

# IEEE Canada Overview for R8

*Rob Anderson*



**IEEE Canada**



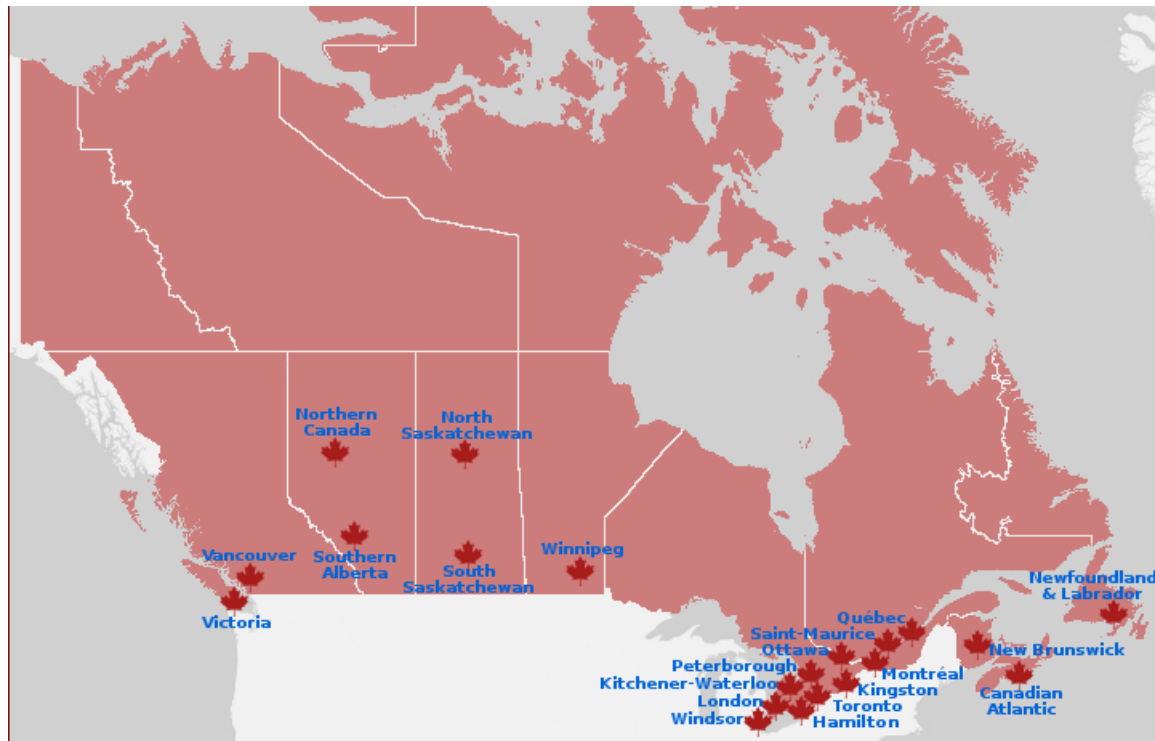
Established 1995



**IEEE**

# IEEE Canada

## Quick Facts



IEEE Canada



Established 1995

- ▶ IEEE Canada is one of ten Regions within IEEE.
- ▶ Is unique because it is the only country in the world that is a single Region.
- ▶ 21 Sections in IEEE Canada.
- ▶ Over 50 Student Branch Chapters in Canada.
- ▶ Total Membership 14,880 (as of Nov 2020)



# IEEE Canada

## *Quick Facts (Continued)*



**IEEE Canada**



Established 1995

- ▶ IEEE Canada Only has meaning within Canada, to the rest of IEEE, we are known as Region 7.
- ▶ Represents about 4 % of IEEE Membership.
- ▶ Membership is down from 2019 by about 10 percent.
- ▶ Has three Areas: East, Central and West
- ▶ I am 31<sup>st</sup> Region Director and the 15<sup>th</sup> President of IEEE Canada
- ▶ In 1995, IEEE Region 7 and Canadian Society Electrical & Computer Engineering merged to form IEEE Canada.
- ▶ 2022 was the was the 27<sup>th</sup> Anniversary on IEEE Canada.
- ▶ IEEE Canada has its own Foundation, IEEE Canadian Foundation

# IEEE Canada Board Affiliations

*Engineering Institute of Canada*



**IEEE Canada**



Established 1995

- ▶ IEEE Canada (Region 7) is the Canadian arm of the IEEE, as well as the constituent society of the Engineering Institute of Canada (EIC) for the technical fields of electrical, electronics and computer engineering.
- ▶ While both organizations provide educational services and products, IEEE provide technical information through its member societies and EIC focuses on the professional component.
- ▶ By bringing together both entities, IEEE Canada can provide its members with quality information on the latest technology and important networking opportunities.

