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The Chapters Virtual Meeting Program

The ongoing COVID-19 pandemic has changed our world dramatically. In a short space of time, we have had to make drastic changes to our daily lives. Lockdowns have been implemented in many countries, and social distancing has become a necessary measure to curb the spread of the virus. The restrictions have also had a detrimental impact on Chapter activity across the globe, particularly Industry Applications Society (IAS) Student Branch activity, as many universities and educational institutions closed and opted for virtual lessons.

To assist Chapters in continuing their activity during this unorthodox period, the IAS Chapter and Membership Department (CMD) introduced the Chapters Virtual Meeting Program (CVMP). The aim of the CVMP was twofold: to help IEEE IAS Chapters host events amid the current COVID-19 climate and enable the IAS to maintain contact with its Chapters. The program is the brainchild of Dr. Peter Magyar (the CMD director of Chapter Development). He developed it after realizing that Chapters had a keen desire to continue hosting events but were finding it challenging because of COVID-19 restrictions.

The promotional poster for one of the virtual events hosted by the Mar Athanasius College of Engineering IAS Student Branch Chapter. The speaker was Sumit Chhabria (IAS YP chair and CMD Students, YP, and WIE Events Committee chair).

The program provides IAS Chapters with a list of potential speakers they can invite for a virtual event or webinar. The CMD put together an extensive database of speakers comprising IAS board members (Society officers, operating department chairs, standing committee chairs, and members at large), technical department chairs, technical committee chairs, Distinguished Lecturers, CMD committee members, Young Professionals (YPs), and guest speakers. The list of speakers is available on the IAS website. A short biography about each speaker is available with an overview about the topic the speaker will discuss. The program has also been extended to include a virtual roundtable Women in Engineering (WIE) and YP discussion. The topics cover a diverse range and include both technical and nontechnical presentations.

Some of the technical presentation topics include the following:

- Electrical safety standards and regulations
- Condition monitoring and fault diagnosis of electrical machines
- Control of electric and magnetic radiated emissions at low and high frequencies
- Magnetic testing, modeling, simulation, and analysis for space applications applied to Jupiter-bound spacecraft such as the Juno and Europa Clipper missions
- Underground cables and overhead lines basics
- Asset management in the smart grid area
- Planning and control of high-voltage regional electrical grids
- Recent trends in industrial lighting
- Harmonic distortion in low-voltage networks with photovoltaic penetration
- Battery energy storage, the enabler for renewable energy uptake in the Australian context
- Main challenges in electrical vehicles: Acoustic noise and vibrations
- Smart energy management system for microgrid: Buildings, campuses, and rural electrification
- Technology predictions in times of pandemics.

The nontechnical presentations have been quite popular with the Student Branch Chapters, particularly the YP presentations. The topics cover issues that students and YPs face as they make the transition from being a student to entering the corporate environment. Some of the nontechnical presentation topics include the following:

- How to get involved with IEEE activities after graduation
- Considering an M.B.A. in a time of COVID
- How to practice engineering thinking
- Empower Your Professional profile
- Personal and professional development—Challenges of Young Professionals in the 4.0 industry
- Could women save the world?—Sustainable development and gender equality
- Humanitarian technology—Social engineering and tech educational program management
- Women in industry
- Networking successfully in IEEE
- My route from student to IEEE director—Career development.

The list of topics and presenters is continually growing and being updated on the IAS website. Thus, Chapters have the freedom to review the list of speakers and topics available and choose one or more speakers for a virtual event. The process to invite a speaker and set up an event is easy. Once the topic or speaker is selected by the Chapter, the Chapter representative simply needs to email the speaker directly and determine his or her availability for the proposed webinar. As soon as the webinar date and time are arranged, the Chapter can advertise the event among its members and host the event using any online platform. The event will also be available on the IAS CMD webpage. The Chapters also need to adhere to strict privacy and copyright regulations when hosting the virtual event (i.e., no webinar can be recorded without the prior approval of the presenters).

The overall feedback about the program has been tremendously positive. Chapters have expressed their appreciation for the program and informed us of the positive impact the events have had on their members. The speakers have also expressed their delight in taking part in the virtual events. The program has enabled Chapters to continue their activity at a time when traditional events are not possible. I encourage all IAS Chapters to make use of this exceptional opportunity to keep their activities engaging by inviting a speaker and hosting a virtual event.

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