj Jain, Washington U St.Louis,USA,Rm 2306/09
09:45 Keynote: Sushanta Mitra, York Univ, CAN, Room 2306/09
10:30 Keynote: Axel Krings Univ of Idaho, USA, Room 2306/09
11:15 Coffee break, Great Hall North
11:45 Technical Sessions for IEMCON 2016
01:00 Lunch Great Hall North
02:00 Technical Sessions for IEMCON 2016
02:00 Parallel workshop, Room 2314
03:30 Coffee break, Great Hall North
04:00 Technical Sessions for IEMCON 201
04:00 Parallel workshop, Room 2314

Day 3 - 15 October

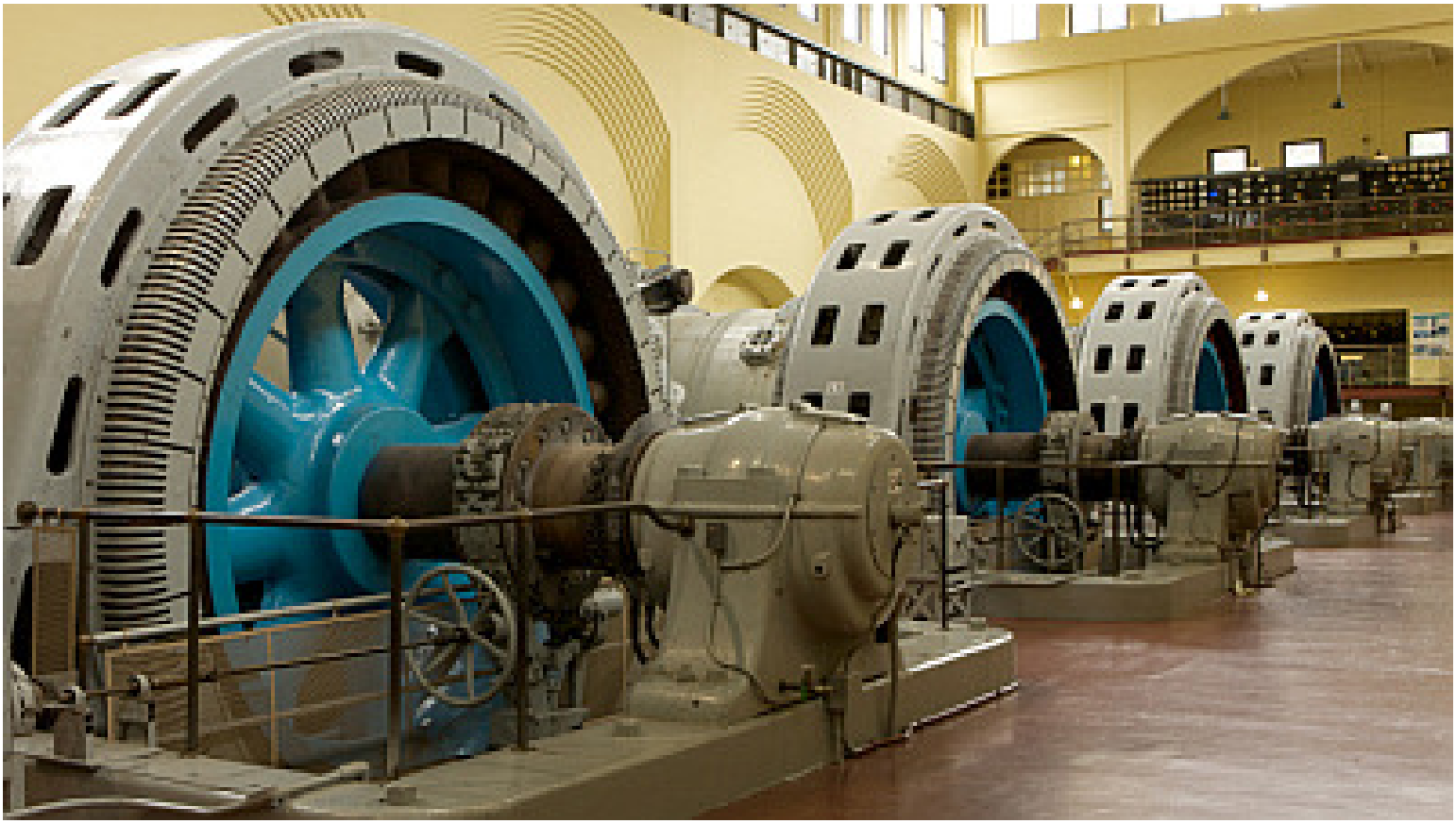
08:00 Registration, Great Hall North Lobby
09:00 Keynote:J. Giesbrecht,Ebor Computer Lab,AU,Rm2306/09
09:45 Keynote:Takeo Sasaki,Tokyo U of Science,JP,Rm 2306/09
10:30 Keynote:James Cole, Univ of Tsukuba, JPN, Rm 2306/09
11:15 Coffee break, Great Hall North
11:45 Keynote: Ruediger Gad, Terma GMBH, DEU, Rm2306/09
12:30 Prizes and certificate distribution, Room 2306/09
01:00 Lunch Great Hall North
02:00 Technical Sessions for IEMCON 2016
02:00 Parallel workshop, Room 2314
03:30 Coffee break, Great Hall North
04:00 Technical Sessions for IEMCON 2016

