In Memoriam

Heinz van der Broeck

(1952-2009)

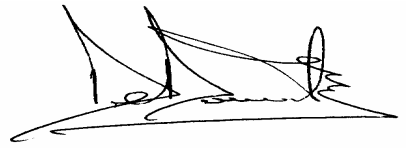
With great sadness, we learned that Heinz van der Broeck, Professor at the Cologne University of Applied Science and Honorary Professor at RWTH Aachen University, passed away on May 8, 2009 after a short but aggressive illness. Heinz was an active member of both the IEEE Power Electronics and IEEE Industry Applications Societies. From 2007 till 2008 he served as Chair of the IEEE German Joint IAS-PELS-IES Chapter. In 2004, he served as Treasurer of the IEEE PESC'04 conference in Aachen, Germany.

Heinz van der Broeck studies followed what has been called in Germany "the long route". He started by obtaining a degree as technician in 1971. He followed this by earning an engineering degree from the Cologne University of Applied Science. After having obtained that engineering degree with high distinction in 1975, he began studying at RWTH Aachen University for the Dipl.-Ing. (M.Sc.) degree in electrical engineering. He received his Dipl.-Ing. (M.Sc.) degree in electrical power engineering from RWTH Aachen University, in 1980 with highest distinction, for which he was honored with the Springorum Medal and the Henri Ford M.Sc. Award. His thesis was in the area of converter modulation techniques. Having been recognized for his excellent work, Heinz was offered a PhD Research Assistant position at the Institute for Power Electronics and Electrical Drives (ISEA) of the RWTH Aachen University. His Ph.D. thesis on "Comparison of Voltage Source Inverters with Two or Three Inverter Legs for Induction Machines using Pulse-Width Modulation at High Switching Frequency" was completed with highest distinction in 1985. From 1987 till 1999, he worked at the Philips Research Center in Aachen. In 1994, he began lecturing as Adjunct Lecturer at the ISEA. After the unexpected death of the ISEA Director that year, he voluntarily agreed to teach all courses offered by ISEA, which he did for 2 years. No doubt, Heinz's support during this critical phase in the history of ISEA guaranteed continuation of all teaching tasks in the area of power electronics at RWTH Aachen University, a fact for which we are all greatly indebted to him. In 1999 he was appointed Honorary Professor at RWTH Aachen University. Shortly thereafter, in the same year, he was appointed Professor at the Cologne University of Applied Science.

Heinz's work and main interest was the continued development of converter controls, electronic ballasts and switched mode power supplies. He was extremely creative in finding simple but reliable solutions. As a teacher, he taught several courses on switched mode power supplies. He developed a unique laboratory with project-based learning, on which he reported at several conferences. Over the years, the students have valued his lecturing for its quality and clarity, his direct involvement in their work, and his strong mentoring skills. Twice, with great success, he led the Aachen-Cologne student team in the PELS International Future Energy Challenge.

In the 1987 Proc. of the IEEE IAS Conf. and later in the 1988 IEEE Trans. on IA, Heinz was co-author of the first IEEE paper on “space vector modulation”. This paper was a milestone on how to control three-phase converters with PWM modulation whilst providing highest possible utilization of the converter. This paper on PWM modulation techniques for converters has been cited by many researchers ever since. Despite many significant contributions to the field of power electronics, Heinz remained humble and had a great sense of perspective. He worked with great integrity and motivated many to explore better solutions to make power supplies more efficient and more cost effective.

With sadness we say adieu to Heinz, who left us all too early. Heinz was also a personal friend to many of us. We wish his wife Brigitte and their children, Christoph, Franziska, Thomas and Stephan the strength to bear this heavy loss. The Faculty of Electrical Engineering at RWTH Aachen University, in particular, the Institute for Power Electronics and Electrical Drives (ISEA), and the University of Applied Science in Cologne, we will miss Heinz van der Broeck dearly.



Rik De Doncker