IEEE AP-S DL Workshop – İstanbul Edition

Topic: Antennas and Propagation for Next-Generation Wireless Communications and Artificial Intelligence
Date: June 9, 2026
Location: Istanbul Medipol University, Kavacık South Campus, Conference Hall, Turkiye
Hybrid Attendance: 84 participants
Audience Profile: Undergraduate, Master's, and Ph.D. students, Academic Researchers, and Industry Professionals.

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Executive Summary

On June 9, 2026, Istanbul Medipol University hosted the IEEE AP-S Distinguished Lecturer Workshop. Organized by the IEEE AP/MTT/EMC/ED Turkey Joint Chapter and the IEEE AP-S Istanbul Chapter, the event brought together researchers, industry professionals, and students to explore recent advances in antennas, electromagnetics, sensing systems, and wireless communications.

Held at the Kavacık South Campus Conference Hall, the workshop featured lectures by Prof. Zhi Ning Chen on AI-driven antenna design and metantennas, Assoc. Prof. Sema Dumanlı Oktar on in-body sensing antennas, Prof. Levent Sevgi on electromagnetic engineering education, and Prof. Hüseyin Arslan on flexible radio access technologies for 6G and beyond. The event provided an excellent platform for knowledge exchange and networking, fostering discussions on emerging technologies and future research directions while strengthening connections within the IEEE community.

Scientific Program

The workshop featured four distinguished speakers covering emerging topics in antenna design, biomedical sensing, electromagnetic engineering, and future wireless communication systems.

- **AntennaAI and Generative Antenna Design: Prof. Zhi Ning Chen** (National University of Singapore, Singapore) presented how artificial intelligence and generative design techniques are transforming antenna development and enabling innovative metantenna technologies.
- **Antennas for In-Body Sensing: Assoc. Prof. Sema Dumanlı Oktar** (Boğaziçi University, Türkiye) discussed the design principles, measurement techniques, and open challenges associated with implantable and in-body antenna systems.
- **From Engineering Electromagnetics to Electromagnetic Engineering: Prof. Levent Sevgi** (Emeritus - Istanbul Technical University, Türkiye) shared his perspectives on modern electromagnetic engineering education and the skills required for future generations of engineers.

- **Flexible Radio Access Technologies for 6G and Beyond: Prof. Hüseyin Arslan** (Istanbul Medipol University, Türkiye) explored emerging wireless communication technologies, focusing on flexible radio access solutions and future 6G networks.

Picture 1: *Photos of the four speakers.*

Networking and Academic Impact

The workshop provided an excellent opportunity for networking and knowledge exchange among participants from academia and industry. Throughout the event, students, researchers, and professionals had the chance to interact directly with the distinguished speakers, discussing current research challenges, emerging technologies, and potential collaboration opportunities in the fields of electromagnetics, antennas, and wireless communications.

The interactive discussions continued during the coffee breaks, creating a dynamic environment for exchanging ideas and experiences. These informal interactions enabled participants, particularly graduate students and early-career researchers, to gain valuable insights from internationally recognized experts and establish new professional connections within the IEEE community.

The event successfully strengthened ties between universities, researchers, and industry representatives while promoting future collaborations in research, education, and technological innovation. It also reinforced the role of IEEE chapters in fostering scientific engagement and supporting the professional development of students and young engineers.

Student Feedbacks

- **Ceren Özcan (M.Sc. Student, Boğaziçi University):** “The workshop provided a comprehensive overview of current research trends in antennas and electromagnetics. It was particularly valuable to see how diverse areas, ranging from biomedical applications and electromagnetic engineering to artificial intelligence and wireless communications, are shaping the future of the field. The

event broadened my perspective on both academic research and real-world applications."

- **Arda Güler (M.Sc. Student, Boğaziçi University)**: "The workshop allowed us to explore a wide variety of research directions in antennas and electromagnetics. It was particularly inspiring to see how the field contributes to future technologies through applications ranging from healthcare and biomedical sensing to artificial intelligence and advanced wireless communications. The talks provided valuable insight into both the diversity of the field and its potential impact on society."

- **İpek Hilal Kacar (Ph.D. Student, Boğaziçi University):** "The workshop offered valuable insights into the future of wireless communications. The discussions on 6G technologies, flexible radio access systems, and emerging communication paradigms highlighted both the challenges and opportunities that will shape next-generation networks. It was inspiring to learn about cutting-edge developments directly from leading experts in the field."

- **Burak Özcan (M.Sc. Student, Boğaziçi University)**: "I particularly enjoyed the presentations related to artificial intelligence and its integration with antenna engineering. It was exciting to see how AI is transforming traditional design approaches and opening new possibilities for future wireless communication systems. The workshop provided valuable insights into the growing role of AI in electromagnetics research and engineering applications."

Picture 2: *A group photo after the workshop.*

Picture 3: *A selection of photos and selfies from the workshops.*

Conclusion

The Istanbul Medipol University edition of the IEEE AP-S Distinguished Lecturer Workshop was a highly successful event, bringing together leading experts, researchers, students, and industry professionals to explore current developments in antennas, electromagnetics, sensing technologies, and next-generation wireless communications. Through a combination of high-quality technical lectures and active participant engagement, the workshop provided a valuable platform for knowledge sharing, professional networking, and scientific collaboration. The event further strengthened the visibility of IEEE activities in Türkiye and contributed to fostering future partnerships within the international electromagnetics and wireless communications community.