# IEEE Canada Affiliations

*IEEE Canadian Foundation – Philanthropic Partner of IEEE Canada*

[www.ieeecanadianfoundation.org](http://www.ieeecanadianfoundation.org) & [www.canadahelps.org/en/charities/ieee-canadian-foundation/](http://www.canadahelps.org/en/charities/ieee-canadian-foundation/)



**IEEE Canada**



Established 1995

## Learn

- CRA registered charity in Canada & incorporated Ontario non-profit
- Donors have direct impact, not supported by dues, rebates
- All Canadian Board, all volunteers
- Collaboration with IEEE Foundation when appropriate
- Funds held, managed, disbursed in Canada
- Over \$2.0M disbursed to 3Q2020



**Grants** to new and innovative projects in Canada that seek to apply technology for the benefit of humanity



**IEEE McNaughton Learning Resource Centres** and related scholarships



## Donate

- IEEE dues renewal & shopping cart
- Online via website & Canada Helps
- Mail
- Bequests, gifts in memory or in honour
- Endow a scholarship/prize/award
- Charitable tax receipt (in Canada)



Fund administrator for peer recognition programs and scholarships within Canada



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# IEEE Canada Governance

*IEEE Canada Board*



**IEEE Canada**



Established 1995

- ▶ Voting Members: Region Chair, Region Vice Chair (Elect), Region Secretary, Region Treasurer, and Past Region Chair, Each Section Chair, the five Group Chairs (more on Groups in back up materials), the Regional Student Representative (RSR).
- ▶ Non-Voting Members: Directors Emiriti, ICF President, IEEE BoD Members in R7, and the three Area Chairs.

