## 2006 Distinguished Educator Award Wolfgang Hoefer and Peter Russer

This award was inspired by the untimely death of Prof. F. J. Rosenbaum (1937-1992), an outstanding teacher of microwave science and a dedicated Administrative Committee Member and contributor. The award recognizes a distinguished educator in the field of microwave engineering and science who best exemplifies the special human qualities of Fred Rosenbaum who considered teaching a high calling and demonstrated his dedication to the Society through tireless service. This year the Society is pleased to recognize two recipients of this award: Wolfgang J. R. Hoefer and Peter Russer. The citation reads *"FOR OUTSTANDING ACHIEVEMENTS AS AN EDUCATOR, MENTOR AND ROLE MODEL OF MICROWAVE ENGINEERS AND ENGINEERING STUDENTS."* 



**Wolfgang J.R. Hoefer** received the Dipl.-Ing. Degree in Electrical Engineering from the Technische Hochschule Aachen, Germany, in 1965, and the D. Ing. Degree from the University of Grenoble, France, in 1968.

During the academic year 1968/69 he was a Lecturer at the Institut Universitaire de Technologie de Grenoble and a Research Fellow at the Institut National Polytechnique de Grenoble, France. In August 1969 he joined the faculty at the Department of Electrical Engineering, the University of Ottawa, Canada, where he was a Professor until March 1992. He was President of the Commission of Sciences of the Graduate School from 1977 to 1980, and Department Chair from 1978 to 1981. In April 1992 he was selected to hold the NSERC Industrial Research Chair in RF Engineering at the University of Victoria, Canada, where he heads the Computational Electromagnetic Research Laboratory (CERL) in the Department of Electrical and Computer Engineering.

Dr. Hoefer held visiting appointments with the Space Division of AEG-Telefunken in Backnang, Germany, the Electromagnetics Laboratory of the Institut National Polytechnique de Grenoble, France, the Space Electronics Directorate of the Communications Research Centre in Ottawa, Canada, the University of Rome "Tor Vergata", Italy, the University of Nice - Sophia Antipolis, France, The Ferdinand Braun Institute in Berlin and the Technical University of Munich, both in Germany, the Georgia Institute of Technology, Atlanta, USA, and the University of Perugia, Italy.

He was the Chair and Co-Chair of the MTT-15 Technical Committee on Field Theory from 1990 through 2004, and Associate Editor of the IEEE MTT Transactions from 1998 to 2000. He is the co-founder and managing editor of the International Journal of Numerical Modelling since 1988. He serves on the editorial and advisory boards of several other scientific journals and organizations. He is a Fellow of the IEEE, of the Advanced System Institute of British Columbia, and of the Royal Society (the Academies of Arts, Humanities and Sciences) of Canada. He is a Distinguished Microwave Lecturer of the MTT Society (2005 to 2007) and the President of Faustus Scientific Corporation.

He has over 400 refereed publications in books, journals and conference proceedings, on subjects in computational electromagnetics, microwave and millimeter wave circuits, microwave measurement techniques, and engineering education. He has supervised 53 researchers at the Postdoctoral, Doctoral and Masters levels.



**Peter Russer** received his Dipl.-Ing. degree in 1967 and his Dr. techn. degree in 1971, both in electrical engineering and both from the Vienna University of Technology, Austria. From January 1968 to October 1971 he was with the Electrical Engineering Department, Vienna University of Technology. In 1971 he joined the Research Institute of AEG-Telefunken in Ulm, Germany, where he worked on fiber optic communication, broadband solid-state electronic circuits, statistical noise analysis of microwave circuits, laser modulation and fiber optic gyroscopes. In 1979 he was co-recipient of the NTG Award for the publication "Electronic Circuits for High Bit Rate Digital Fiber Optic Communication Systems". Since 1981 he has been Professor and head of the Institute for High Frequency Engineering at the Munich University of Technology, Germany. In 1990 and in 1993, respectively he has been Visiting Professor at the Universities of Ottawa and Victoria. From October 1992 through to March 1995 he was elected to the grade of Fellow of the IEEE for fundamental contributions to noise analysis and low-noise optimization of linear electronic circuits with general topology. From 1997 to 1999 Peter Russer was Dean of the Department of Electrical Engineering and Information Technology of the Munich University of Technology. He was Chairman of U.R.S.I. Commission D from 2002 to 2005 and he is now member of the U.R.S.I. Long Range Planning Committee.

Peter Russer has served as a member of the technical programme committees and steering committees of various international conferences (IEEE MTT-S, European Microwave Conference and as the member of the editorial board of several international journals (Electromagnetics, International Journal of Numerical Modeling). His current research interests are electromagnetic fields, electromagnetic compatibility, integrated microwave and millimeter-wave circuits, statistical noise analysis of microwave circuits, and methods for computer-aided design of microwave circuits.

Peter Russer has published more than 500 scientific papers in refereed journals and conference proceedings. He has written two textbooks and edited one monography. His textbook "Introduction to information Technology" (in German) is an introduction into the broad field of electronics and information and communication techniques. In 1994 Professor Russer edited together with Johann-Friedrich Luy the book "Silicon-Based Millimeter-Wave Devices" which has been the first comprehensive book on silicon millimeterwave devices. In his textbook "Electromagnetics, Microwave Circuit and Antenna Design for Communications Engineering", which appeared in 2003 and in 2006 in a considerably extended 2<sup>nd</sup> edition Professor Russer has introduced exterior differential forms which today are considered to be the most suitable framework for field theory.

The teaching activities of Professor Russer comprise courses in electromagnetic fields, high-frequency engineering, linear, nonlinear and noisy microwave circuits and quantum electronics. Over the years he has graduated more than 400 students of which more than 50 received their PhD degree. So far eight of his former students became Professors. In 2000 Professor Russer initiated the international graduate program "Master of Science in Microwave Engineering" at the Munich University of Technology.