IEEE AP-S ITU DL Workshop

Event Report

Date	5 November 2026
Venue	Ömer Korzay Conference Hall, Faculty of Electrical and Electronics Engineering, Istanbul Technical University
Attendance	**72 participants**
Audience	Undergraduate and graduate students, faculty members, and researchers
Workshop host	**Assoc. Prof. Dr. Kamil Karaçuha** Chair, IEEE Türkiye AP/MTT/EMC/ED Joint Chapter karacuha17@itu.edu.tr



Executive Summary

The IEEE Türkiye AP/MTT/EMC/ED Joint Chapter and the IEEE Türkiye AP-S Chapter organized the workshop as part of the IEEE Antennas and Propagation Society's Distinguished Lecturer program. Five talks covered electromagnetics education, computational modeling, inspection and imaging, metasurfaces, and millimeter-wave phased arrays.

Scientific Program

1. **From Engineering Electromagnetics to Electromagnetic Engineering: Teaching/Training Next Generations.** Prof. Dr. Levent Sevgi (Istanbul Technical University, retired) discussed how theory, engineering practice, and simulation can be combined in electromagnetics education.
2. **Advanced Computational Electromagnetics: Beyond the Standard Numerical Modeling Techniques.** Prof. Dr. Özlem Özgün (Hacettepe University) examined hybrid methods, domain decomposition, and parallel solvers for large electromagnetic problems.
3. **From Electromagnetic Scattering to Defect Reconstruction: Physics-Assisted Learning for Composite Pipeline Inspection.** Assoc. Prof. Dr. Ahmet Sefer (KAUST) explained how reverse time migration and deep learning can be combined to reconstruct defects in composite pipes.
4. **Metamaterials and Their Applications in Antennas and Beyond: From Compressive Sensing to Information Encoding.** Prof. Dr. Okan Yurduseven (Queen's University Belfast) discussed how frequency-diverse metasurfaces support compressive imaging and how engineered surfaces can encode information.
5. **From Chip to System: A Holistic Approach to 2D Scalable Low-Loss D-Band Active Phased Array Realization.** Prof. Dr. Kamil Yavuz Kapusuz (imec and Ghent University) presented the joint design of circuits, antennas, and packaging for scalable low-loss D-band arrays.

Program Change

Prof. Dr. Atif Shamim (King Abdullah University of Science and Technology) was unable to attend. His scheduled lecture, "*From Nanoparticles to Microwave Systems: Bridging Materials, Inks, and Additive Manufacturing*," was canceled.

Interaction and Participation

In the closing discussion, undergraduate and graduate students spoke with the presenters about research topics raised in the lectures. The session gave students time to ask questions, exchange ideas, and make contacts with researchers in antennas and electromagnetics.

Social Activities

The social program included two coffee breaks and lunch. Participants used these breaks to continue conversations from the technical sessions and meet other attendees.

Conclusion and Acknowledgments

The workshop brought students into contact with researchers from institutions in Türkiye, the United Kingdom, Saudi Arabia, and Belgium. The organizing chapters thank the ITU Faculty of Electrical and Electronics Engineering and the IEEE ITU Student Branch for their support, and Q&Co for sponsoring the workshop.



Figure 1. Speakers and organizers during the workshop.

Workshop Flyer



Figure 2. Pre-event flyer showing the originally announced speaker lineup.

Official IEEE vTools event listing

Workshop Photographs



Figure 3. Group photograph and snapshots from the conference hall.



Figure 4. Participants at a coffee break.



Figure 5. Workshop lunch and informal gatherings.