# IEEE Canada Board of Directors



## IEEE Canada



Established 1995

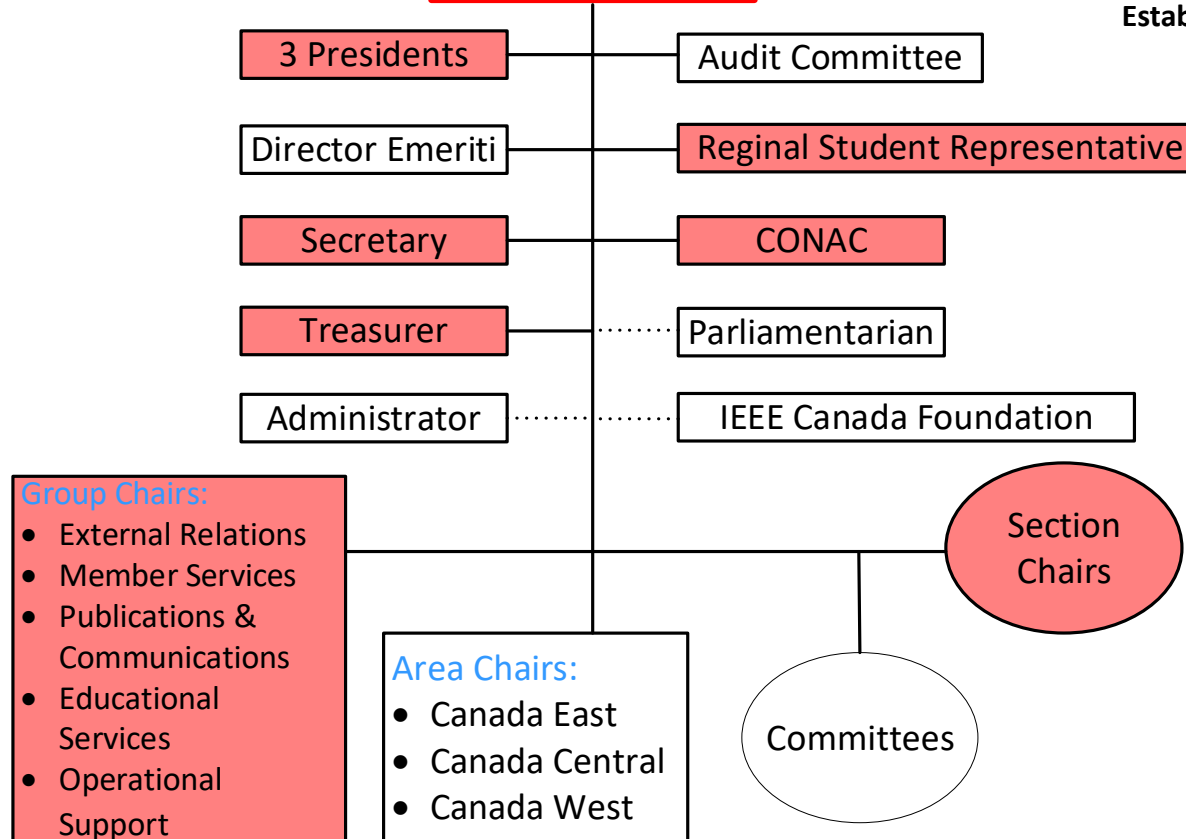


Chart 5:  
Sections

**East Area Sections:**

- Newfoundland & Labrador
- Canadian Atlantic
- New Brunswick
- Quebec
- Saint Maurice
- Montreal
- Ottawa

**Central Area Sections:**

- Kingston
- Peterborough
- Hamilton
- Toronto
- London
- Kitchener/Waterloo
- Windsor

**West Area Sections:**

- Winnipeg
- South Saskatchewan
- North Saskatchewan
- Southern Alberta
- Northern Canada
- Vancouver
- Victoria

Chart 5:  
Committees

**External Relations Group (ERG):**

- Industry Relations Committee (IRC)
- Outreach and Partnership Committee (OPC)
- Humanitarian Initiatives Committee (HIC)
- Standards Association Liaison (SAL)
- PAGSE Committee Representative (PCR)

**Member Services Group:**

- Membership Development Committee (MDC)
- Young Professionals (YP)
- Women in Engineering (WIE)
- Life Member Committee (LMC)
- Student Activities Committee (SAC)
- Regional Student Representative (RSR)

**Publications & Communications Group:**

- Editor in Chief Canadian Journal of Electrical & Computer Engineering (CJECCE)
- Editor in Chief IEEE Canadian Review (ICR)
- Editor in Chief IEEE Canada Electronic Newsletter (IECN)
- Advertising Coordinator (AC)
- Translation

**Educational Activities Group:**

- Educational Activities Coordinator (EAC)
- Teacher In Service Program (TISP)
- Training Coordinator (TC)

**Member Services Group:**

- Meeting Coordinator
- Publicity Coordinator
- History Committee (HC)
- vTools Coordinator
- Regional Vitality Coordinator
- Chapter & Student Branch Chapter Coordinator (CSCC)



**IEEE Canada**



**Established 1995**







- ▶ Canadian Conference on Electrical and Computer Engineering (CCECE)
  - First F2F conference since the start of pandemic.
- ▶ Electrical Power and Energy Conference (EPEC)
  - Will be a virtual event.
- ▶ International Humanitarian Technical Conference (IHTC)
  - The IEEE International Humanitarian Technology Conference is a Multi-Regional Conference Series rotating between R7, R8, and R9. Will be a virtual event.
- ▶ Wireless Communication in Space and Extreme Environments (WiSEE) Conference
  - This conference is a collaboration between Region 7, a local Section, and IEEE council on RFID.
  - R7 hosts this once every 3 years



- ▶ Two face-to-face Board meetings.
  - 2-day events
- ▶ At least two virtual Board meetings.
  - Try to keep agenda to four hours.
- ▶ Multi-Generational Congress (held every other year)
  - This conference brings together Students, Young Professional, Women in Engineering and Life Members for Mentorship, training, for the sharing of ideas and issues, and brain storming. This Congress also provided an opportunity for each committee to individually meet.
- ▶ Student Congress (held every year)
- ▶ Monthly Executive (ExCom) and Steering Committee (SteerCom) meetings.
  - These meetings are held on same evening every month, try to keep them to 2 hours each.



