

MTT-SOCIETY AWARDS

2004 Outstanding Young Engineer

RICHARD LAI, AND ROBERT A. YORK

The Outstanding Young Engineer Award is presented to recognize an outstanding young MTT-S member, who is less than 39 years old at the time of nomination, who has distinguished himself/herself through a sequence of achievements, which may be technical (within the MTT-S Field of Interest), may constitute exemplary service to the MTT-S, or may be a combination of both. Multiple awards may be made at the discretion of the Awards Committee. This year there are two recipients of this Award.

This first recipient is Richard Lai, whose citation reads: **“For the development and production of advanced high electron mobility transistor technology for high volume commercial, military and space applications.”**



RICHARD LAI received his BSEE from University of Illinois Urbana-Champaign in 1986 and his MSEE and Ph.D. degrees from University of Michigan Ann Arbor in 1988 and 1991, respectively. He joined TRW (now Northrop Grumman Space Technology) in 1991 and since 1994, he has been the principal investigator for an advanced HEMT MMIC research and development project at TRW and now Northrop Grumman Space Technology. From 1997-2001, he was the manager for HEMT MMIC Products Section and since 2001, he became the manager of the Technology Development Department that is responsible for all of the HEMT, HBT and photonics product engineers. He is also a

Northrop Grumman technical fellow since 2001 – scientists and engineers of exceptional achievement within the corporation. He has authored and co-authored over 150 total papers, patents and conference presentations in the area of advanced GaAs and InP-based device and circuit technology, establishing world record performance for low noise amplifiers, high frequency amplifiers and power amplifiers. He has also received four TRW's Chairman's and Presidents Award for Innovation in 1996, 1999 and 2003 for work on GaAs power HEMT MMIC development and InP HEMT MMIC development. In 1998, he received a paper of the decade award for the International Conference on InP and Related Materials and in 1999, he also received JPL's Award for Excellence for his work on cryogenic InP HEMT MMIC development.

Richard is married to Dr. Cecilia Fu, a pediatric attending physician at Children's Hospital of Los Angeles and has two daughters Audrey and Stephanie, ages 8 and 4. His outside interests are sports such as tennis, softball and golf, along with general travel.

This second recipient is Robert A. York, whose citation reads: **“For contributions to the theory and techniques of spatial power-combining coupled oscillator arrays, and ferroelectric phase shifters.”**



ROBERT A. YORK (S '86 - M '91 - SM '99) received the B.S. degree in electrical engineering from the University of New Hampshire in 1987, and the M.S. and Ph.D. degrees in electrical engineering at Cornell University in 1989 and 1991, respectively. He is currently a Professor of Electrical and Computer Engineering at the University of California at Santa Barbara. His group at UCSB is involved with the design and fabrication of novel microwave and millimeter-wave circuits, high power microwave and millimeter-wave amplifiers using spatial combining and wide-bandgap semiconductor devices, and application of ferroelectric materials to microwave and millimeter-wave circuits and systems. Dr.

York received the Army Research Office Young Investigator Award in 1993, and the Office of Naval Research Young Investigator award in 1996. He has served as an associate editor of the IEEE MTT Transactions, and co-founded Agile Materials and Technologies Inc. in 1999.