

Stefano Maci 

To IEEE Antennas and Propagation Society Members

It is both an honor and a privilege to have served as the president of the IEEE Antennas and Propagation Society (AP-S) in 2023. In this concise report, I am pleased to summarize the key initiatives and achievements undertaken by our Society throughout the year. Our strategic vision has been crafted to enhance the impact of the AP-S, focusing on the following core guidelines:

- 1) *Global outreach*: strengthening our global presence and collaboration efforts
- 2) *Diversity and inclusion*: embracing a philosophy of diversity and inclusion to foster a more representative and equitable community
- 3) *Supporting early-stage researchers*: elevating the involvement and recognition of early-stage researchers and young engineers through increased activities and promotions
- 4) *Strategic and sustainable technologies*: driving advancements in strategic and sustainable technologies in antennas and propagation to address evolving challenges
- 5) *Industry engagement*: augmenting industry membership and fostering active participation from professionals in the field
- 6) *Enhanced publications*: elevating the quality and relevance of our publications to disseminate cutting-edge research effectively

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- 7) *Improved online platforms*: enhancing our online platforms to create a seamless and engaging experience for our members and stakeholders
- 8) *International collaboration*: strengthening relationships and fostering interactions with IEEE Societies/Councils and other external associations
- 9) *Initiatives in Regions 8–10*: increasing our initiatives and impact in Regions 8–10, ensuring a broader geographical reach and inclusivity.

I am proud to report that our Society has made significant strides in each of these areas, thanks to the dedication and collaborative spirit of our committees. Together, we have not only met but exceeded our goals, positioning the AP-S as a beacon of excellence and innovation in our field.

The pursuit of these objectives did not follow a linear hierarchy within the AP-S. Instead, our 24 committees worked in parallel to address these points. An ad hoc committee worked intensively to prepare a report for the Society review, based on the above

points, under the guidance of Mahta Moghaddam, a former AP-S president and the chair of the Strategic Planning Committee. This document was submitted to the IEEE Society and Council Review Committee in October for the periodic review of the Society.

Our overarching global vision (point 1) was to establish our Society as indispensable within the global electromagnetics community, earning universal recognition for our contributions in antennas, propagation, and electromagnetics. This vision served as the guiding principle for all subsequent activities.

Point 2, embodying the philosophy of diversity and inclusion, was championed primarily by three committees: Diversity, Equity, Inclusion, and Belonging (DEIB); Special Interest Group on Humanitarian Technology (SIGHT); and Committee for Promoting Equality (COPE). These committees undertook numerous initiatives, including delivery of awards, special programs in Africa and other developing countries, and collaborations with IEEE Smart Village. Notably, the establishment of the Rohde Humanitarian Technical Field Project Award recognized the most outstanding humanitarian project initiative of the year. We are proud to have achieved our goal of empowering and supporting our members and volunteers

through impactful technological and humanitarian activities at the local level. I extend my deepest gratitude to Claire Migliaccio, Jawad Siddiqui, and Weng Chew, chairs of the DEIB, SIGHT, and COPE, respectively, for their invaluable contributions.

The commitment to diversity and inclusion has been pursued at the IEEE level. As an example, revisions were made by IEEE to the Fellow nomination and promotion rules to foster greater inclusivity. These changes were embraced by our Society, and I express my gratitude to Magdalena Salazar for her diligent efforts in overseeing this process at the IEEE level and to Doug Werner for guiding the adaptation of the AP-S committee to the new rules.

Point 3 has seen remarkable progress, with several committees actively contributing to its success. A significant boost in young student membership recruitment was achieved by reducing the registration fee for student members of the AP-S to just US\$1, a decision made during the current year. Annually, our Society awards 24 prestigious honors to senior scientists and an additional 150 awards to benefit students, early-stage researchers, and Young Professionals (YPs). These awards include fellowships, travel grants, student design contests, best paper prizes at conferences, and summer school scholarships.

