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May the IEEE Antennas and Propagation Society 75th Anniversary Special Series Begin!

I am sure you knew, dear reader, that *IEEE Antennas and Propagation Magazine*, faithfully serving for decades our beloved IEEE Antennas and Propagation Society (AP-S), could not miss celebrating this year's 75th anniversary of the founding of the AP-S. No one can deny that the last 75 have been very fruitful years for our discipline and that the AP-S has been impacting the lives of scientists and engineers and their students and families in many wonderful ways. At the magazine, we thought that there would be no better way to celebrate this very special occasion than by dedicating a special series to it! You are now holding in your hands the first issue of this special series. More will come; be sure to collect them all! The issue starts with news that the AP-S just won the IEEE Young Professionals Hall of Fame Award. In the announcement, Reddy reports on this well-deserved achievement and on the outstanding work of the AP-S Young Professionals Committee.

In this first issue of the IEEE AP-S 75th Anniversary Special Series, we have collected a great roster of excellent contributions. Our president opens the issue with a detailed analysis of the state of our Society. The article by Notaroš [A1], in fact, provides a nice overview of the Society structure and governance, allowing our readership to better understand

the complex, but effective, way the AP-S functions via the Administrative Committee and all others. The article then describes the main axes and technical directions of the AP-S, together with the Society's main activities and figures of merit. The president closes the contribution with an insightful vision for the future of the AP-S. The article by Bird [A2] presents an accurate and detailed historical account of our Society, from the very beginning to the present day. The article starts by focusing on the early history, moving then to describe the history of our governing structures, including financial aspects and publications as well as conference symposia and awards. The reader will truly be able to appreciate how impactful the AP-S has been decade after decade for generations of engineers and scientists. The article by Balanis [A3] is the first of a series that, to honor the 75th anniversary, celebrates antenna history, current technology, and impactful developments. This contribution reviews the origins of antenna designs, including dipole and loop antennas. After a historical overview, both dipole and loop antennas are reviewed, rendering the contribution an excellent and useful introductory text to the topic. The article by Rahmat-Samii et al. [A4] celebrates the anniversary, examining the history, impact, and current developments of printed and transmitarray antennas. After a rich introduction, the article presents an informative overview of lens and transmitarray antennas. Then, a detailed

historical analysis of the technology is performed, from the technology's origin to modern times. The historical overview also contains useful bibliographic references that the reader will surely find quite convenient. The article then closes with a conclusion and an insightful view of the future of the topic. The article by Notaroš [A5] reviews the past 75 years of research in computational electromagnetics. After a quite informative introduction, the article describes the different approaches in the domain, then describes each of them in detail, providing pointers to the most relevant references in each subdomain, something that will prove quite useful for both the experienced and inexperienced reader. A final analysis is devoted to describing fast techniques and parallelization strategies that, in recent years, have been gathering increasingly important interest in the community. The article terminates with an analysis of error assessment and management, commercial relevancy of the discipline, and applications, and in the conclusion, the author presents a perspective view of the domain, delineating promising venues of further research and engineering. The article by Maci [A6] presents a historical overview of electromagnetic metamaterials and metasurfaces research. This is a relatively recent topic, but the author succeeds in showing how research, often pouring out from our Society's 75 years of activities, has prepared for the advent and then lead the growth of this promising field. The historical overview is rich and

complete, describing all contributions together with their originators. Moreover, the article offers the reader a unique and very complete set of references that will be invaluable to start diving into the discipline. The last, but certainly not the least, of the feature articles is by Lombardi [A7], describing the history of our Society's logo and celebrating the anniversary of the AP-S, showing how much effort and commitment over the years have been devoted by our members to creating, spreading, and, we can surely say, honoring the insignia of our AP-S. In addition to these feature articles, the reader should make sure to check also our outstanding columns, which, introduced by the column editors, also contain contributions honoring the 75th anniversary!

In conclusion, the magazine is quite proud to offer to you, dear reader, this celebratory issue. Our Society has been, is, and will be the scientific and professional home for those of us doing science and engineering in antennas and propagation. We wish it many more milestones in the future, and I am sure *IEEE Antennas and Propagation Magazine* will continue to be there to celebrate each one of them!

APPENDIX: RELATED ARTICLES

[A1] B. M. Notaroš, "Celebration of the 75th anniversary of the IEEE antennas and propagation society," *IEEE Antennas Propag. Mag.*, vol. 66, no. 3, pp. 8–9, Jun. 2024, doi: [10.1109/MAP.2024.3399352](https://doi.org/10.1109/MAP.2024.3399352).

[A2] T. S. Bird, "The IEEE antennas and propagation society in its 75th year: A historical overview," *IEEE Antennas Propag. Mag.*, vol. 66, no. 3, pp. 28–41, Jun. 2024, doi: [10.1109/MAP.2024.3398051](https://doi.org/10.1109/MAP.2024.3398051).

[A3] C. A. Balanis, "The evolution of antenna technology: History, dipoles, and loops," *IEEE Antennas Propag. Mag.*, vol. 66, no. 3, pp. 42–51, Jun. 2024, doi: [10.1109/MAP.2024.3393889](https://doi.org/10.1109/MAP.2024.3393889).

[A4] Y. Rahmat-Samii, J. Wang, and A. Papanasopoulos, "The evolution of printed lens and transmitarray antennas: Navigating representative past, present, and future designs and manufacturing techniques," *IEEE Antennas Propag. Mag.*, vol. 66, no. 3, pp. 52–67, Jun. 2024, doi: [10.1109/MAP.2024.3398564](https://doi.org/10.1109/MAP.2024.3398564).

[A5] B. M. Notaroš, "75 years of AP-S research in computational electromagnetics: A view on the discipline and its history, current state, and future prospects," *IEEE Antennas Propag. Mag.*, vol. 66, no. 3, pp. 68–83, Jun. 2024, doi: [10.1109/MAP.2024.3395652](https://doi.org/10.1109/MAP.2024.3395652).

[A6] S. Maci, "Electromagnetic metamaterials and metasurfaces: A historical journey," *IEEE Antennas Propag. Mag.*, vol. 66, no. 3, pp. 84–101, Jun. 2024, doi: [10.1109/MAP.2024.3393350](https://doi.org/10.1109/MAP.2024.3393350).

[A7] G. Lombardi, "A brief history of our logo: A long and exciting initiative," *IEEE Antennas Propag. Mag.*, vol. 66, no. 3, pp. 110–114, Jun. 2024, doi: [10.1109/MAP.2024.3392440](https://doi.org/10.1109/MAP.2024.3392440).



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