

2005 Outstanding Young Engineer

Joseph Pekarek and Thomas Weller

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 Joseph Pekarek, whose citation reads: "*FOR INNOVATION IN SOFTWARE DESIGN AND OUTSTANDING ACHIEVEMENT IN ENTREPRENEURSHIP.*" **Joseph Pekarek** received his BSEE from the South Dakota School of Mines in 1988, and his MSEE from the California State University of Northridge, CA in 1991. In 1996, he received his Ph.D from UCLA.

Joe worked on the development of advanced MMIC's at Hughes Aircraft Company, while simultaneously pursuing his doctoral degree. In 1994, he founded Applied Wave Research (AWR) where he spent 4 years developing the first Microwave Office (MWO) suite released in 1998. From the beginning, Joe has been the architect and developer of MWO as it has evolved into a series of products providing complete front-to-back solution from design capture to tape-out. Today, the firm Joe founded is recognized worldwide as a leading provider of a design platform for microwave and MMIC circuits generating around \$15M in sales per year.

Under Joe's technical leadership, Applied Wave Research has received awards for Top Products of 1998 and 2002 from Microwaves and RF; Top Products for 2002 from EDN Magazine; was a 2002 EDN Innovation Finalist; and a finalist in the Software Developer of the Year from the Southern California Software Council. Joe is credited with a patent for a coplanar waveguide quadrature coupler, and has three patents pending related to system simulation.

This second recipient is Thomas Weller, whose citation reads: “*FOR CONTRIBUTIONS MADE IN THE FIELD OF PLANAR CIRCUIT DESIGN AND MODELING, AND TO IMPROVING THE QUALITY OF MICROWAVE EDUCATION.*”



Tom Weller received the B.S., M.S. and Ph.D. degrees in Electrical Engineering in 1988, 1991, and 1995, respectively, from the University of Michigan, Ann Arbor. From 1988-1990 he worked at Hughes Space and Communications as a Systems Engineer, focusing primarily on Ku-band communications sub-system design and the development of a hardware-based satellite simulator for high definition television broadcast testing. During this same period he was a software engineer for Edge Technologies, a robotics start-up company. He joined the University of South Florida in 1995, where he is currently an Associate Professor. Along with four faculty colleagues he started the Center for Wireless and Microwave Information Systems (aka the WAMI Center) in which more than 35 graduate and 8 undergraduate research assistants are typically involved each year. He is also the co-director of the National Science Foundation sponsored SKINS IGERT Program at USF, a bio-engineering oriented program that will support 40 2-year Ph.D. fellowships over a 5-year period. In 2001, he co-founded Modelithics, Inc. with Dr. Larry Dunleavy and has led the development of the company’s first software products. He has served as the chair of the Florida West Coast IEEE MTT/AP/EDS chapter, is a member of the MTT Technical Program Committee and the Vice President of Technical Operations for the IEEE Sensors Council. Dr. Weller was a co-recipient of the 1996 Microwave Prize from the IEEE MTT Society, a recipient of a CAREER Award from The National Science Foundation in 1999, and the USF President’s Award for Faculty Excellence in 2003. He has over 70 refereed publications and has been awarded three patents in the areas of circuit modeling and planar circuit design.