Exceptional contributions to this endeavor have been made by Vladimir Okhmatovsky, Claire Migliaccio, and Karl Warnick. Their efforts have led to initiatives such as AP-S Fellowship student travel grants, undergraduate summer research scholarships, and student contests at our flagship conference. Our YPs activities, spearheaded by C. J. Reddy, are poised to become among the best within IEEE. These initiatives have been fostered through our Chapters, with the assistance of Ajay Poddar. Notably, our Society's activities in this realm rank among the most successful within IEEE. I am delighted to announce, indeed, the establishment of a new foundation, the AP-S Talent Development Fund, which has been approved by IEEE. This quasi-endow-

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ment fund will provide a consistent and reliable source of support, enabling the AP-S to invest in initiatives aimed at attracting, nurturing, and developing talent in the field of antennas and propagation. The fund will be exclusively utilized to support initiatives designed for students (both undergraduate and graduate) as well as early-career professionals and YPs, including practitioners and researchers. This milestone achievement is the result of the efforts of a committee led by Kamal Sarabandi, with unwavering support from the AP-S officers. I express my heartfelt gratitude to Kamal for his exceptional leadership and expertise. I extend my thanks to Michael Deering, of the IEEE Foundation, for guiding us on this innovative path toward talent development.

Point 4 was pursued vigorously by a sizable committee under the leadership of Koichi Ito, an AP-S past president and the chair of the New Technology Direction Committee. I extend my heartfelt thanks to Koichi for his impeccable work on behalf of our Society.

Our strategy for industry participation (point 5) focused on three key areas: increasing membership, enhancing exhibitions at our flagship conference, and establishing dedicated awards for industry experts. The Industrial Initiatives and Listing Committee, led by Rod Waterhouse, played a pivotal role in organizing numerous meetings and providing unwavering support. I am deeply grateful for Rod's dedicated contributions.

Point 6 stands as one of our most significant achievements. As mentioned in one of my previous "President's Message" columns, our *IEEE Transactions on Antennas and Propagation* achieved an unprecedented impact factor (IF) of 5.7, securing the second position in terms of paper downloads among all

IEEE periodicals. Equally remarkable progress was made by *IEEE Antennas and Wireless Propagation Letters* and *IEEE Antennas and Propagation Magazine*, elevating their IF to 4.2 and 3.5, respectively. Notably, *IEEE Open Journal on Antennas and Propagation* attained its inaugural IF, soaring from zero to an impressive four. This remarkable outcome was made possible by the exceptional efforts of our current and former editors-in-chief: Konstantina Nikita, Steven Gao, Zhongxiang Shen, Francesco Andriulli, Danilo Erricolo, and Christophe Fumeaux. Yang Hao, chair of the Publication Committee, displayed outstanding leadership, proposing a new journal on selected topics, presently under IEEE evaluation, and overseeing our collaborative journals with other Societies. These collaborative efforts, such as *IEEE Journal of Electromagnetics, RF, and Microwaves in Medicine and Biology* [shared with the IEEE Microwave Theory and Technology Society (MTT-S)], achieving an IF of 3.26, and *IEEE Journal on Multiscale and Multiphysics Computational Techniques* [shared with the MTT-S and IEEE Electromagnetic Compatibility Society (EMC)], reaching an IF of 2.3, gained increased recognition. Moreover, our AdCom approved a proposal for new awards for best papers in these journals. I am immensely proud of these accomplishments and deeply thankful for the dedication and hard work of all involved. Together, we have elevated the standing of our Society and publications within the global scientific community.

In regard to point 7, our website and social media platforms have undergone remarkable enhancements. We owe a significant debt of gratitude to Erdem Topsakal, editor-in-chief of electronic communication, and Meryem Murphy, AP-S marketing director, for their exceptional efforts. These platforms have undergone continuous updates and revitalization, operating in synergy with our journal editors-in-chief and committee chairs. Their initiatives, such as the creation of a new video series titled

Legends of Electromagnetics, have garnered an impressive number of views and engagement. I am truly grateful for Erdem and Meryem's dedication as well as the collaborative spirit of our entire team in ensuring that our online presence remains dynamic, informative, and engaging for our members and the broader community.

Points 8 and 9 are interlinked. Our partnerships with sister Societies, namely, the MTT-S, EMC, and IEEE Geoscience and Remote Sensing Society (GRSS), have been significantly strengthened. I had the privilege to sign memoranda of understanding (MoU) with the MTT-S, EMC, and GRSS, involving key leaders, such as

Nuno Carvalho (MTT-S president), Vignesh Rajamani (EMC president), and Mariko Burgin (GRSS president). Additionally, new MoU were recently established, a process that involved prominent members of our Society, notably, our former President Gianluca Lazzi, President-Elect Branislav Notaros, and Administrative Manager Rachel Moore. I had the pleasure of signing these agreements with Lars Foged, president of the Antenna Measurement Techniques Association; Andrea Alù, president of the Metamorphose Virtual Institute of Metamaterials; and Stefania Monni, president of the European Association on Antennas and Propagation.

