



# MTT-S Society News

## Spotlight on the MTT-S Membership and Geographic Activities Committee

■ Nuño Borges Carvalho and Robert H. Caverly

For this month's "Spotlight," Nuño Borges Carvalho (NBC), chair of the IEEE Microwave Theory and Techniques Society's (MTT-S's) Membership and Geographic Activities (MGA) Committee, was interviewed. Note that the interview has been edited for clarity and length.

### What exactly is the main purpose of the MGA Committee?

NBC: Well, I've been the chair of the MGA Committee for one year, and it has been a strange year, but some good things have happened for our members. I wanted the MGA Committee to work with and for all of our members throughout the world. We have members on all continents, with a range from developed to developing countries. We want to provide access to activities for all of them, which can



©SHUTTERSTOCK.COM/TITIMA ONGKANTONG

help promote microwave engineering around the globe.

Prior to the pandemic, we were offering assistance in organizing various in-person activities with our Chapters. These Chapters are smaller structures of the MTT-S and, sometimes, other IEEE Societies that exist within various localities: they could be in universities, cities, regions, or even whole countries. The MGA Committee supports many of these Chapter meetings, where people can gather in an informal, relaxed forum to discuss issues regarding microwaves, the MTT-S, and administration as well as have small technical meetings or workshops or

act as hosts for our Distinguished Microwave Lecturers (DMLs).

Student Chapters at schools are especially important because they help introduce our future Society members to microwave engineering in, again, a relaxed, informal atmosphere where they can gather socially and hear talks or do fun activities such as transmitter "fox hunts" or learn about working with space hardware. We also support and help with the organization of Chapter chair meetings, where the leaders of various Chapters can gather and discuss microwaves as well as exchange ideas about their different activities and perspectives on

---

Nuño Borges Carvalho ([nbcarvalho@ua.pt](mailto:nbcarvalho@ua.pt)) is with the University of Aveiro, Aveiro, 3810-193, Portugal. Robert H. Caverly ([rcaverly@villanova.edu](mailto:rcaverly@villanova.edu)) is with Villanova University, Villanova, Pennsylvania, 19085, USA.

Digital Object Identifier 10.1109/MMM.2020.3048218  
Date of current version: 2 March 2021

microwave engineering. These multiple visions of the same technology can help increase our diversity of thought, which can lead to new ideas for services the MGA Committee could provide. In short, the overarching aim of the MGA Committee is to promote microwaves around the world.

### **Where does a typical MTT-S member see the impact of the MGA Committee's work?**

**NBC:** As I mentioned before, the typical MTT-S member sees our impact in the activities of the various Chapters throughout the world, and the MGA Committee especially supports the Young Professionals, Women in Engineering, and various Student Branch activities. Typically, members will see our efforts in their Chapter activities, such as lectures and meetings. All of these activities are supported by the MTT-S membership dues, and new initiatives are encouraged and supported by the Society.

Our goal is to try to bring people together, in person or virtually, as a way to enhance our interactions and promote microwave engineering. The MGA Committee itself does not actually provide the technical content material, such as workshops; rather, we rely on the MTT-S technical committees and the specialized expertise of the membership to provide the program.

The MGA Committee tries to support the gathering of like-minded microwave engineers. We hope the typical MTT-S member takes advantage of all of these activities because, as the saying goes, "If you do not have members, then you do not have a Society." Fortunately, we see our recent efforts starting to bear fruit in that we have seen the membership numbers slowly increasing in the past year or two.

### **What are some of the accomplishments of the MGA Committee in the last two years that the general MTT-S member would have seen?**

**NBC:** The world has changed significantly over the last two years, with

many activities coming to a halt starting around February 2020. In 2019, the MGA Committee had supported an increasing number of events for Young Professionals and Women in Microwaves at various conferences as well as programs related to space technology.

Once the pandemic hit, the MGA Committee had to adapt to support similar activities but ones that were more amenable to a virtual/remote modality. One very successful event came from the Young Professionals community and was spearheaded by Sara Barros and Tushar Sharma, the Young Professionals coordinators: together with the MTT-S Marketing and Communications Committee, the MTT-Live forum was developed as a way to assist in the delivery of technical talks to a remote audience.

The first talk was presented by Robert Thirsk, a former astronaut, and other presentations, such as those by DMLs, have continued. Thirsk's lecture was very timely, as parts of the speech were devoted to the idea of living in isolation—he discussed the isolation associated with the pandemic and what one can do to cope with this, whether in space or on Earth.

Live and recorded versions of these talks are available on social media platforms, such as the MTT-S channel on YouTube (<https://bit.ly/3pydvYQ>), MTT-S Live page on Facebook (<https://www.facebook.com/IEEEMTT>), and LinkedIn page. We have seen as many as 5,000–6,000 microwave engineers take advantage of these presentations.

