The second IEEE Region 8 Mediterranean Industry Applications Society (IAS) Student Branch Chapter Workshop took place in Xanthi, Greece, 13–14 May 2017. It was organized by the IEEE IAS Student Branch Chapter of the Democritus University of Thrace, Greece, with the support of the Industrial Electronics Society/Industry Applications Society/Power Electronics Society (IES/IAS/PELS) Joint Chapter of the IEEE Greece Section. The participants of the workshop came from several universities throughout the Region, i.e., Italy, Spain, Portugal, United Kingdom, Hungary, Tunisia, and, of course, Greece (Figure 1).

The chair of the IEEE IES/IAS/PELS Joint Chapter, Prof. Athanasios Karlis, gave the opening speech. Prof. Ioannis Bourtalis, the head of the Electrical and Computer Engineering Department at the Democritus University of Thrace, Greece, presented the department’s research and educational activities. Next, Prof. Ioannis Pratikakis, membership development chair of the IEEE Greece Section, presented the activities of the Section. Dr. Peter Magyar, IAS Chapters and membership department chair, and David B. Durocher, past president of the IAS, presented the activities of the IAS. IAS Distinguished Lecturer Suresh Chandranarasappa, fellow engineer at Westinghouse Electric Company, Cranberry Township, Pennsylvania, gave the presentation “Update on Nuclear Power.”

The next part of the workshop included the Student Branch Chapter presentations and two technical talks. The first talk was presented by Prof. J. Marcos Alonso of the University of Oviedo, Spain, who is a member of the IEEE IES Power Electronics Technical Committee and the 2006 recipient of the IEEE IES Early Career Award. His presentation on “Light-Emitting Diode (LED) Lightings and Drivers” began with an introduction to lighting and vision and color theory. Various types of LED modeling, thermal management, and dimming were also discussed. The presentation closed with discussion about dc-supplied LED drivers and offline LED drivers.

Associate Prof. Dimosthenis Peftitsis, of the Norwegian University of Science and Technology and a member of the International Steering Committee of the European Power Electronics and Drives Association, gave the second technical...
In March 2017, the joint IEEE Power Electronics Society/Industry Applications Society (PELS/IAS) Student Branch Chapter at Aalborg University, Denmark, was established. As part of the inaugural event, the Chapter invited PELS Distinguished Lecturer, Prof. Vassilios G. Agelidis of the Technical University of Denmark, Kongens Lyngby, to give the talk, “Power Electronics Technologies: Ubiquitous, Diverse, Ever Changing.” Prof. Frede Blaabjerg, Department of Energy Technology, Aalborg University, Denmark, chaired the lecture.

During the lecture, Prof. Agelidis discussed the research directions of power electronics technologies, and he highlighted the increasing demands for more intelligent, reconfigurable, multifunctional, adaptable, and multisourced “plug-and-play” technologies at both the hardware and the software levels (Figure 1). He also hinted at the urgent need for further integration of functions like control, monitoring, diagnostics, prediction and failure avoidance, and autocorrection capabilities. This would leverage power electronics technologies for more cost-effective industrial solutions and an overall more sustainable Society. This was a high-level lecture that prompted discussion with the audience.

Prior to the lecture, Chapter Chair Dapeng Lu, a Ph.D. student in the Department of Energy Technology at Aalborg University, gave a presentation promoting the IEEE Student Branch at Aalborg University and the technical activities and resources in PELS and IAS. The Chapter plans to organize more activities in the near future with the support of the power electronics program at Aalborg University.

Participants had the opportunity to explore the city of Xanthi and the nearby city of Avdira, which is the birthplace of the ancient Greek philosopher Democritus. The workshop offered a pleasant and social program where strong relationships and new friendships were formed.

by Xiongfei Wang