Our collaborative efforts with the MTT-S have included significant initiatives, such as the inaugural joint MTT-S-AP-S Distinguished Lecturer Program, reciprocal participation in AdCom meetings during events like the International Microwave Symposium (IMS) and the IEEE International Symposium on Antennas and Propagation and U.S. National Committee of the International Union of Radio Science Radio Science Meeting (AP-S/URSI), held in San Diego, CA, USA, and Portland, OR, USA, respectively, and joint travel to support Chapters and conferences. I maintained continuous

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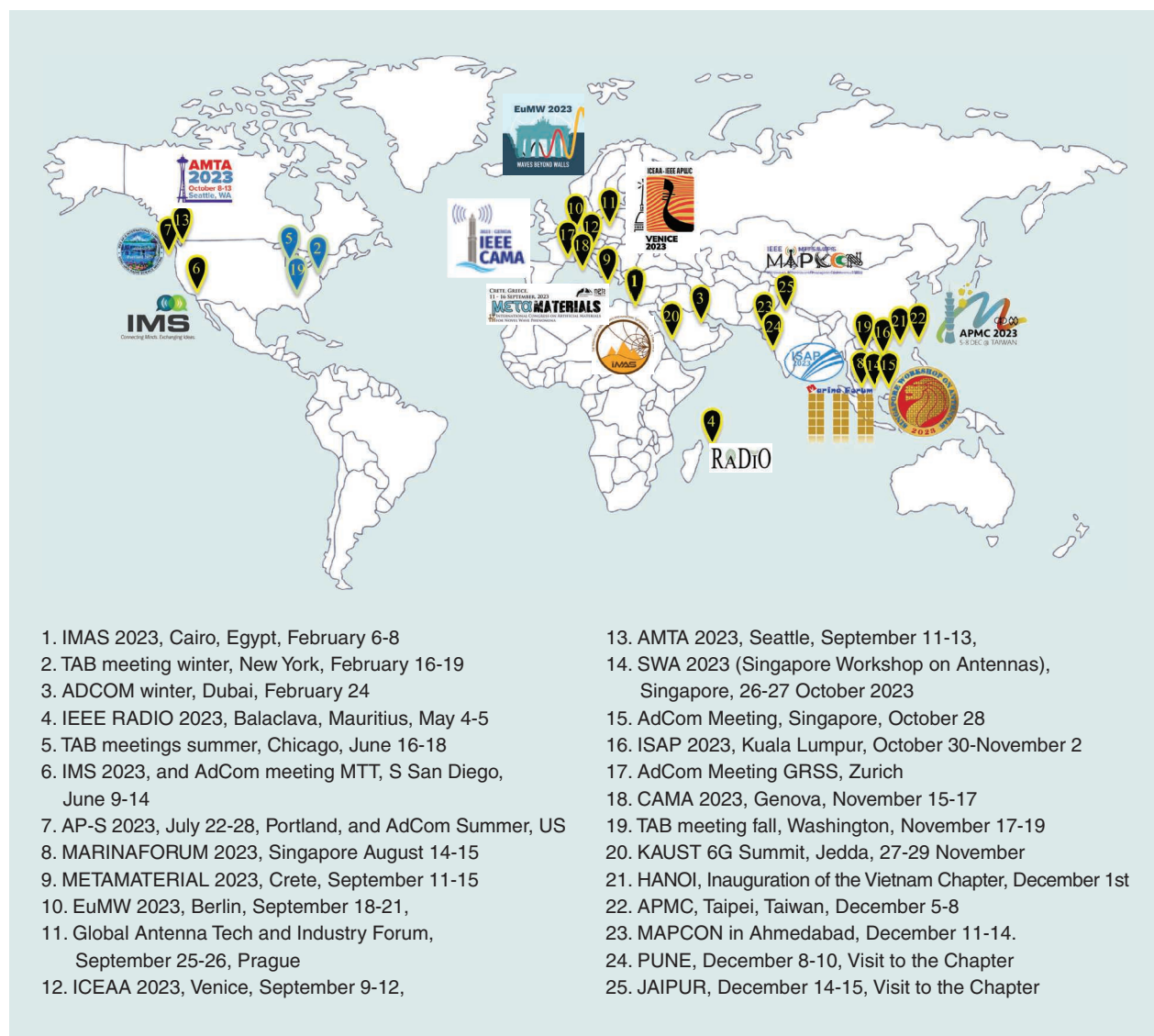


FIGURE 1. AP-S President Maci's travels on behalf of the Society during 2023.