http://www.ieee-iemcon.org

Tour historic Stave Falls Powerhouse

Saturday 08 October
10am - 2pm

Stave Falls Powerhouse **31338 Dewdney Trunk Road** **Mission BC**



Tour the historic Stave Falls Powerhouse with IEEE Power and Energy Society and IEEE Young Professionals

This 100-year-old power generating facility is a National Historic Site of Canada where you can explore the original mechanical and electrical components installed over a century ago. Lots of vintage protection equipment to explore the basics of modern systems.

Participation is encouraged to explore this site as a peer-peer activity. Moderate technical content discussion for those interested.

Participants are encouraged to carpool from BC Hydro Edmonds at 8:30am (leaving at 9am sharp).
Group meets in the Stave Falls Powerhouse Entrance at 10am.
Participants will be responsible for their own admission fees, as applicable.
Admission information and accessibility information:
https://www.bchydro.com/community/recreation_areas/visitor-centres/stave-falls-visitor-centre.html
Register to participate:
https://www.eventbrite.com/edit?eid=27297104374

Information
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IEEE PES Power & Energy Society®

DEIS

Information
Sean Garrity, Chair
IEEE youngprofessionals
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IEEE youngprofessionals

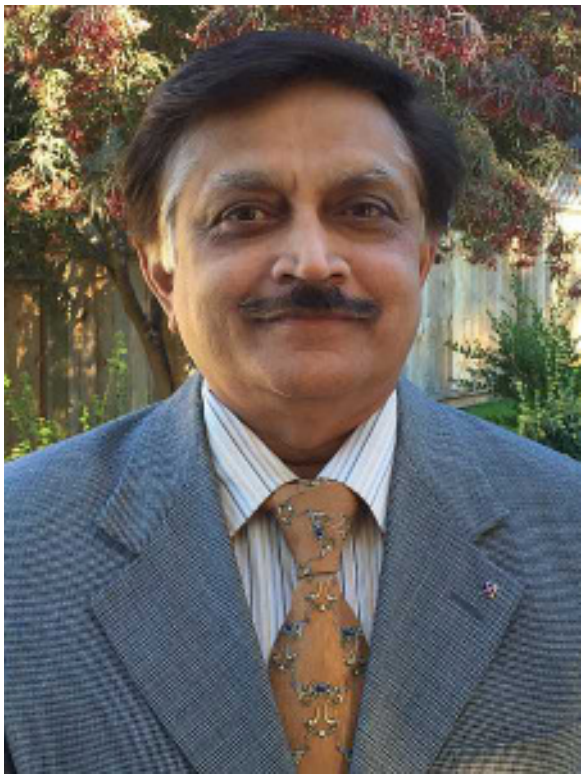
Congratulations

IEEE Vancouver members
Anthony Ho
and
Sudhakar Cherukupalli
awardees of the

2016 STANDARDS MEDALLION AWARD

by the IEEE Standard Association (IEEE-SA) in recognition of major contributions to the development of standards.

Dr. Anthony Ho received IEEE Standards Association's 2016 Standards Medallion Award for contributions to several IEEE standards since 2005, particularly in the area of FACTS device, and for transfer knowledge to the professionals in the industry through teaching in IEEE tutorials.



Dr. Sudhakar Cherukupalli received IEEE Standards Association's 2016 Standards Medallion Award for significant contribution towards development of standards pertaining to Real-time Ratings for Transmission Cable Circuits, DGA Interpretation for Condition Assessment of High Voltage Oil-Filled Cables and towards the Education Committee of the IEEE Dielectrics and Electrical Insulation Society (DEIS).

