

Short CV:

Dr. Harald Böttner is currently head of the department "Thermoelectrics and Integrated Sensor Systems" of the Fraunhofer Institute for Physical Measurement Techniques IPM, Freiburg/ Germany with ~ 30 permanent staff members and additional ~ 20 students.

He graduated with a diploma degree in chemistry of the University of Münster, Germany, in 1974 and received his Ph.D. in 1977 at the same university for his thesis on "Diffusion and solid state reaction in the quaternary semiconductor II-VI/IV-VI material system". In 1978 he joined the Fraunhofer Institut für Silicatforschung ISC, Würzburg/Germany and in 1980 he accepted the appointment at Fraunhofer IPM. From 1980 to 1995 he developed IV-VI-based infrared semiconductor lasers and at the same time started activities in thermoelectrics. From 1995 to 2003 his was responsible for the development of semiconductor gas sensors and since 1996 also for the field of thermoelectrics.

His current research activities are focused on nanoscale thin film- and bulk-thermoelectrics, industrializing high temperature thermoelectrics as materials and devices, thermoelectric metrology and thermoelectric systems: e.g. high temperature harvesting and thermoelectrically powered sensor systems.

At Fraunhofer IPM Dr. Böttner was head of development of the first completely wafer-based miniaturized microelectronic compatible thermoelectric devices commercialized as company MicroPelt.

He is author or co-author of more than 100 papers in journals, proceedings, of reviews articles and chapters in handbooks. He holds around twenty thermoelectric related patents.

Involvement in the TE community:

Dr. Böttner was member of the board of the International Thermoelectric Society from 2003 until 2010. Further he is secretary member of the executive board of the European Thermoelectric Society and co-founder, Vice president and treasurer of the Deutsche Thermoelektrik Gesellschaft e.V (German Thermoelectric Society).

He was

2001 Chairman of 6th European Conference on Thermoelectrics, Freiburg, 2008 organizer of the second German Thermoelectric School, Freiburg, and 2009 Chairman of 28th International Conference on Thermoelectrics and 7th European Conference on Thermoelectrics 26 to 30 July 2009, Freiburg

Harald Böttner can be reached by email at harald.boettner@ipm.fraunhofer.de.