1993

Distinguished Educator Award

Arthur A. Oliner

The creation of this award was inspired by the untimely death of Prof. F. J. Rosenbaum (1937–1992), an outstanding teacher of microwave science and a dedicated MTT-S ADCOM Member/contributor. This award is to be presented to a distinguished educator in the field of microwave engineering and science who exemplifies the special human qualities of the late Fred J. Rosenbaum who considered teaching a high calling and demonstrated his dedication to MTT-S through tireless service.

PRIZE: A Plaque and honorarium of $1,000.

BASIS FOR JUDGING: The awardee must be a distinguished educator, recognized, in general, by an academic career. It is desirable for the candidate to have received other teaching awards. The effectiveness of the educator should be supported by a list of graduates in the field of microwave science, who have become recognized in the field. Relevant letters of support are encouraged.

The candidate shall also have an outstanding record of research contributions, documented in archival publications. The candidate shall have a record of many years of service to MTT-S.

The first recipient of the Distinguished Educator Award is Professor Arthur A. Oliner, a world renowned scientist. Many of his Ph.D. students became well-known scientists, educators and managers in the U.S. and abroad. One of Prof. Oliner's Ph.D. student described Dr. Oliner so well: "You have a gift of insight into the heart of a problem, and the ability to make simple models which represent the important features. Your patience, attention to detail, and genuine interest in your students are outstanding. You are able to understand and to communicate in ways that few people can. You are one of the very few people I know who knows how to converse, to listen with attention and appreciation and then respond in a kind and thoughtful manner. I am continually impressed by your dedication to whatever you take on, always striving to give your best, and always expecting the best from those who work with you." ... "I am better, more useful man today for having known you."

Dr. Oliner has been, and still is, an active participant in MTT-S Adcom. We are privileged to have people like Prof. Oliner in our MTT Society.

Arthur A. Oliner (M'47–SM'52–F61–LF'87) was born in Shanghai, China, on March 5, 1921. He received the B.A. degree from Brooklyn College, Brooklyn, NY, and the Ph.D. degree from Cornell University, Ithaca, NY, both in physics, in 1941 and 1946, respectively.

He joined the Microwave Research Institute of the Polytechnic Institute of Brooklyn, NY, in 1946, and was made Professor in 1957. From 1966 to 1971, he was Head of the Electro-physics Department; thence became Head of the combined Department of Electrical Engineering and Electro-physics from 1971 through 1974. He was also the Director of the Microwave Research Institute from 1967 to 1981. During the summer of 1964, he was a Walker-Ames Visiting Professor at the University of Washington, Seattle, and during the 1965–1966 academic year, he was on a sabbatical leave at the Ecole Normale Superieure, Paris, France, under a Guggenheim Fellowship. During the summer of 1973, he was a Visiting Professor at the Catholic University, Rio de Janeiro, Brazil; in the spring of 1978, he was a Visiting Research Scholar at the Tokyo Institute of Technology, Japan; in the spring of 1980 he was a Visiting Professor at the Huzhuong (Central China) Institute of Technology, Wuhan, China; and in the fall of 1982 he was a Visiting Professor at the “La Sapienza” University of Rome, Rome, Italy.

Dr. Oliner's research has covered a wide variety of topics in the microwave field, including network representations of microwave structures, precision measurement methods, guided-wave theory with stress on surface waves and leaky waves, traveling-wave antennas, plasmas, periodic structure theory, and phased arrays. His interests have also included waveguides for surface acoustic waves and integrated optics and, more recently, novel leaky-wave antennas for millimeter waves and leakage effects in millimeter-wave integrated circuits. He is the author of more than 180 papers and the coauthor of coeditor of three books. He served on the Editorial Boards of the journal Electronics Letters (published by the British IEEE) and the volume series Advances in Microwaves (Academic Press). He is also a former Chairman of a National Academy of Sciences Advisory Panel to the National Bureau of Standards (now NIST). He has been a consultant to industry since 1952, for IBM, Raytheon, Boeing, Hughes, AIL, Kaiser Aluminum, Rockwell, MIT Lincoln Lab., CBS Labs., etc. He was a founder of Merrimac Industries and has been on its Board of Directors since 1962.

Dr. Oliner is a Fellow of the AAAS and the British IEE, and he is a member of the National Academy of Engineering. He has received prizes for two of his papers: the IEEE Microwave Prize in 1967 and the Institution Premium, the highest award of the British IEE, in 1964. He was named an Outstanding Educator of America in 1973, and in 1974 he received a Sigma Xi Citation for Distinguished Research. He was President of the IEEE MTT Society, its first National Lecturer, a member of the IEEE Publication Board, and General Chairman of three symposia. In 1982, he received the IEEE Microwave Career Award, and he is one of the six living Honorary Life Members of the MTT Society. In 1984, he was a recipient of the IEEE Centennial Medal, and in 1988 a special retrospective session was held in his honor at the International Microwave Symposium. He is a member of several Commissions of the International Union of Radio Science (URSI), a past U.S. Chairman of Commissions 1 (now A) and D, and a member of the U.S. National Committee of URSI. In 1990, he received the URSI van der Pol Gold Medal, which is awarded triennially, for his contributions to guided-wave theory.