

Editorial

WITH the start of the new millenium, IEEE MICROWAVE AND GUIDED WAVE LETTERS begins its eleventh year of existence. This anniversary brought several significant changes with it.

The first one is the new name: IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS (MWCL). This new name emphasizes the rapid evolution of the wireless technology, and the strong impact and connection it has with the conventional microwave technology. As the quest for rapid transmission of more information increases, the commercial wireless technology moves deeper into microwave, and even millimeter-wave, frequency bands. Well-established concepts and techniques developed by microwave engineers are finally reaching almost every home and every hand via the modern applications of the wireless technology. This makes the IEEE Microwave Theory and Techniques Society a natural parent for the current and future wireless technology. The new name is only an acknowledgment of this intuitive relationship.

The second change is the addition of three new associate editors: Professor Shigeo Kawasaki, Dr. Arvind Sharma, and Professor Ruediger Vahldieck. They have been very active in both research and professional service in the area of Microwave Theory and Techniques. They bring a wide knowledge base and a diverse background to MWCL. They will be helping the Editor-in-Chief in processing manuscripts. I firmly believe that the appropriate use of qualified associate editors assists MWCL in accomplishing its mission, which is providing a quick-turn-

around archival journal for disseminating new significant developments of interest to our members. It is no secret that arranging and obtaining qualified reviews for each manuscript is the most time-consuming part of the publication process. Not getting reviews in a timely manner is the most common reason for delays in publications. The new associate editors help expanding the reviewer's base, by reaching out to well qualified scientists and engineers all over the world, whom may not be in our current database. By distributing the reviewing job, we will not overload our dedicated volunteer reviewers, which, in turn, should reduce the review cycle. Moreover, the new associate editors reflect and enhance the transitional character of both the MTT Society and IEEE.

The paper-submission process remains unchanged. New manuscripts should be submitted to the Editor-in-Chief at the address given on the back cover of this issue. Inquires regarding manuscripts should also be directed to the same address.

As the Editor-in-Chief, I welcome our incoming associate editors, and wish them a productive and rewarding experience with MWCL.

SAMIR M. EL-GHAZALY, *Editor-in-Chief*
Arizona State University
Department of Electrical Engineering
Tempe, AZ 85287-7206 USA
e-mail: mwcl@ieee.org



Samir M. El-Ghazaly (S'84–M'88–SM'91–F'00) received the Ph.D. degree in electrical engineering from the University of Texas at Austin in 1988.

In August 1988, he joined Arizona State University, Tempe, where he is now a Professor in the Department of Electrical Engineering. He visited and worked at several universities and research centers including Cairo University; the Centre Hyperfréquences et Semiconducteurs at Université de Lille I in France; University of Ottawa, Ottawa, ON, Canada; NASA's Jet Propulsion Laboratory (JPL), Pasadena, CA; CST-Motorola, Inc., Tempe; Université de Lille, France; and the Swiss Federal Research Institute (ETH). His research interests include RF and microwave circuits and components; microwave and millimeter-wave semiconductor devices, semiconductor device simulations, ultrashort pulse propagation, microwave-optical interactions; linear and non-linear modeling of superconductor microwave lines, wave-device interactions, electromagnetics, and numerical techniques applied to monolithic microwave integrated circuits.

Dr. El-Ghazaly is a Fellow of IEEE, an elected member of Commissions A and D of URSI, a member of Tau Beta Pi, Sigma Xi, and Eta Kappa Nu. He was the secretary and vice-chairman, and currently is the chairman, of Commission A of the U.S. National Committee of URSI. He is a member of the Technical Program Committee for the IEEE International Microwave Symposium since 1991, and on the editorial board of the IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES and is Editor-in-Chief of the IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS. He was the Chairman of the IEEE-Waves and Devices Group, Phoenix Section. He was the Chapter Funding Coordinator and the Chairman of the Chapter Activities Committee of the IEEE MTT Society. He is an elected member of the Administrative Committee (AdCom) of the IEEE Microwave Theory and Techniques Society. He is the General Chairman of the upcoming IEEE MTT-S 2001 International Microwave Symposium, to be held in Phoenix, AZ, in May 2001.



Shigeo Kawasaki (S'90–M'96) received the B.S. and M.S. degrees in electrical engineering from Waseda University, Japan, in 1979 and 1981, respectively, and the Ph.D. degree in electrical engineering from University of California, Los Angeles (UCLA), in 1993.

In 1990, he was a Research Assistant at The University of Texas at Austin. From 1991 to 1993, he was the Graduate Student Researcher at UCLA. Since April 1994, he has been with Tokai University, Kanagawa, Japan, where he is now a Professor in the Department of Communications Engineering. In the summer of 1997, he was the Invited Visiting Scholar at UCLA and, in the spring of 1999, he was the Invited Visiting Professor at California Institute of Technology, Pasadena, respectively. His research activities include quasi-optical components, active integrated antenna array design, and its optical control and nonlinear active device modeling for microwave simulators. He has several patents and has published more than 70 papers.

