Chapter 3

Techniques for Low-Frequency Problems

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Edmund K. Miller was born in Milwaukee in 1935. He received a PhD in electrical engineering from the University of Michigan in 1965. At the Radiation Laboratory, and later at the High Altitude Research Laboratory, of the University of Michigan, he conducted experimental and analytical research in plasma—electromagnetic-wave interaction. In 1968 he joined MBAssociates, where he worked on integral-equation methods for modeling antennas in both the time and frequency domains. His involvement in numerical techniques continued at the Lawrence Livermore National Laboratory, which he joined in 1971 and where he served as leader of the Engineering Research Division and the Nuclear Energy Systems Division until 1985. He was Regent's Distinguished Professor of Electrical and Computer Engineering at the University of Kansas at Lawrence from 1985 to 1987 and is now Manager of Electromagnetics at Rockwell International Science Center. He has lectured widely on computer methods in electromagnetics and has taught numerous short courses on the subject. Dr. Miller has published more than 60 articles on numerical methods, their electromagnetic applications, signal processing, graphics, and related topics.