About the Author

Allen Taflove (F'90) was born in Chicago, IL on June 14, 1949. He received the B.S., M.S., and Ph.D. degrees in electrical engineering from Northwestern University, Evanston, IL in 1971, 1972, and 1975, respectively. After nine years as a research engineer at IIT Research Institute, Chicago, IL, he returned to Northwestern in 1984. Since 1988, he has been a professor in the Department of Electrical and Computer Engineering of the McCormick School of Engineering. Currently, he is a Charles Deering McCormick Professor of Teaching Excellence and Master of the Lindgren/Slivka Residential College of Science and Engineering.

Since 1972, Prof. Taflove has pioneered basic theoretical approaches and engineering applications of finite-difference time-domain (FDTD) computational electromagnetics. He coined the FDTD acronym in a 1980 IEEE paper, and in 1990 was the first person to be named a Fellow of IEEE in the FDTD area. In 1995, he authored *Computational Electrodynamics: The Finite-Difference Time-Domain Method* (Artech House, Norwood, MA). This book is now in its second edition, co-authored in 2000 with Prof. Susan Hagness of the University of Wisconsin–Madison. In 1998, he was the editor of the research monograph, *Advances in Computational Electrodynamics: The Finite-Difference Time-Domain Method* (Artech House, Norwood, MA).

In addition to the above books, Prof. Taflove has authored or co-authored 12 invited book chapters, 74 journal papers, approximately 200 conference papers and abstracts, and 13 U.S. patents. Overall, this work has resulted in his being named to the "Highly Cited Researchers List" of the Institute for Scientific Information (ISI) for 2002.

Prof. Taflove has been the thesis adviser of 15 Ph.D. recipients who hold professorial, research, or engineering positions at major institutions including University of Wisconsin–Madison, University of Colorado–Boulder, McGill University, MIT Lincoln Laboratory, Jet Propulsion Laboratory, Argonne National Laboratory, and U.S. Air Force Research Laboratory. Currently, he is conducting research in a wide range of computational electromagnetics modeling problems including the propagation of bioelectric signals within the human body, laser-beam propagation within samples of human blood, UHF diffraction by buildings in urban wireless microcells, electrodynamics of micron-scale optical devices, novel wireless interconnects for ultrahigh-speed digital data buses, and extremely low-frequency geophysical phenomena.