



## **Michael E. Auer**

### **Biography**

Michael E. Auer received his Ing. degree (1971) and his Ph.D. degree (1975) from the Dresden University of Technology, Germany and in 1978 a Dr.sc.techn. degree (Postdoctoral Lecture Qualification - Habilitation). After his academic career he worked in the industry. In 1995 Michael Auer was appointed Professor of Electrical Engineering of the Dept. of Electronics at Carinthia Tech Institute, Villach, Austria.

Based on his experience in teaching engineering subjects at Technical University of Dresden and in the further education in corporations he built up the teaching domain “Fundamentals of Electrical Engineering and Circuit Design”. Michael Auer has also a teaching position for “Microelectronics” at the University of Klagenfurt, Austria and works as a visiting professor at some universities worldwide. He gave guest lectures at University of Patras, Greece, Transylvania University of Brasov, Romania, University of Maribor, Slovenia, Princess Sumaya University for Technology Amman, Jordan, MIT Boston, USA, Columbia University New York, USA, Technical Universities of Moscow, Athens and others. He was invited as keynote speaker to numerous conferences worldwide. Michael Auer is a Senior Member of IEEE and member of ASEE, SEFI, VDE, IGIP, etc., author or co-author of more than 180 publications and leading member of numerous national and international organizations in the field of Online Technologies. His current research is directed to technology enhanced learning and remote working environments. Besides being a co-chair or member of the Program Committees of several international conferences and workshops he is especially involved in the following international conferences:

- Founder and general chair of the annual International Conference “Interactive Collaborative Learning” (ICL, [www.icl-conference.org](http://www.icl-conference.org)) since 1998.
- Chair of the steering committee of the annual International Conference “Remote Engineering and Virtual Instrumentation” (REV, [www.rev-conference.org](http://www.rev-conference.org)) since 2004.
- Chair of the steering committee and conference co-chair of the annual International Conference “IEEE Engineering Education” (EDUCON, [www.educon-conference.org](http://www.educon-conference.org)) since 2010.

In 2009 Michael Auer was appointed as member of the Advisory Board of the European Learning Industry Group (ELIG, <http://www.elig.org>). Furthermore he is chair of the Advisory Board of the International E-Learning Association (IELA, [www.ielassoc.org](http://www.ielassoc.org)) and member of the Board of Consultants of the International Centre for Innovation in Education (ICIE, <http://www.icieparis.net>). He works as an evaluator and coordinator of European Union funded research projects and is member in expert groups of the European Commission. Michael Auer has experience in leading of several national and international projects in the fields of remote engineering and technology supported learning.

Under his guidance international teams developed a Joint European Master Study Program “Remote Engineering” (EU project MARE) and a Joint European Bachelor Study Program “Information Technology” (EU project BIT2010). Michael Auer is editor-in-chief of the International Journals of “Online Engineering” (iJOE, [www.i-joe.org](http://www.i-joe.org)), “Emerging Technologies in Learning” (iJET, [www.i-jet.org](http://www.i-jet.org)) and “Interactive Mobile Technologies” (iJIM, [www.i-jim.org](http://www.i-jim.org)).

Michael Auer is Founding President and CEO of the “International Association of Online Engineering” (IAOE), a non-governmental organization that promotes the vision of new engineering working environments worldwide. In September 2010 he was elected as President of the “International Society for Engineering Education” (IGIP). His term of office as IGIP President was extended last year until 2017. Furthermore he is one of the founders and Secretary General of the “Global Online Laboratory Consortium” (GOLC, [www.online-lab.org](http://www.online-lab.org)). GOLC is the result of an initiative started in 2009 at MIT to coordinate the work on educational online laboratories worldwide. Since 2011 he is a member of the

Advisory Board of the “International Institute for Developing Engineering Academics” – IIDEA. In June 2011 Michael E. Auer was awarded with the title Dr.H.C. by Transylvania University of Brasov, Romania with a laudation of Prof. Rob Reilly from MIT.

### **Statement of Rationale**

To begin with, let me tell you that it is a great honor and privilege for me to be considered as a candidate for the 2014 IFEES Executive Committee election. As you might know, I have frequently been involved in a number of IFEES activities over the years and have also acted in several functions for IFEES, for example as the co-chair of the Award Committee, as a member of the Nomination Committee, and as a member of the IIDEA Advisory Board. I have also been contributing to the preparation of WEEF2014 and have participated in many other Engineering Education activities.

We are currently witnessing a significant transformation in the development of Engineering Education. Two essential elements of this transformation process are definitely the challenges that have to be tackled in the fields of

- the impact of globalisation on all areas of human life, and
- the exponential acceleration of the developments in technology as well as of the global markets and the necessity of flexibilisation arising from it within Engineering Education.

I can envisage IFEES as the great community that may play an active role in this transformation process. Who else, if not we as IFEES, could provide the direction and the content with which Engineering Education can help to master future challenges for society.

Over many years, I have been closely connected with many dear colleagues and friends in IFEES through our common work : Hans Hoyer, Lueny Morell, Krishna Vedula, Claudio Borri, Jose Quadrado, Stephanie Farell, to name but a few.

Together with them and with all other IFEES members I would like to focus my work within the IFEES EC on the following aspects:

- Implementation and establishment of regional centres for the initial and continuing education and training in the fields of Engineering Pedagogy and Educational Technology. This shall also include the specific adaptation of curricula contents towards regional and national requirements (e.g. as is currently done in India and is planned for China, as well as for North and South America).
- Development of an Online Portal for further education in Engineering Pedagogy under the umbrella of IFEES.
- Knowledge acquisition, dissemination and promotion by means of Online Engineering as an essential component of future engineering work and at the same time as a future pedagogical method and principle in Engineering Education.

Apart from the activities mentioned above, I am at present also actively involved in the preparation of the WEEF in Florence in 2015.

I strongly believe that it is of the utmost importance that IFEES will, in the future, listen to and learn more from its members than ever before and that best-practice experiences and innovative methods shall become a more general and universal importance. In addition, IFEES shall organise more common activities, partnerships and co-operations for its members, which would put Engineering Education into a more cross-linked global context and would also create considerable synergies.

As Darwin said: "It is not the strongest of the species that survive, nor the most intelligent, but rather the one most responsive to change." I am more than willing to initiate these changes in Engineering Education together with and within the IFEES community, this international group of Engineering Education innovators.