

## CONFERENCE PUBLICATIONS AND OTHERS

### INTERNATIONAL CONFERENCE PAPERS

1. W. C. Chew and J. A. Kong, "Resonance of axial and non-axial symmetric modes in circular microstrip disk antennas," International Symposium on Antennas and Propagation, Quebec, Canada, June 1980.
2. W. C. Chew and J. A. Kong, "Input impedance and radiation characteristics of a circular microstrip antenna," International Symposium on Antennas and Propagation, Quebec, Canada, June 1980.
3. T. M. Habashy, J. A. Kong and W. C. Chew, "Electromagnetic fields of a dipole submerged in a two-layer conducting medium in the ELF regime," International Symposium on Antennas and Propagation, Quebec, Canada, June 1980.
4. W. C. Chew and J. A. Kong, "Asymptotic approximation of dipole fields in the geophysical probing of a two-layer earth," International Geoscience and Remote Sensing Symposium, Washington, D.C., June 1981.
5. J. A. Kong, W. C. Chew and T. M. Habashy, "Electromagnetic fields of dipole antennas in the presence of layered media," NATO Advisory Group for Aerospace Research and Development (AGARD) Conference in Brussels, Belgium, Sept. 1981.
6. S. M. Ali, W. C. Chew and J. A. Kong, "Radiation from printed conducting patches on thin films with a ground plane," Annual meeting of the Optical Society of America, Oct. 1981.
7. W. C. Chew and P. N. Sen, "Dielectric enhancement due to electrochemical double layer," (Invited) Gordon Research Conference, Frontiers of Science, Plymouth, New Hampshire, Aug. 1982.
8. W. C. Chew, "Response of the deep propagation tool in invaded boreholes," AIME Society of Petroleum Engineers Conference, New Orleans, Sept. 1982.
9. W. C. Chew and P. N. Sen, "Dielectric enhancement due to electrochemical double layer: thin double layer approximation," Bulletin of the American Physical Society, vol. 28, no. 3, p. 284, March 1983.
10. W. C. Chew, S. Barone and C. H. Hennessy, "Diffraction of waves by discontinuities in open, cylindrical structures," 1983 International Symposium Digest, Antennas and Propagation, vol. 2, p. 503, May 23-26, 1983.
11. W. C. Chew, "Dielectric enhancement due to electrochemical double layer: a uniform approximation," Bulletin of the American Physical Society, vol. 29, March 1984.
12. B. Anderson and W. C. Chew, "A new high speed technique for calculating synthetic induction and DPT logs," SPWLA 25-th Annual Logging Symposium, paper HH, June 1984.
13. W. C. Chew and P. N. Sen, "Dielectric enhancement and electrophoresis of colloids," (invited) 58th Colloid and Surface Science Symposium, paper 129, June 10-13, 1984.
14. W. C. Chew, "Response of a source on top of a vertically stratified halfspace," National Radio Science Meeting Digest, p. 9, June 25-29, 1984.
15. W. C. Chew and S. L. Chuang, "Profile inversion of planar medium with a line source or a point source," International Geoscience and Remote Sensing Symposium, Strasbourg, France, Aug. 27-30, 1984.
16. W. C. Chew and B. Anderson, "Diffraction of waves by bed boundaries in an open borehole," International Geoscience and Remote Sensing Symposium, Strasbourg, France, Aug. 27-30, 1984.
17. W. C. Chew, "Application of electromagnetic methods in well logging," Union of Radio Science Internationale XXIst Assembly, Florence, Italy, Aug. 28-Sept. 5, 1984.
18. W. C. Chew and P. N. Sen, "Dielectric and electrophoretic response of electrochemical double layer," 167th Meeting of the Electrochemical Society, Toronto, Canada, May 12-17, 1985.
19. B. Anderson and W. C. Chew, "SFL interpretation using high speed synthetic computer generated logs," SPWLA 26-th Annual Logging Symposium, June 1985.
20. T. M. Habashy and W. C. Chew, "Radiation of an open-ended rectangular waveguide into a planar stratified medium," Radio Science Meeting and Int. IEEE/AP-S Symposium, Vancouver, Canada, June 17-21, 1985.
21. W. C. Chew and S. L. Lin, "Radiation of a point source in an open waveguide," Radio Science Meeting and Int. IEEE/AP-S Symposium, Vancouver, Canada, June 17-21, 1985.
22. W. C. Chew and J. Lovell, "Radiation of a point source in the vicinity of a multi-cylindrically layered

geometry,” Radio Science Meeting and Int. IEEE/AP-S Symposium, Vancouver, Canada, June 17-21, 1985.

