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EDUCATION

- Jan. 1989, **Ph.D. in Electrical Engineering**, Electrical Engineering, UIUC
- July 1986, **M.Sc. in Physics**, Physics Department, Xiamen University, China
- July 1983, **B.Sc. in Physics**, Physics Department, Xiamen University, China

EXPERIENCE

- 2004/1–present, **Full Professor**, Electrical & Computer Engineering, Duke University
- 1999–2003, **Associate Professor**, Electrical & Computer Engineering, Duke University
- 1996–1999, **Associate Professor**, Electrical & Computer Engineering, New Mexico State University
- 2/1994–12/1995, **Program Leader**, Schlumberger-Doll Research, Ridgefield, CT
- 3/1990–12/1995, **Research Scientist**, Schlumberger-Doll Research, Ridgefield, CT
- 12/1988–2/1990, **Postdoctoral Research Associate**, University of Illinois at Urbana-Champaign

AWARDS/HONORS RECEIVED

- Presidential Early Career Award for Scientists and Engineers (PECASE), White House Office of Science and Technology, 1996.
- National Science Foundation CAREER Award, 1997.
- U.S. Environmental Protection Agency Early Career Research Award, 1996.
- Fellow of the IEEE, 2005. For contributions to computational electromagnetics and subsurface sensing applications.
- Fellow of the ASA (Acoustical Society of America), 2005. For contributions to computational acoustics and elasticity.
- Fellow of the Electromagnetics Academy.

PROFESSIONAL ACTIVITIES

- Guest Editor, *Proceedings of IEEE*, Special Issue on “Large Scale Electromagnetic Computation for Modeling and Applications,” published in Feb. 2013.
- Deputy Editor-in-Chief, *Journal of Electromagnetic Waves and Application*, 2009–2013.
- Deputy Editor-in-Chief, *Progress in Electromagnetics Research (PIER)*, 2009–present.
- Guest Editor, Special Issue on Computational Wave Issues in Remote Sensing, Imaging and Target Identification, Propagation, and Inverse Scattering, *IEEE Transactions on Geoscience and Remote Sensing*, published in July 2000 (with W. C. Chew).
- Associate Editor, *IEEE Transactions on Geoscience and Remote Sensing*, 1996–present.
- Associate Editor, *Radio Science*, 2003–2012.
- Associate Editor, *Medical Physics*, 2009–2010.
- Editor, *Journal of Computational Acoustics*, 2010–present.
- Editor in Chief, *IEEE Journal on Multiscale and Multiphysics Computational Techniques*, 2015–present.

PUBLICATIONS

A. Journal Papers

- [1] W. C. Chew, and Q. Liu, "Resonance frequency of a microstrip patch," *IEEE Trans. Antennas Propagat.*, vol. AP-36, pp.1045-1056, 1988; Correction, vol. AP-36, p. 1827, 1988.
- [2] Q. Liu, and W. C. Chew, "Curve-fitting formulas for fast determination of accurate resonant frequency of circular microstrip patches," *IEE Proc.*, Pt. H, vol. 135, pp.289-292, 1988.
- [3] Q. H. Liu, W. C. Chew, M. R. Taherian, and K. A. Safinya, "A modeling study of electromagnetic propagation tool in complicated borehole environments," *Log Analyst*, vol. 30, pp. 424-436, 1989.
- [4] Q. H. Liu, and W. C. Chew, "Surface integral equation method for the analysis of an obliquely stratified half-space," *IEEE Trans. Antennas Propagat.*, vol. 38, pp. 653-663, 1990.
- [5] Q. H. Liu, and W. C. Chew, "Numerical mode matching method for the multi-region vertically stratified media," *IEEE Trans. Antennas Propagat.*, vol. 38, pp. 498-506, 1990.
- [6] Q. H. Liu, and W. C. Chew, "A hybrid method for the analysis of complex rectangular dielectric waveguides," *J. Electromagnet. Waves Appl.*, vol. 5, pp. 253-266,1991.
- [7] Q. H. Liu, and W. C. Chew, "Analysis of discontinuities in planar dielectric waveguides: an eigenmode propagation method," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-39, pp. 422-430, 1991.
- [8] W. C. Chew, Z. Nie, Q. H. Liu, and B. Anderson, "An efficient solution of electrical well logging tools in a complex environment," *IEEE Trans. Geosci. Remote Sensing*, vol. 29, pp. 308-313, 1991.
- [9] W. C. Chew, Z. Nie, Q. H. Liu, and Y. T. Lo, "A rigorous analysis of a probe-fed microstrip disk antenna," *IEE Proc.*, Pt. H, vol. 138, pp. 185-191, 1991.
- [10] M. Moghaddam, W. C. Chew, B. Anderson, E. Yannakakis, and Q. H. Liu, "Computation of transient electromagnetic waves in inhomogeneous media," invited paper, *Radio Science*, vol. 26, no. 1, pp. 265-273, 1991.
- [11] W. C. Chew, L. Gurel, Y. M. Wang, G. Otto, R. Wagner, and Q. H. Liu, "A generalized recursive algorithm for wave-scattering solutions in two dimensions," *IEEE Trans. Microwaves Theory Tech.*, vol. 40, no. 4, pp. 716-723, 1992.
- [12] Q. H. Liu, and W. C. Chew, "Diffraction of nonaxisymmetric waves in cylindrically layered media by horizontal discontinuities," *Radio Sci.*, vol. 27, no. 5, pp. 569-581, 1992.
- [13] Z. Nie, W. C. Chew, and Q. H. Liu, "Electromagnetic scattering from two-dimensional layered media with axial symmetry," *Acta Geophysica Sinica*, vol. 35, no. 4, pp. 479-489, 1992.
- [14] Q. H. Liu, "Electromagnetic field generated by an off-axis source in a cylindrically layered medium with an arbitrary number of horizontal discontinuities," *Geophysics*, vol. 58, no. 5, pp. 616-625, 1993.
- [15] Q. H. Liu, and W. C. Chew, "A CG-FFHT method for the scattering solution of axisymmetric inhomogeneous media," *Microwave Opt. Technol. Lett.*, vol. 6, no. 2, pp. 101-104, 1993.
- [16] Q. H. Liu, "Reconstruction of two-dimensional axisymmetric inhomogeneous media," *IEEE Trans. Geosci. Remote Sensing*, vol. 31, no. 3, pp. 587-594, 1993.
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