



THE IEEE NORTH JERSEY SECTION NEWSLETTER

VOL. 67, NO. 01 **JANUARY 2021**

A Welcome Message from the IEEE North Jersey Section Chair Dr. Ajay Poddar

I am delighted to start my term as the Chair of North Jersey Section starting from Jan 01, 2021.

The COVID-19 pandemic has affected the world in an unprecedented manner and we reached the end of the year 2020 under the pain and frustration of losing our brothers and sisters because of this pandemic. I'm optimistic that 2021 will be a year of returning to normalcy, and I hope that our section and chapters will start holding in-person meetings including conferences, workshops and technical talks.

My heartfelt thanks goes to our past section Chair Dr. Yu-Dong Yao for his effort and dedication during his two years term 2019-2020. Our Section is in decent shape, financially sound, well structured, and incessantly at the forefront of service to local members and community.

Being the Chair of the Section is the utmost honor but it also involves a solid assurance on my part to offer best efforts to lead and drive our ExCom and the Section to even higher and more ambitious goals for the benefit of the society. As your new Chair, I am enthusiastic and anticipate a successful membership growth and an increase in the chapter's events. I am looking forward to working with our volunteers, and to support our membership.

I am also eager to be working with my new executive team,

- 1st Vice-Chair: Hong Zhao
 - 2nd Vice-Chair: Emad Farag
 - Secretary: Adriaan van Wijngaarden
 - Treasurer: Avimanyou Vatsa
 - Member-at-Large: Har Dayal
 - Member-at-Large: Kirit Dixit
 - Member-at-Large: Anisha Apte
- and all the Chapter officers, Committee members and Technical Council Chairs.

Every year brings new challenges, and new opportunities. This year we are experiencing unforeseen times of health crisis, job loss and economic downturn. Engineering, also known as a noble pursuit and an essential profession, is in general facing a tough environment and we in northern New Jersey are no different. IEEE's tagline, "Advancing Technology for Humanity," stimulates us to proceed in a direction to invent the technology and apply those to decipher basic needs found in the underserved regions of the world.

As your Chair, I want the North Jersey Section to put forth a collaborative effort and direct our resources to assist STEM activities, YPs, WiE events, and humanitarian projects in joint collaboration with IEEE SIGHT (special group on humanitarian technology) and IEEE HAC (Humanitarian Activity Committee). Our Pre-University Committee and Student Activities Committee (SAC) can be instrumental in motivating students who are our future, by extending support and promoting engineering at various levels, including high school, colleges and universities and even after graduating, by getting involved in mentoring and providing guidance through YP's, and PACE and WiE for the women in the engineering field and gain a rewarding experience in return.

The opportunity I had to serve as an AdCom member in IEEE AP-S and IEEE MTT-S, gained experience for helping over 200+ chapters worldwide with an active role in the COPE (Committee on Promoting Equality) initiative. COPE is an initiative aiming at promoting equality in gender, income and race, by promoting access to knowledge and promoting equality by leveraging the access to opportunities in Science and Technology for the benefit of the community. I would like to promote COPE in our section and to make an effort in building "Inter-Section Relationship" for "Promoting Humanitarian Technology and Equality" with the joint partnerships among IEEE sister societies. Partnership with sister societies, EPICS, industry, academic institutions, and local communities will strengthen the society and promote equality in underserved and under-represented communities.

Past history has revealed that technology improves the standards of living, progresses the quality of life, and stimulates coordination and agreement. But advancing technology also has the possibility to destroy our Planet Earth if not used appropriately. While IEEE's tagline, "Advancing Technology for Humanity," should establish its resolutions, unfortunately there is a substantial portion of the population that does not have access to some of the basic stuff (clean water, electricity, internet, mobile phone, and others) that many of us take for granted. Admission to these basic things to improve the quality of life is being considered as a "Human Right". IEEE SIGHT platform inspired me to understand the global humanitarian challenges and the ability to apply engineering capability to explore the low-cost solution for

improving the quality of life in the underserved regions of the world. As an IEEE SIGHT Steering committee member along with proactive SIGHT committee members from AP and MTT society, I have supported numerous Projects to support grassroots humanitarian technology and sustainable development projects that addressed the COVID-19 situation by IEEE members in their local communities. It is important to share my experience “volunteering for SIGHT” and it complements my thirst for serving the underserved community, and the gratification resulting from this volunteering service is inestimable. In my opinion, IEEE SIGHT is a road map that enables volunteering forces to work together to arrive at a sustainable approach for advancing technology to make our planet a better place to live for all of us. I am very fortunate to be a volunteer of IEEE SIGHT and am able to work and engage with a large network of IEEE volunteers around the world carrying out and/or supporting impactful humanitarian activities at the IEEE local section level.

In the early months of this year, I would like to establish the IEEE North Jersey SIGHT group involving local schools and colleges under the mentorship of IEEE Life Fellows. Many IEEE Life fellows who may be retired from work retain wealth of technical knowledge and enjoy free time. We should take this opportunity to engage IEEE Life Fellows in SIGHT activities through IEEE local section level, as they can engage industry

leaders (CEOs and upper management) for SIGHT activities, which can provide sustainability and long-term impact.

My goal is to expand IEEE membership in our section by introducing Engineers to the various benefits of IEEE membership. An involved membership with strong volunteer support will provide the necessary tools to tackle challenges and work towards a greater cause with broader perspective.

To sum it up, all the committees will be called upon to work harmoniously to support engineering in our section.