On behalf of the IEEE Vancouver Section, we congratulate
Dr. Anthony Ho and Dr. Sudhakar Cherukupalli
for receiving such prestigious recognition
for their contribution to the development of IEEE Standards.

Accepted nominations for IEEE Vancouver 2017 elected positions

The Nominations Committee is pleased to announce a slate of candidates for the elected positions within the Vancouver Section. You will note that there is one position that is listed as vacant. These positions have not yet received confirmation that someone is willing to stand for office. If any of these positions interests you please contact Bob Gill (nominations committee chair) at bgill@ieee.org. to state your interest.

Also, if you are interested in a position that is listed as having a nominee you are free to run for that position. We will hold an election for any positions that are contested as is our usual practice. The Section bylaws call for petitions as follows:

Following this announcement, a minimum of twenty eight (28) days shall be allowed for additional nominations by petition. A valid petition must be signed by twelve (12) or more voting members or 1% of the Section's voting membership, whichever is fewer.

Bob Gill,
Chair Nominations Committee

Rama Vinnakota	Chair	Vancouver	Section
Guillaume Boisset	Vice-chair	Vancouver	Section
Steven McClain	Treasurer	Vancouver	Section
Secretary	vacant	Vancouver	Section
Youry Khmelevsky	Chair	Okanagan	Sub-Section
Matthew Reid	Chair	Northern BC	Sub-Section

Ivan Bajic	Chapter Chair	Signal Processing	(SP01)
Jeff Bloemink	Chapter Chair	Joint Industry Applications and Electronics	(IE13/IA34)
Bob Gill	Chapter Chair	Joint Computing	(C16/CIS11)
Bonnie Gray	Chapter Chair	Electron Devices	(ED15)
Ahmed Hussein	Chapter Chair	Joint Applied Physics	(IM09/MAG33/NPS05/UFFC20)
Sara Khosravi	Chapter Chair	Engineering in Medicine and Biology	(EMB18)
Darrell Koskinen	Chapter Chair	Joint Management	(TM14/PC26/E25/SIT30)
Dave Michelson	Chapter Chair	Joint Aerospace & Electromagnetics	(AES10/GRS29/RL07/PSE43)
Shahriar Mirabbasi	Chapter Chair	Joint Solid State Circuits & Technology	(SSC37/CE08/CPMT21)
Ryozo Nagamune	Chapter Chair	Joint Control, Robotics, and Cybernetics	(CS23/RA24/SMC28)
Martin Ordonez	Chapter Chair	Power Electronics	(PEL35)
Dipendra Rai	Chapter Chair	Joint Power & Energy	(PE31/DEI32)
Serdar Soylu	Chapter Chair	Oceans, Geoscience & Remote Sensing	(OE22)
Ljiljana Trajkovic	Chapter Chair	Joint Section Circuits and Systems	(CAS04)
Vincent Wong	Chapter Chair	Joint Communications	(VT06/COM19/PHO36/BT02/IT12/ITS38)

Parastoo Kheirkhah Dehkordi	Chair	Women In Engineering	Affinity Group
Sean Garrity	Chair	Young Professionals	Affinity Group
Terry Martinich	Chair	Life Membership	Affinity Group
Scott Tully	Chair	Consultants Network	Affinity Group

IEEE Vancouver is seeking a volunteer for the role of Section Secretary starting January 2017. This position involves taking minutes during our monthly executive meetings. The position annually progresses to Treasurer, Vice-chair, Chair, and Past-chair. All necessary training will be provided.

Please send your expression of interest to Bob Gill at bgill@ieee.org.

IEEE Vancouver Membership Development recognition

From: Antonio Luque [mailto:aluque@gte.esi.us.es]
Sent: 2016, August 23 12:42 AM
To: Venkataramakrishnan Vinnakota
Subject: Congratulations on meeting your goals

Dear Venkataramakrishnan Vinnakota, Vancouver Section Vice Chair,
I am pleased to recognize the Vancouver Section for meeting its retention goal for the 2016 membership year. Congratulations!
The membership development goals were developed based on your Section's four year performance. You are to be commended for continuing to grow IEEE membership in the Vancouver Section.

In recognition of this achievement, I have attached an image that you can place in your e-mail signature and on your Section website or newsletters, which signifies your outstanding achievement for the 2016 membership year.
Please feel free to share this with other leaders in your Section to recognize the good work you are doing, and to let your members know you are working hard to provide them the best member experience possible.

Regards,
Antonio Luque
2016 Chair
IEEE Membership Recruitment and Recovery Committee