

R. Zoughi received his B.S.E.E, M.S.E.E, and Ph.D. degrees in electrical engineering (radar remote sensing, radar systems, and microwaves) from the University of Kansas where from 1981 until 1987 he was at the Radar Systems and Remote Sensing Laboratory (RSL). Currently he is the *Schlumberger Endowed Professor* of Electrical and Computer Engineering at Missouri University of Science and Technology (S&T) (formerly University of Missouri-Rolla). Prior to joining Missouri S&T in January 2001 and since 1987 he was with the Electrical and Computer Engineering Department at Colorado State University (CSU), where he was a professor and established the Applied Microwave Nondestructive Testing Laboratory (*amntl*). His current areas of research include developing new nondestructive techniques for microwave and millimeter wave inspection and testing of materials (NDT), developing new electromagnetic probes to measure characteristic properties of materials at microwave frequencies, developing embedded modulated scattering techniques for NDT purposes in particular for complex composite structures and infrastructure inspection, and developing innovative imaging methods for high-resolution 3D imaging of a wide variety of composite structures.

Dr. Zoughi held the position of *Business Challenge Endowed Professor* of Electrical and Computer Engineering from 1995 to 1997 while at CSU. He has co-authored over 425 journal publications, conference proceedings and presentations, technical reports and overview articles. He is the author of a graduate textbook entitled "*Microwave Nondestructive Testing and Evaluation Principles*" KLUWER Academic Publishers (2000) and a co-author, with A. Bahr, and N. Qaddoumi, of a chapter on Microwave Techniques in an undergraduate introductory textbook entitled "*Nondestructive Evaluation: Theory, Techniques, and Applications*" edited by P.J. Shull, Marcel and Dekker, Inc. (2002). He and his co-authors are the recipient of the 2005 ASNT Outstanding Paper Award in *Materials Evaluation*.

Since at Missouri S&T he has received four Outstanding Teaching Awards, three Outstanding Teaching Commendations, and three Dean of Engineering Excellence in Teaching Awards. He was voted the most outstanding teaching faculty seven times by the junior and senior students at the Electrical and Computer Engineering Department at CSU. While at CSU he received the College of Engineering Abell Faculty Teaching Award in 1995 and the Colorado State Board of Agriculture Excellence in Undergraduate Teaching Award (only one faculty recognized for this award at each of the three CSU system campuses) in 1996. Dr. Zoughi was recognized as an honored researcher for seven years by the Colorado State University Research Foundation. He received the 2007 IEEE Instrumentation and Measurement Society *Distinguished Service Award* and the 2009 American Society for Nondestructive Testing (ASNT) *Research Award for Sustained Excellence*.

He has nine patents to his credit all in the field of microwave nondestructive testing and evaluation. He has given numerous *invited* talks on the subject of Microwave and Millimeter Wave Nondestructive Testing and Evaluation.

He is a *Fellow* of the Institute of Electrical and Electronics Engineers (IEEE) and a *Fellow* of the American Society for Nondestructive Testing (ASNT), a member of Sigma Xi and Eta Kappa Nu.

Since 2007 he has been serving as the Editor-in-Chief (EIC) of the *IEEE Transactions on Instrumentation and Measurement*. He is a technical associate editor for *Materials Evaluation* and served as the Guest Associate Editor for the Special Microwave NDE Issue of *Research in Nondestructive Evaluation* and in 1995 and co-guest editor for the Special Issue of *Subsurface*

Sensing Technologies and Applications: Advances and Applications in Microwave and Millimeter Wave Nondestructive Evaluation. He served as the *Research Symposium Co-Chair for the American Society for Nondestructive Testing (ASNT) Spring Conference and 11th Annual Research Symposium* in March 2002 in Portland, Oregon and as the *Technical Program Chair for the IEEE Instrumentation and Measurement Technology Conference (IMTC2003)* in May 2003 in Vail Colorado. He served as the Guest Editor for the IMTC2003 Special Issue of the *IEEE Transactions on Instrumentation and Measurement*.

He has served as the Principal and Co-Principal Investigators on 71 funded research grants, sponsored by state and federal agencies (NSF, FHWA, EPRI, US Navy, US Air Force, DOE, MODOT NASA and ONR) and commercial/industrial entities. He has also been involved in 17 Educational and Fellowship Awards (as the Principal investigator or a team member) focused on training undergraduate and graduate students in the field of microwave and millimeter wave NDT&E.

Professor Zoughi spent a semester of sabbatical leave in 1998 at Département de Recherche en Electromagnétisme, Supélec (Ecole Supérieure d'Electricité), Plateau de Moulon, Gif-sur-Yvette, France. There he learned about modulated scattering techniques and collaboration with scientist at Supelec in combining near-field microwave nondestructive testing techniques with modulated scattering techniques for microwave nondestructive testing and evaluation purposes. He also co-organized (with Professor J.C. Bolomey) the first "*Training Workshop on Advanced Microwave NDT/NDE Techniques*" which was later held in Paris on September 7-9, 1999.

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