



Around the Globe

Mobile World Congress 2018

■ Nuno Borges Carvalho

This year, the IEEE and the IEEE Microwave Theory and Techniques Society (MTT-S) presented exhibits at the Mobile World Congress 2018 (MWC 2018) held in Barcelona, Spain (Figure 1). The MWC offers the world's largest mobile industry exhibition, including mobile operators, technology providers, device manufacturers, vendors, and content owners. More than 107,000 people from 205 countries attended MWC 2018, with 2,400 exhibitors showcasing items including hardware- and software-related devices for wireless communications and, especially, mobile communications.

The main topics addressed and on display at the exhibition provided a clear picture of the impact the MTT-S has had within the mobile device community. Despite the mobile phone industry promoting software advances and focusing on new camera and photo frames with improved quality and personalized avatars, the main players in the development of hardware solutions

Nuno Borges Carvalho (nbc Carvalho@ua.pt or nbc Carvalho@av.it.pt) is with the Universidade de Aveiro, Portugal.

Digital Object Identifier 10.1109/MMM.2018.2844080
Date of publication: 7 August 2018



Figure 1. The IEEE booth at the Mobile World Congress 2018. (Photo courtesy of Nuno Borges Carvalho).

showed very interesting close-to-market products, which included

- hardware for high bit rate fifth-generation millimeter wave and massive multiple-input/multiple-output communications base stations, using very interesting approaches for all-digital massive antenna array designs, cloud radio access networks for massive and very high bit rate access, low-power devices for massive

deployment of the Internet of Things (IoT), and spectrum sharing and other approaches for IoT solutions

- drone advances and their impact on mobility
- the integration of sensors with mobile phones, allowing these devices to be used for worldwide sensor data gathering
- narrow-band communications, a very important topic that was cov-

ered by presentations discussing such important verticals as agriculture, health, and daily life improvement.

These activities were clearly an indicator of new hardware approaches in state-of-the-art mobile communications with the seamless integration of software and hardware, resulting in improved cost and usability of mobile communications.

IEEE UAE MTT-S/IM-S/AP-S Joint Chapter

■ Nazih Khaddaj Mallat and Faten Kharbat

After creating the IEEE United Arab Emirates (UAE) Microwave Theory and Techniques Society (MTT-S) Chapter in 2013 [which merged with the IEEE UAE Instrumentation and Measurement Society (IM-S) Chapter in 2015], Dr. Nazih Khaddaj Mallat (IEEE UAE MTT-S/IM-S Joint Chapter chair) in February 2018 received official approval from the IEEE Member and Geographic Activities Board to add the IEEE Antennas and Propagation Society (AP-S) Chapter to the existing Joint Chapter, forming the IEEE UAE MTT-S/IM-S/AP-S Joint Chapter.

The new joint Chapter has already kicked off its activities by organizing—in collaboration with Mathworks, the IEEE UAE Section, and the College of Engineering (CoE) at Al Ain University of Science and Technology—the technical workshop “MATLAB Academic Tour 2018 UAE.” The event was supervised by Dr. Khaddaj Mallat, dean of the CoE, and Dr. Faten Kharbat, deputy dean of the CoE, and attended by many academic staff members, students, and engineers from different institutions and companies (Figure 1).

Nazih Khaddaj Mallat (nazih.mallat@aau.ac.ae) and Faten Kharbat (faten.kharbat@aau.ac.ae) are with the Al Ain University of Science and Technology, United Arab Emirates.

*Digital Object Identifier 10.1109/MMM.2018.2844084
Date of publication: 7 August 2018*



©ISTOCKPHOTO.COM/ALICAT



Figure 1. The workshop opening.