- ▶ Sections Congress 2023 – Ottawa, Ontario
  - You are all invited
- ▶ IEEE Milestone: TransCanada Microwave System
  - This Milestone dedication will see 19 out of the 21 Sections dedicating an IEEE Milestone for the TransCanada Microwave System which was established in 1958. The system made it possible to stream live TV events Coast to Coast and enabled Direct Dial Long Distance. This milestone will be the largest single dedication of an engineering achievement in IEEE history.
  - The industry partners involved in this project want to make an educational for STEM and an historical event.

- ▶ IEEE Canadian Review



- ▶ IEEE Canadian Journal on Electrical & Computer Engineering

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Electrical and  
Computer  
Engineering

Journal  
canadien  
de génie  
électrique et  
informatique



IEEE CANADA  
<http://www.ieee.ca/journal>



- ▶ Monthly Newsletter

- ▶ Our Own Web Page:

- [www.ieee.ca](http://www.ieee.ca)



### ► Declining Membership Numbers

- Makes it difficult to find volunteers for Sections and Region Board.
- Makes it difficult to find volunteers to run our conferences.
- Which impacts ...

### ► Revenues

- Revenues are down at our conferences due to attendance is about one-third what it was.

### ► Focuses

- Better training for volunteers so they have the have knowledge and tools for membership development.
- Exploring new revenue streams: IEEE Canada Press, which is patterned after IEEE Press, but focused more on publishing books on the history of technology.
- New marketing opportunities: IEEE Milestone: Trans Canada Microwave System





**IEEE Canada**



Established 1995

# Supporting Materials



**IEEE**

# IEEE Canada Governance

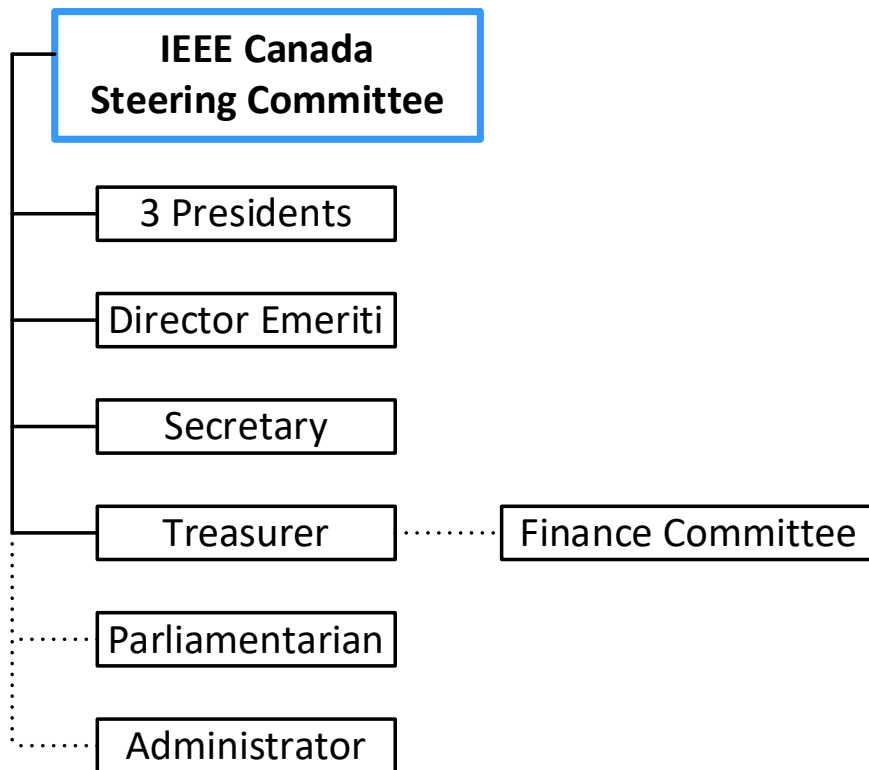
*IEEE Canada Steering Committee (SteerCom)*



