

Guest Editorial

Education of power electronics has obtained increased attention during the last years. Globalization has influenced also the education and nearly all over the world the Power Electronics subject is educated from the same book and material with inherently different results. What makes the difference is the educational methods and tools as well as personal approach which motivates the students. A general problem in electrical engineering is the fact that it deals with rather abstract notions such as current, voltage, resistance, capacitance etc. It has been found, that students who are faced with the principles of Power Electronics have problems in understanding and dealing with the high complexity of these systems. Additionally power electronics circuit is often connected to a concrete application which knowledge is also important. Traditionally, in development of engineering education, the key objective was to enable a teacher to convey knowledge and insight to students. Today the education is influenced by emerging eLearning facilities and the accent lies in skills and (deep) understanding rather than in knowledge. In this respect, the eLearning plays an important role in education. In this special issue, different application of eLearning in Power Electronics and its current state of the art is reviewed. Education in power electronics is changing towards paying attention to integration of knowledge areas and to development of skills for learning. Project oriented education and problem oriented education are the methods

shown in this issue to develop needed skills. The development in last years in education and particularly in the field of Power Electronics can be summarized by the following development:

- 1) E learning became mature and fully implemented also in the field of Power Electronics in the form of interactive eLearning Virtual and Distance Laboratories as well as Interactive Animations.
- 2) Project oriented and problem oriented education has obtained increased attention shown on the several examples in this issue.
- 3) Power Electronics entered new areas such as sustainable power engineering. Generally what we can see in education is a shift from technology oriented education to an application oriented one.

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