Dr. Kawasaki is a member of the Institute of Electronics, Information, and Communication Engineers of Japan.



Arvind K. Sharma (S'74–M'80–SM'87) received the B.E. (Hons.) degree in electronics from Birla Institute of Technology and Science, Pilani, India, in 1973, and the M.Tech degree in electronics and communication engineering and the Ph.D. degree from the Indian Institute of Technology, Delhi, India, in 1975 and 1981, respectively.

From 1980 to 1982, he was with the Department of Electrical Engineering, University of Ottawa, Ottawa, ON, Canada, as a Research Associate. His areas of interest included microwave and millimeter-wave integrated circuits, as well as analytical and numerical methods in electromagnetics. From 1982 to 1987, he was with the Microwave Technology Center of RCA Laboratories, David Sarnoff Research Center, Princeton, NJ, as a Member of Technical Staff. He was responsible for the design and development of hybrid and monolithic millimeter-wave integrated circuits, and antennas. He is now with the Microwave and Millimeter-Wave Systems Department, RF Products Center, Electronic and Technology Division of TRW, Inc. He is RF Concurrent Engineering Manager and is responsible for characterization and modeling of active devices and

passive structures, as well as for the development of computer-aided design techniques for monolithic microwave integrated circuits (MMICs) and modules. He serves as Chairman of the Design and Test Control Board within RF Products Center. He is also currently the Program Manager for a commercial 38-GHz digital radio MMIC's. He has managed Navy's X-band low-phase noise HBT MMICs program. He has published more than 65 technical papers in the areas of microwaves and millimeter-wave planar transmission lines, structures, and circuits. He has received eight U.S. patents and has one patent pending. He has contributed to the *Microwave Solid State Circuit Design* (New York: Wiley, 1988), and to the *Wiley Encyclopedia of Electrical and Electronic Engineering* (New York: Wiley, 1999). He is on the Editorial Board of *Microwave and Optical Technology Letters*, and *International Journal of RF and Microwave Computer-Aided Engineering*.

Dr. Sharma is active in the Microwave Theory and Techniques Society. He has served as a Chairman of the MTT/ED Chapter of Princeton section in 1983, and as a Chairman of the Steering Committee of Sarnoff Symposium in 1985 and 1986. He is a member of the MTT-S Technical Committee on Computer-aided Design. He is on the Editorial Board of the IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES and IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS. He is also serving as a member of the Technical Program Committee for the IEEE International Microwave Symposia since 1985. He is currently Editor of Microwave Digital Archive Project. He has also served as a member of the Technical Program Committee for the IEEE International Antenna Symposium in 1985, and as a member of the Steering Committee for 1987 and 1999 IEEE International Microwave Symposia. He is a member of 2005 IEEE International Microwave Symposium. He was a Guest Editor of the IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES for special issues on, "Quasiplanar Millimeter-Wave Components and Subsystems," published in February 1989, and "Modeling and Design of Coplanar Monolithic Microwave and Millimeter Wave Integrated Circuits," published in September 1993. For contributions to millimeter-wave GaAs power MMIC products for commercial communication systems, he was awarded the 1999 TRW Chairman's Award for Innovation.



Rüdiger Vahldieck (M'85–SM'86–F'99) received the Dipl.-Ing. and the Dr.-Ing. degrees in electrical engineering from the University of Bremen, Germany, in 1980 and 1983, respectively.

From 1984 to 1986, he was a Research Associate at the University of Ottawa, Ottawa, ON, Canada. In 1986, he joined the Department of Electrical and Computer Engineering at the University of Victoria, BC, Canada where he became a Full Professor in 1991. During the fall and spring of 1992–1993, he was a Visiting Scientist at the “Ferdinand-Braun-Institute für Hochfrequenztechnik” in Berlin, Germany. Since 1997, he is has been Professor for electromagnetic field theory at the Swiss Federal Institute of Technology, Zürich, Switzerland. His research interests include numerical methods to model electromagnetic fields in the general area of EMC and, in particular, for computer-aided design of microwave, millimeter-wave and opto-electronic integrated circuits. Since 1981, he has published more than 170 technical papers in books, journals, and conferences, mainly in the field of microwave CAD.

Prof. Vahldieck, together with three coauthors, received the Outstanding Publication Award of the Institution of Electronic and Radio Engineers in 1983. In 1996, he received the J.K. Mitra Award of the IETE for the best research paper in 1995. He is the President of the IEEE 2000 International Zürich Seminar on Broadband Communications (IZS'2000) and Vice President of the EMC Congress in Zürich. He is a member of the Editorial Board of the IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES. Since 1992, he has served on the Technical Program Committee of the IEEE International Microwave Symposium, the MTT-S Technical Committee on Microwave Field Theory, and in 1999 on the TPC of the European Microwave Conference. He is the Chairman of the IEEE Swiss Joint Chapter on MTT, AP, and EMC.