**IEEE Canada**



Established 1995



- ▶ Voting Members of SteerCom: Three Presidents, Secretary, Treasurer, Director Emeriti.
- ▶ Non- Voting Members of SteerCom: Parliamentarian and IEEE Canada Administrator.
- ▶ Duties:
  - On recommendation from the Nominations and Appointments Committee, shall be responsible for appointments to all Committees and to nominate the candidates for Director Elect
  - Approving compensation for IEEE Canada Administrator.



# IEEE Canada Governance

## *IEEE Canada Executive Committee (ExCom)*

- ▶ Voting Members of ExCom: Three Presidents, Secretary, Treasurer, Director Emeriti, Group Chairs and Area Chairs.
- ▶ Non- Voting Members of ExCom: CONAC Chair, Parliamentarian and IEEE Canada Administrator.
- ▶ Duties:
  - Conducts the operations of IEEE Canada between Board Meetings.
  - Monitors the goals and objectives of IEEE Canada and institutes corrective action if necessary
  - Ensures it is possible for all IEEE Canada Committees to meet their annual objectives.



**IEEE Canada**



Established 1995

**IEEE Canada  
Executive Committee**

3 Presidents

Director Emeriti

Secretary

Treasurer

Parliamentarian

Administrator

Finance Committee

### Group Chairs:

- External Relations
- Member Services
- Publications & Communications
- Educational Services
- Operational Support

### Area Chairs:

- Canada East
- Canada Central
- Canada West



# IEEE Canada Governance

## *IEEE Canada Group Chairs*



**IEEE Canada**



**Established 1995**

### Group Chairs:

- External Relations
- Member Services
- Publications & Communications
- Educational Services
- Operational Support

### ► Duties:

- Maintaining Communication between their Committee Chairs.
- At IEEE Canada Board Meetings, represents and coordinates reporting to Board on activity plan.
- In between IEEE Canada Board Meetings, represent the interests of the Committees to the ExCom to ensure Region objectives and goals are delivered to.
- Ensure that each Committee Chair prepares an activity plan and, if necessary, prepare a budget.
- When necessary review and approve Web page content for their Committees.
- Hold a minimum of four (4) to six (6) group meetings a year to ensure progress on activity plans.
- Further details of positions can be found in IEEE Canada Operations Manual (and later on in the training).

# IEEE Canada Governance

## *External Relations Group*



**IEEE Canada**



Established 1995

### External Relations Group (ERG):

- Industry Committee (IC)
- Outreach and Partnership Committee (OPC)
- Humanitarian Initiatives Committee (HIC)
- Standards Association Liaison (SAL)
- PAGSE Council Representative (PCR)

- ▶ Primary mission of this group is to work with and strengthen relationships with groups external to IEEE Canada.
  - Examples include industry, licensing bodies, other technical associations, humanitarian organizations, standards associations, colleges and universities.
- ▶ Promote IEEE Standards and science/technology to Canadian governments to ensure right message is received.
- ▶ Key Duties of Committee Chairs
  - Develop activity plan
  - Develop Budget if necessary
  - Execute on plan
  - Review and update Web page content when applicable.

# IEEE Canada Governance

## *Member Services Group*



**IEEE Canada**



Established 1995

### **Member Services Group:**

- Membership Development Committee (MDC)
- Young Professionals (YP)
- Women in Engineering (WIE)
- Life Member Committee (LMC)
- Student Activities Committee (SAC)
- Regional Student Representative (RSR)

- ▶ Primary mission of this group is to ensure needs existing IEEE members are served, there are avenues to promote/advance these interests, and to attract new and retain new members.
  - Three R's: Recruitment, retention and recognition.
- ▶ The Member Services group collectively focuses on the life cycle.
- ▶ Key Duties of Committee Chairs
  - Develop activity plan
  - Develop Budget if necessary
  - Execute on plan
  - Review and update Web page content when applicable.