The second talk featured MTT-S Administrative Committee member Goutam Chattopadhyay and was attended by many people interested in NASA's Jet Propulsion Laboratory (JPL) activities. The third event was held in association with a Chapter chairs meeting and featured David Root discussing the impact of microwave engineering on the new and exciting area of quantum computing. More than 300 people listened to this talk live, with many more accessing the recorded version. To help our Chapter chairs, another activity using MTT-S Live was

a give-and-take forum during which Chapter chairs presented short videos (<https://bit.ly/32MuPiW>) of their activities as a way to improve the utility of all meetings. These talks have been uploaded to the Facebook page.

### **How is the pandemic impacting the MGA Committee's activities?**

**NBC:** The pandemic, unfortunately, has had a significant impact on MGA Committee activities. There have been some successful alternatives, as mentioned previously, and we are discussing other possible events right now. One proposal would be to have an MTT-S Day, which would be a social media broadcast—possibly a mix of remote and in-person, depending on the venue—following the MTT-S president through the International Microwave Symposium (IMS) exhibit hall to see what it is all about.

Since the IMS has the largest exhibit of microwave vendors in the world, it is really an exciting place to be and see, and, hopefully, new members will recognize the benefits of attending a conference and becoming MTT-S members. Some similar types of walk-through videos have been done at commercial shows, but this event is devoted to our technology, microwaves.

We are also encouraging our students in both Student Branches and those involved in their Chapters to organize MTT-S Day workshops or other events that could include friendly competitions, such as hidden transmitter hunts, or other fun microwave-related activities. To help out our Chapters even more, we are discussing creating a Chapter Welcome Kit that will help jump-start Chapters to get them active quickly.

Because of the pandemic, none of our DMLs has been able to travel, and so they have been presenting their talks remotely. The MGA Committee, Electronic Information Committee (EIC), and Technical Coordinating and Future Directions Committee (TCFDC) [see the September 2020 issue for our "Spotlight" on the TCFDC] have been

discussing how we might reorganize the DML program for remote talks as well as in-person presentations once the pandemic travel restrictions are lifted. We want to make the program accessible to more Chapters and promote it so that it is more widely seen as an MTT-S activity. One possible way to do this is to develop a website with the DML schedules so that there is advanced notice of dates and venues to help increase attendance.

### What made you want to take on the role of chair of the MGA Committee?

**NBC:** For three years, I was chair of the MTT-S EIC, which is the committee tasked with developing and maintaining the MTT-S's electronic presence on the web, social media, and other virtual resources. The MTT-S president asked me if there was another committee that I was interested in serving on, and so I went to meetings of other committees, such as the MGA Committee, Meetings and Symposia (M&S) Committee [see the November 2020 issue for our "Spotlight" on the M&S Committee], and TCFDC. I had been Chapter chair at one time in Portugal and, later, of the IEEE Portugal Section; I wanted to try to bring more microwave engineers into the community, and so I felt that the MGA Committee would be the best one to join.

### As an MTT-S member, how can I make a contribution to help with the work related to the MGA Committee?

**NBC:** One of the first things you can do is contact your local Chapter chair to discuss how you might become involved in Chapter activities. Volunteer your time to help organize events, such as DML lectures, workshops, social events, or even small regional conferences.

If you don't find a Chapter nearby, you can create one. How do you go about doing that? If you have at least 12 members in the Region, you can petition to create a Chapter by going to the MTT-S website (<https://mtt.org/chapter-officers-handbook/creating-a-new-chapter/>), downloading and completing the Chapter organization forms, and sending them in. The website shows the process. A student Chapter can be created in the same way. If your local area does not have enough MTT-S members, you can organize a joint Chapter with one or more IEEE Societies, such as the IEEE Antennas and Propagation Society or IEEE Electron Devices Society, to increase the numbers and create a "critical mass" of Chapter members to help with activities.

Being involved in a Chapter is one of the most important things you can do to be involved with the

MTT-S community. Even in this time of travel and gathering restrictions, Chapters can still be quite active. For example, Chapters in India are doing amazing workshops online using various platforms to reach throughout the country.

### Is there one final statement that you would like to make to the MTT-S membership about the MGA Committee?

**NBC:** This is not exactly MGA Committee related, but, when we talk about the MTT-S community, we are really talking about a group that is very hardware oriented. If you are interested in "gadgets," this is the community to be a part of. The MTT-S has considerable expertise to share with the electronics community, and so we need to get this out to a wider audience and make the MTT-S the place to go for hardware questions. We are the "MHz To THz Community," and our expertise is found everywhere. Most people buying their smartphone, laptop, or tablet may not realize that they are actually buying something with a radio component; the MTT-S is the community that helped in that radio's creation.



**We want to hear from you!**

Do you like what you're reading?  
Your feedback is important.  
Let us know—send the editor-in-chief an e-mail!