Finally, sections like ours cannot function without dedicated ExCom members, committee chairs and volunteers. We survive and thrive because of the enthusiasm of our volunteers and the time they devote to organizing and running sections and chapter’s activities, and many more. Please think about volunteering to serve and help our Section. Please visit our website to learn about various volunteering opportunities.

I have the great privilege and honor of offering you the best wishes for a happy and prosperous new year on behalf of the IEEE North Jersey section ExCom!

Best Wishes,
Ajay Poddar
IEEE North Jersey Section Chair

GRADUATE SCHOOL VIRTUAL OPEN HOUSE!

Tuesday, January 12, 2021, 6:30 p.m.

Fairleigh Dickinson University’s Gildart Haase School of Computer Sciences & Engineering (GHSCSE)

- **A national leader in Cybersecurity, designated as a “Center of Academic Excellence for Cyber Defense Education” by NSA and DHS**
- **18 cutting-edge labs, among the best in the North and Mid-Atlantic Regions**
- **Offers 6 Masters of Science (MS) Programs:**
 - Cybersecurity & Information Assurance
 - Computer Science
 - Electrical Engineering
 - Computer Engineering
 - Management Information Systems
 - E-Commerce

Grow your career opportunities!

Register for the Open House: <https://tinyurl.com/GHOpenHouse>

For Programs information, visit: <https://tinyurl.com/GHprogram>

Calendar of Events

Terahertz Communications at 300 GHz: Devices, Packages and System – MTT/AP & ED/CAS Chapters

Location: [Registration Link](#) Global Access-Facebook Live Video Presentation

Date: 12 January 2021 **Time:** 12:00 PM to 01:00 PM (Eastern Daylight time)

Contact: Ajay K. Poddar: akpoddar@ieee.org, Anisha Apte: anisha_apte@ieee.org,
Prof. Durga Misra: dmisra@njit.edu, Prof. Edip Niver: edip.niver@njit.edu

Speaker: Dr. Ho-Jin Song of Nippon Telegraph and Telephone, NTT, USA

IEEE North Jersey Section EXCOM meeting - January 2021 - Online (Zoom)

Date: 13 January 2021 **Time:** 07:00 PM to 08:45 PM

Location: Join Zoom Meeting <https://us02web.zoom.us/j/89067811667> Meeting ID: 890 6781 1667

Contact: Ajay K. Poddar akpoddar@ieee.org, Hong Zhao (201)-692-2350, zhao@fdu.edu, Adriaan van Wijngaarden avw@ieee.org

Switchgear Series - Switchgear Technical Discussion – PES / IAS / LM Joint Meeting

Date: 15 January 2021 **Time:** 09:00 AM to 11:00 AM (Eastern Daylight time)

Location: <https://global.gotomeeting.com/join/691224053>

Contact: Ronald Quade: rwquade@ieee.org

Speaker: Jonathan Wear of AZZ

Signal Integrity Analysis on PCB and Interconnects – MTT/AP, ED/CAS & VTS Chapters

Location: [Registration Link](#)

Date: 19 January 2021 **Time:** 02:00 PM to 03:00 PM (Eastern Daylight time)

Contact: Ajay K. Poddar: akpoddar@ieee.org, Anisha Apte: anisha_apte@ieee.org,

Prof. Durga Misra: dmisra@njit.edu, Prof. Edip Niver: edip.niver@njit.edu, Ionel Bajescu: nelu108@yahoo.com

Speakers: Dr. Alexander Kuellmer of Rohde & Schwarz, Joern Pfeifer of Rohde & Schwarz

Switchgear Series - Switchgear Technical Discussion – PES / IAS / LM Joint Meeting

Date: 29 January 2021 **Time:** 09:00 AM to 11:00 AM (Eastern Daylight time)

Location: <https://global.gotomeeting.com/join/800363093>

Contact: Ronald Quade: rwquade@ieee.org

Speaker: Jonathan Wear of AZZ

Computation of Unsteady Turbulent Flows with Application to Acoustics – AES/CS

Location: [Zoom Meeting Link](#)

Date: 3 February 2021 **Time:** 7:00 PM to 8:00 PM (Eastern Daylight time)

Contact: Cherif Chibane: cherif.chibane@gmail.com, Kirit Dixit: kdixit@microcomsales.com

Speaker: Dr. Kader Frendi

IEEE North Jersey Section EXCOM meeting - February 2021- Online (Zoom)

Date: 3 February 2021 **Time:** 07:00 PM to 08:45 PM

Location: Join Zoom Meeting <https://us02web.zoom.us/j/89067811667> Meeting ID: 890 6781 1667

Contact: Ajay K. Poddar akpoddar@ieee.org, Hong Zhao (201)-692-2350, zhao@fdu.edu, Adriaan van Wijngaarden avw@ieee.org

Hardware/Software Co-Design of Deep Learning Accelerators – SP

Location: [Zoom Meeting Link](#)

Date: 10 February 2021 **Time:** 2:00 PM to 3:00 PM (Eastern Daylight time)

Contact: Hong Zhao: zhao@fdu.edu

Speaker: Dr. Yiyu Shi of University of Notre Dame

IEEE – IMPORTANT EVENTS, ARTICLES, ANNOUNCEMENTS AND REMINDERS:

- [This Month's Communications Society News from Around the World](#)
- [“Engineering Education Memories” - An article by Harry Roman](#)
- [IEEE WIE ILC 2020 Virtual Series](#)

For up-to-date information, visit our website: [IEEE North Jersey Section](#).

You do not have to be an IEEE member to attend any event. Prior registration is encouraged and appreciated.

The Section Executive Committee roster is at: https://webinabox.vtools.ieee.org/wibp_officers/index/R10327