# IEEE Canada Governance

## *Publications & Communications Group*



**IEEE Canada**



Established 1995

### **Publications & Communications Group:**

- Editor in Chief IEEE Canadian Journal of Electrical & Computer Engineering (ICJECE)
- Editor in Chief IEEE Canadian Review (ICR)
- IEEE Canada Newsletter (ICN) Committee Chair
- Web Committee Chair
- Advertising Coordinator (AC)
- Translation

- ▶ Primary mission of this group is the production and publication of magazines, journals, newsletters and web pages in both official languages when possible.
- ▶ This includes the identification of advertising revenue.
- ▶ Key Duties of Committee Chairs
  - Develop publication timelines and plans
  - Develop budget
  - Execute on plan
  - Review and update Web page content when applicable.

# IEEE Canada Governance

*Educational Services Group*



**IEEE Canada**



Established 1995

## **Educational Activities Group:**

- Educational Activities Coordinator (EAC)
- STEM Outreach Committee (SOC)
- Training Coordinator (TC)

- ▶ Primary mission of this group is to promote the IEEE Educational Activities programs and to aid or training to Sections who are holding college, pre-college activities in Science, Technology, Engineering and Math (STEM).

## ▶ Key Duties of Committee Chairs

- Develop publication timelines and plans
- Develop budget
- Execute on plan
- Review and update Web page content when applicable.

# IEEE Canada Governance

## *Operational Support Group*



**IEEE Canada**



Established 1995

### Operational Support Group:

- Meeting Coordinator
- Publicity Coordinator
- History Committee (HC)
- IEEE Canada Volunteer Tools Committee (ICVTC)
- Regional Vitality Coordinator
- Chapter & Student Branch Chapter Coordinator (CSCC)

- ▶ Primary mission of this group is to provide support to Sections and Chapters that need revitalization or volunteers involved in the day-to-day operations of IEEE Canada or for volunteers hosting an IEEE event within Canada including the publicity of that event.
- ▶ This includes:
  - Access to, training on, and help with It Tools available for volunteers.
  - Planning, organizing and hosting a meeting (Virtual or in-person)
- ▶ These day-to-day activities may need archiving, or a historical event may need to be promoted. This is the responsibility of History Committee.

# IEEE Canada Governance

- ▶ Audit Committee



**IEEE Canada**



Established 1995

- The Audit Committee reports directly to the IEEE Canada Board.
- On an annual basis, reviews the performance of the Treasurer's activities to ensure Generally Accepted Accounting Principles (GAAP) are followed.
- On annual basis, reviews all operations of the Region.



# IEEE Canada Governance

## *Awards & Recognition Committee (ARC)*



**IEEE Canada**



Established 1995

- ▶ ARC is a Standing Committee of IEEE Canada.
  - Promote, recognize, and reward excellence demonstrated by IEEE Canada Members and OUs.
  - Advocate for all levels of awards, recognition and advancement.
- ▶ IEEE Canada Awards fall into three main areas:
  - Awards for Members
    - Achievement Awards
    - Service Awards
  - Section Awards
  - President's Make a Difference Award
- ▶ For additional Information on Awards, see the following link:  
<https://www.ieee.ca/en/awards/>

# IEEE Canada Governance

## *Nominations & Appointments Committee (NAC)*



**IEEE Canada**



Established 1995

- ▶ NAC is a Standing Committee of IEEE Canada.
- ▶ NAC reports to Steering Committee
- ▶ NAC key duties include:
  - Recommending qualified candidates for Region 7 Director Elect
  - Recommending qualified candidates for IEEE Canada committees and appointed positions
  - Identify qualified candidates for IEEE and MGA Board positions
  - Promote calls for nominations at all level of IEEE
  - Manage Nomination process for IEEE Canada

# IEEE Canada Governance

*Conference Advisory Committee (CONAC)*



**IEEE Canada**



Established 1995

- ▶ CONAC is a Standing Committee of IEEE Canada.
- ▶ NAC reports to IEEE Canada Board
- ▶ Oversees the following conferences:
  - The Canadian Conference on Electrical and Computer Engineering (CCECE)
  - Canadian Electrical Power and Energy Conference (EPEC)
  - International Humanitarian Technology Conference (IHTC)
  - International Symposium on Antenna Technology and Applied Electromagnetics (ANTEM)
- ▶ Additional information on conferences will be in an Upcoming Session



