The joint IEEE Industry Applications Society (IAS)/Power Electronics Society (PELS) Central and South Italy Chapter co-sponsored the third Roma Tre summer course on power electronics and applications at the Center for Power Electronics and Drives, Roma Tre University, 3–14 July 2017. This event was organized in cooperation with Huawei Technologies, Infineon Technologies, National Instruments Corporation, ROHM Semiconductor, Semikron, Sky Research, the University of Nottingham, and the University of Roma Tor Vergata. The European Center for Power Electronics provided technical sponsorship.

The two-week course included 30 hours of lessons and three European credits available for each week. Lectures took place during the first week of the course, and laboratory hands-on training provided tips, techniques, and valuable insight for the attendees. In addition to the technical aspects, the workshop offered an opportunity for attendees to connect with the developers of PLECS. The SBC plans to organize similar events on a regular basis.

**Research-Sharing Sessions**

The Chapter regularly organizes research-sharing sessions (RSSs) where researchers from Power and Energy Systems group at the Department of Electrical and Computer Engineering present their ongoing work. These sessions serve as an interactive platform for the researchers to share their ideas and discuss any issues they are facing. They are also helpful for those who want to practice their presentations before presenting their work at a conference or a Ph.D. oral defense. The SBC has organized seven RSSs in 2017, which were attended by IEEE Members and guests.

**FIG 1** (a) Prof. M. Rezwan Khan with lecture attendees and (b) the PLECS team with event participants. (Photo courtesy of Sandeep Kolluri.)

by Fabio Crescimbini and Luca Solero

**Joint IEEE IAS/PELS Central and South Italy Chapter Co-sponsor Power Electronics and Applications Summer Course**
activities were performed during the second week. The program allowed participants to attend each session independently and as a single, short course. Although the course was primarily intended for Ph.D. and master’s degree students, it was also open to employees of companies interested in the topic.

Week one was devoted to the theoretical aspects of silicon carbide and wide bandgap devices, the design of modern insulated-gate bipolar transistors and power modules, and modern configurations as multilevel and multiscell power converters. It also included topics on the control aspects from basic to model-predictive strategies, the use of field-programmable gate arrays (FPGAs), and the application of the discussed topics in specific areas such as more electric aircraft, harsh environments, and industrial motor drives (Figure 1).

Week two was devoted to the new PED-board equipped with the National Instruments sbRIO-9651 and Linux real-time operating systems. Specific power electronics and drives applications, using a laboratory virtual instrument engineering workbench integrated development environment, were proposed for the development of the FPGA main scheduler and pulsewidth modulator for multilevel converter topology. They were also recommended for the development of the field-oriented control for permanent magnetic machines directly on the FPGA target and for the development of control structure for a buck power converter using both real-time and FPGA capabilities.

Attendees and instructors took part in a half-day visit to the Semikron Factory in Pomezia, Italy. Participants were also invited to dine at a traditional restaurant in the Trastevere area. More than 15 students participated in the first week of the program, and seven students participated in the second week. The attendees were mainly Ph.D. students coming from electrical, electronic, and mechanical disciplines but also included three industry participants. The individuals who took part in this summer course gave extremely positive feedback.

by Andreas Wagener

Joint IEEE IAS/PELS/IES German Chapter Holds Meeting at Airbus and ZF Friedrichshafen AG Facilities

The second Joint IEEE Industry Applications Society (IAS)/Power Electronics Society (PELS)/Industrial Electronics Society (IES) German Chapter meeting of 2017 took place on the coast of Lake Constance at the facilities of Airbus and ZF Friedrichshafen AG. Dornier, a former German aircraft manufacturer and creator of famous airplanes such as the 12-engine flying boat Do-X and VTOL Do31, is now a part of the Airbus network of aircraft. Its product line includes satellites, electronic surveillance for border