MODERN ELECTRONIC AND DIGITAL SCANNED ARRAY ANTENNAS

18–22 March 2024, San Diego, CA, USA. Georgia Institute of Technology, Professional Education, P.O. Box 93686, Atlanta, GA 30377-0686, USA. +1 404 385 3500, fax: +1 404 894 8925. <http://www.pe.gatech.edu>.

FUNDAMENTALS OF SYNTHETIC APERTURE RADAR SIGNAL PROCESSING

1–5 April 2024, ONLINE.

BASIC RF ELECTROMAGNETIC WARFARE CONCEPTS

2–4 April 2024, Atlanta, GA, USA.

PHASED ARRAY RADAR SYSTEM

9–11 April 2024, Atlanta, GA, USA.

BASIC ANTENNA CONCEPTS

16–18 April 2024, San Diego, CA, USA.

ANTENNA ENGINEERING

22–26 April 2024, Atlanta, GA, USA. Georgia Institute of Technology, Professional Education, P.O. Box 93686, Atlanta, GA 30377-0686, USA. +1 404 385 3500, fax: +1 404 894 8925. <http://www.pe.gatech.edu>.

MODELING AND SIMULATION OF PHASED-ARRAY ANTENNAS

7–9 May 2024, ONLINE.

SIGNALS INTELLIGENCE (SIGINT) FUNDAMENTALS

14–15 May 2024, Atlanta GA, USA. Georgia Institute of Technology, Professional Education, P.O. Box 93686, Atlanta, GA 30377-0686, USA. +1 404 385 3500, fax: +1 404 894 8925. <http://www.pe.gatech.edu>.



PRESIDENT'S MESSAGE (continued from page 9)

communication with Nuno Carvalho to organize joint travels, with the invaluable assistance of Ajay Poddar and Chinmoy Saha, whom I deeply thank for their unwavering dedication and fantastic support.

Attention has been dedicated to initiating new initiatives in Regions 8–10, particularly focusing on supporting new conferences, including the Microwave, Antennas, and Propagation Conference (MAPCON) (India, Region 10) and the International Microwaves and Antennas Symposium (IMAS) (Africa, Region 9). Collaborating with the MTT-S, we developed an “Africa mission” strategy to establish joint Chapters, attract new members and students, and raise awareness about the activities and opportunities offered by our Societies. These collaborations not only strengthen our Society’s global footprint but also promote mutual growth and knowledge exchange, enriching the experiences of our mem-

bers and contributing to the advancement of our field.

The travels I undertook on behalf of the Society in 2023 are outlined in Figure 1. These journeys aimed to share the Society’s vision at conferences and Chapters, often involving keynote technical presentations. I was warmly welcomed everywhere I went, with remarkable enthusiasm, hospitality, and genuine curiosity. Regrettably, one of the IEEE-supported conferences, the IEEE International Conference on Microwaves, Communications, Antennas, Biomedical Engineering, and Electronic Systems, in Tel Aviv, was postponed to 2024 due to the geopolitical situation in Israel. It is hoped that this critical situation will be resolved soon.

Finally, I wish to convey my profound appreciation to my predecessor, Gianluca Lazzi, and my successor, Branislav Notaros, for their unwavering and invaluable support throughout this year. I am deeply grateful for their

consistent guidance and support. I also want to extend special thanks to Guido Lombardi, chair of the Constitution and Bylaws Committee, and to Danilo Erricolo, chair of the Meetings Committee, for their continuous assistance. I appreciate the outstanding contributions of our treasurer, Nestor Lopez, and our secretary, Felix Vega, and the administrative assistance of Rachel Moore and Jessica From. All of them have done a remarkable job this year. I extend the same deepest gratitude to the 30 committee chairs, the 16 AdCom members, and the 240 dedicated volunteers who have served across various committees. The unwavering commitment and extraordinary efforts of these colleagues and volunteers, driven by our core values of global outreach and inclusivity, have propelled the AP-S to unprecedented heights, solidifying our esteemed reputation. I am truly honored to have had the privilege of working alongside them. 