

## From the Editor's Desk

## Welcome to 2023!

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**H**rom all of us at *IEEE Microwave Magazine*, happy new year and welcome to 2023! After more than two years of COVID-19 restrictions, everything seems to be opening up and getting back to prepandemic levels of activity, and so we all hope that 2023 looks more like 2019 in this regard. Just a quick glance at the "Conference

Calendar" [A1] in the back of the issue shows that most of the conferences are now back to in-person modalities. Having restarted conference attendance myself, I am especially enjoying attending the technical sessions again, reconnecting with colleagues and meeting new ones, and having those all-important hallway meetings and conversations that are the staple of the conference experience.

We are starting off the new year with a comprehensive issue that shows

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the breadth of the activities within the IEEE Microwave Theory and Technology Society (MTT-S). We begin with the inaugural "President's Message" [A2] from new MTT-S President Nuno Borges Carvalho, where he writes about our Society's publications and the new members of the MTT-S Administrative Committee (AdCom). We look forward to reading about activities within the MTT-S throughout the year from Prof. Carvalho. We would also like to thank 2022 MTT-S President Rashaunda Henderson, who handed the presidential gavel over to Nuno, for her tireless service to the MTT-S. In our "MicroBusiness" column [A3], Fred Schindler talks about a topic of interest to all of us: the proper compensation for our technical efforts and how compensation may be perceived within an organization. Our "Microwave Bytes" column [A4] is back this month with a new look at an older technology: the maser, and its role in early satellite systems. Author Steve Cripps also provides an insightful look at

the maser's operation for those of us who may not be aware of how these devices operate. In addition to these regular columns, we also have "Microwave Surfing" [A5] as well as "Book/Software Reviews" [A6].

A popular MTT-S-sponsored activity is the webinar series, and this month the MTT-S Education Committee announces the webinar lineup for the first half of 2023 in the "Education News" column [A7]. This is an excellent opportunity for you to learn about a new technology and receive IEEE professional development hours for attending. This month's "MTT-S Society News" column [A8], [A9] is in two parts. The first part describes a new effort by the AdCom's Inter-Society Committee to establish an Inter-Society Technology Panel (ISTP) series [A8]. The article describes not only the background this fundamental microwave structure. Our "Speaker's Corner" column [A14] provides a look at propagation effects

for the establishment of the ISTP but also their first panel at the 2021 IEEE MTT-S International Microwave Symposium (IMS2021). Future activities of the ISTP will be covered in upcoming IEEE Microwave Magazine issues, and we are excited to be able to bring summaries of these events to you. The second article in the "MTT-S Society News" column is a report from the Student Branch Chapter at the Indian Institute

of Technology (Banaras Hindu University) in Varanasi, India, reported by Somak Bhattacharyya [A9]. Reports such as these show what can be accomplished by IEEE Student Branches through dedicated leadership and student commitment. Also from Region 10, the "Conference Report" column [A10] describes the activities at the first International Conference on Microwave, Antennas and Circuits, held near the end of 2021 in Islamabad, Pakistan. This conference was technically cosponsored by the MTT-S, one of the many conferences that the MTT-S financially and technically sponsors each year.

In this issue's "Women in Microwaves" (WiM) column [A11], WiM Committee Member Sherry Hess provides a description of the group as well as a summary of recent activities. The "Young Professionals" (YP) column [A12] this month focuses on the YP activities at the recent IMS2022 in Denver, Colorado. In addition to these regular columns, we also have two columns that appear from time to time that may be of interest to you. The "Educator's Corner" column [A13] takes a novel look at transmission line problems that may help students better understand

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for millimeter-waves up to and above 100 GHz. This article is an update to a previous IEEE Microwave Magazine article from 2005 and should be of interest to those working in the 5G and subterahertz frequency bands. As this is the start of the new year, Prof. Takashi Ohira begins a new series of thought experiments in our "Enigmas, etc." column [A15].

As you can see, we have an issue full of variety and we hope that you find some-

thing (or hopefully, many things) of interest to you. All the best for 2023!

## **Appendix: Related Articles**

- [A1] "Conference calendar," IEEE Microw. Mag., vol. 24, no. 1, p. 95, 2022, doi: 10.1109/ MMM.2022.3211585.
- [A2] N. B. Carvalho, "A new year brings new hopes and challenges," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 9–11, 2022, doi: 10.1109/ MMM.2022.3211590.
- [A3] F. Schindler, "Compensation," IEEE Microw. Mag., vol. 24, no. 1, pp. 12–13, 2022, doi: 10.1109/MMM.2022.3211591.
- [A4] S. C. Cripps, "Still A-Masing," IEEE Microw. Mag., vol. 24, no. 1, pp. 16–20, 2022, doi: 10.1109/MMM.2022.3203943.
- [A5] R. Bansal, "Are we there yet?" IEEE Microw. Mag., vol. 24, no. 1, pp. 14–15, 2022, doi: 10.1109/MMM.2022.3211592.
- [A6] J. Chu, "Exploring the fundamentals of radio wave propagation," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 21–22, 2022, doi: 10.1109/ MMM.2022.3211593.
- [A7] X. Gong and R. Henderson, "Webinars scheduled for the first half of 2023," IEEE Microw. Mag., vol. 24, no. 1, pp. 23–24, 2022, doi: 10.1109/MMM.2022.3211603.
- [A8] K. Wu and J.-C. Chiao, "MTT-S Inter-Society Technology Panel program," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 25–26, 2022, doi: 10.1109/MMM.2022.3211625.
- [A9] S. Bhattacharyya, "Microwave education by the MTT-S Student Branch Chapter IIT-BHU Varanasi," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 27–29, 2022, doi: 10.1109/ MMM.2022.3211604.

- [A10] N. Shoaib, "Pakistan's first international conference on microwave, antennas and circuits," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 79–84, 2022, doi: 10.1109/MMM. 2022.3211600.
- [A11] S. Hess, "MTT-S MGA WIM subcommittee: Who we are and what we do!" IEEE Microw. Mag., vol. 24, no. 1, pp. 74–76, 2022, doi: 10.1109/MMM.2022.3211602.
- [A12] Y. Cheng, "2022 IEEE MTT-S international wireless symposium special session: Young professionals," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 77–78, 2022, doi: 10.1109/ MMM.2022.3211601.
- [A13] J. Sánchez-Curto, "The basics of transmission line theory in four arrows," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 85–88, 2022, doi: 10.1109/MMM.2022.3211598.
- [A14] M. Marcus, X. C. Roman, and J. Jornet, "Millimeter-wave propagation: Spectrum management implications—An update for >100 GHz," *IEEE Microw. Mag.*, vol. 24, no. 1, pp. 91–94, 2022, doi: 10.1109/MMM.2022.3211599.
- [A15] T. Ohira, "Inductor and diode," IEEE Microw. Mag., vol. 24, no. 1, pp. 89–90, 2022, doi: 10.1109/MMM.2022.3211596.

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