2003 Microwave Application Award

Aaron Oki

The Microwave Application Award recognizes an individual or team for outstanding application of microwave theory and techniques. This year's recipient is Aaron Oki whose citation reads "For III-V HBT technology development and insertion into a broad range of microwave applications."

Aaron Oki this was born in Honolulu, Hawaii in 1961. He graduated from the University of Hawaii with a BS in Electrical Engineering in 1983, and an MS in EECS from UC Berkeley in 1985. In 1985 he joined TRW Space and Electronics and, with Michael Kim, started the HBT technology development under Reynold Kagiwada, the lab manager at the time. Soon after Dwight Streit and Donald Umemoto joined the team and HBT technology made significant advances. In 1990 Aaron became Principal Investigator and Section Head for HBT technology. In 1994 TRW inserted the technology into key U.S. military programs such as MILSTAR. In 1995 TRW joined forces with a small company, RF Micro Devices in North Carolina, to exploit the technology for use in cellular telephones. As the production requirements grew beyond TRW's capacity in 1997 Aaron



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helped to transfer TRW's HBT technology to RF Micro Devices. Today many of the world's cellular phones are produced using this technology.

Over the years Aaron has co-authored over 200 papers and conference presentations, been awarded 16 patents on HBT technology, received 11 TRW IR&D Gold Awards, and 5 TRW Chairman's Awards for Innovation. He is a Northrop Grumman Space Technology Technical Fellow, and the Deputy Director for Microelectronics. His organization is responsible for the development and production of advanced GaAs, InP, GaN, antimonide, and superconducting technologies. He has served on the Technical Program Committees for the IEEE GaAs IC Symposium (1994-1997) and the IEEE MTT-S International Symposium (1997-2001). He is married to Peggy, and has a daughter, Jennifer.