- ▶ Canadian Conference on Electrical and Computer Engineering
  - The conference had multiple tracks focused on a variety of technical interests. It also included the IEEE Canada Awards Gala where the Region handed out medals for achievement in science, technology, and innovation. The General McNaughton Gold Medal was awarded for exemplary contributions to the engineering profession.
- ▶ International Humanitarian Technical Conference (IHTC)
  - This inter-disciplinary conference series focuses on showcasing challenges, success stories, lessons learnt, case studies and technological innovation related to achieving the UN Sustainable Development Goals (SDGs), ICT4D and the application of Humanitarian Technologies (including Disaster Relief and Disaster Recovery) and facilitating engagement stakeholders from the public, private, education and research and societal sectors around the world. We place a particular emphasis on facilitating participation by key stakeholder groups from low and lower middle-income countries as well as low resource communities.



- ▶ **Electrical Power and Energy Conference (EPEC)**
  - EPEC provides an opportunity for experts from industry, academia, government sector and other interested organizations from Canada and abroad to present and discuss the latest developments in the electric power and energy systems.
- ▶ **Wireless Communications in Space and Extreme Environments (WiSEE) Conference**
  - This IEEE conference brings together investigators from the National Aeronautics and Space Administration (NASA), the Canadian Space Agency (CSA), the European Space Agency (ESA), and other space agencies, along with aerospace and space defense industries and academic researchers, to understand and solve the emerging problems facing wireless sensing and communication in space and related extreme environments. The conference is a collaboration between, Region 1, Region 7, Winnipeg Section, and IEEE council on RFID

# IEEE Canada Governance

## *Area Chairs*



**IEEE Canada**



Established 1995

- ▶ Area Chairs are the President's representatives to their Sections
- ▶ Area Chairs also represent their sections within their Area to IEEE Canada Excom between Board Meetings.
- ▶ Additional information on conferences will be in Upcoming Session

### **East Area Sections:**

- Newfoundland & Labrador
- Canadian Atlantic
- New Brunswick
- Quebec
- Saint Maurice
- Montreal
- Ottawa

### **Central Area Sections:**

- Kingston
- Peterborough
- Hamilton
- Toronto
- London
- Kitchener/Waterloo
- Windsor

### **West Area Sections:**

- Winnipeg
- South Saskatchewan
- North Saskatchewan
- Southern Alberta
- Northern Canada
- Vancouver
- Victoria

# IEEE Canada 25th

## *Brief Historical Overview*



**IEEE Canada**



Established 1995

- ▶ 1884 – American Institute of Electrical Engineers (AIEE) formed in Philadelphia, USA
- ▶ 1887 – Canadian Society of Civil Engineers (CSCE) formed.
- ▶ 1903 - AIEE Toronto Section formed.
- ▶ 1912 – Institute of Radio Engineers (IRE) formed from the merger of the Society of Wireless Telegraph Engineers and the Wireless Institute.
- ▶ 1912 – CSCE becomes Engineering Institute of Canada
- ▶ 1921 – AIEE District 10 (Canada) formed.
- ▶ 1925 – IRE Canadian Section formed at Canadian General Electric in Toronto.
- ▶ 1944 – Ralph Hackbush becomes first Canadian to be IRE Vice President.
- ▶ 1957 – John Henderson becomes first Canadian to become IRE President.

# IEEE Canada 25th

## *Brief Historical Overview (continued)*



**IEEE Canada**



Established 1995

- ▶ 1995 – IEEE Region 7 and CSECE merge to form IEEE Canada.

- ▶ 1963 – IEEE formed in the merger of AIEE District 10 and IRE Region 8. IEEE Region 7 (Canada) formed.
- ▶ 1972 – Bob Tanner becomes first Canadian to be IEEE President.
- ▶ 1976 – Canadian Society of Electrical Engineers (CSEE) formed.
- ▶ 1990 - Canadian Society of Electrical Engineers (CSEE) renamed to Canadian Society of Electrical & Computer Engineers (CSECE).