23. B. Anderson and W. C. Chew, “A general semi-analytic method for the rapid computer simulation of the response of borehole electrical logging tools,” SEG 55th International Meeting, October 1985.
24. E. Y. Chow, T. M. Habashy and W. C. Chew, “A study of the iterative distorted Born inversion for profile reconstruction,” IEEE APS/URSI Conference, Philadelphia, 1986.
25. T. M. Habashy, W. C. Chew and J. Kiang, “Analysis of an open waveguide in a planar stratified medium,” IEEE APS/URSI Conference, Philadelphia, 1986.
26. J. Lovell and W. C. Chew, “Effect of tool eccentricity on some electrical well logging tools,” International Geoscience and Remote Sensing Symposium, May 1987.
27. W. C. Chew, “Modeling of dielectric logging tool at high frequencies,” International Geoscience and Remote Sensing Symposium, May 1987.
28. W. C. Chew and M. Moghaddam, “Resonant frequencies of the axial symmetric modes in a dielectric resonator,” International Microwave Symposium, April 1987.
29. W. C. Chew and Q. Liu, “Resonant frequency of a rectangular microstrip patch,” Antenna Application Symposium, Monticello, Illinois, September 1987.
30. R. L. Kleinberg, W. C. Chew, E. Y. Chow, B. Clark and D. D. Griffin, “Microinduction sensor for the oil based mud dipmeter,” Society of Petroleum Engineer Conference, SPE 16761, Dallas, Texas, September 1987.
31. W. C. Chew, “Response of a source in a composite medium,” URSI Conference, Boulder, Colorado, January 1988.
32. W. C. Chew and R. L. Kleinberg, “Low frequency response of a current loop in three- dimensional conductive inhomogeneity,” URSI Conference, Boulder, Colorado, January 1988.
33. W. C. Chew and L. Gurel, “Reflection and transmission operators for strips or disks embedded in homogeneous or layered media,” IEEE APS/URSI Conference, Syracuse, 1988.
34. L. Gurel and W. C. Chew, “Resonance and guidance of strips or disks embedded in- homogeneous or layered media,” IEEE APS/URSI Conference, Syracuse, 1988.
35. Q. Liu and W. C. Chew, “Simple formulas for the resonant frequencies of rectangular microstrip patch,” IEEE APS/URSI Conference, Syracuse, 1988.
36. M. Moghaddam and W. C. Chew, “Response of a point source in the vicinity of a multi-cylindrically layered interface,” IEEE APS/URSI Conference, Syracuse, 1988.
37. W. C. Chew and R. L. Kleinberg, “Theory of the microinduction measurements,” International Geoscience and Remote Sensing Symposium, Edinburg, September 1988.
38. Z. Nie, W. C. Chew and Y. T. Lo, “Analysis of the annular-ring-loaded circular-disk micro-strip antenna,” Antenna Application Symposium, Monticello, Illinois, September 1988.
39. Q. H. Liu and W. C. Chew, “An efficient numerical method for the multi-region vertically stratified media,” National Radio Science Meeting, Boulder, Colorado, January 4-6, 1989.
40. Q. H. Liu and W. C. Chew, “A numerical method for the slantingly stratified half-space,” National Radio Science Meeting, Boulder, Colorado, January 4-6, 1989.
41. Y. M. Wang and W. C. Chew, “An iterative solution from two-dimensional electromagnetic inverse scattering problems,” IEEE APS/URSI Conference, San Jose, 1989.
42. A. Sezginer and W. C. Chew, “Image of a current loop over a superconducting sphere,” IEEE APS/URSI Conference, San Jose, 1989.
43. W. C. Chew, R. Geiger, and J. Friedrich, “An N2 algorithm for the multiple scattering of N spheres,” IEEE APS/URSI Conference, San Jose, 1989.
44. W. C. Chew and L. Gurel, “Recursive algorithms for calculating the scattering from N strips or disks,” IEEE APS/URSI Conference, San Jose, 1989.
45. Z. Nie, W. C. Chew and Y. T. Lo, (invited), “Analysis of an annular-ring-loaded, circular-disk microstrip antenna,” IEEE APS/URSI Conference, San Jose, 1989.
46. B. Houshmand, W. C. Chew and S. W. Lee, “Fourier transform of a linear distribution with triangle support and its application in electromagnetics,” IEEE APS/URSI Conference, San Jose, 1989.
47. A. Q. Howard, Jr. and W. C. Chew, “Induction response in dipping beds with invasion,” IGARSS, Vancouver, 1989.
48. W. C. Chew and Y. M. Wang, “Simulation of two-dimensional profiles using nonlinear inversion

- theory," PIERs, Boston, 1989.
49. W. C. Chew and R. Geiger, "Effective dielectric constant of a mixture of spheres from the solution to the N sphere problem," PIERs, Boston, 1989.
  50. W. C. Chew and M. Nasir, "A variational analysis of anisotropic, inhomogeneous dielectric waveguide," PIERs, Boston, 1989.
  51. W. C. Chew and Q. H. Liu, "A numerical method for the slantingly stratified inhomogeneous half space," PIERs, Boston, 1989.
  52. W. C. Chew, B. Anderson, E. Yannakakis, M. Moghaddam, and Q. Liu (invited), "Computation of transient electromagnetic waves in inhomogeneous media," URSI Int. Sym. Elect. Theory, Stockholm, 1989.
  53. Y. M. Wang and W. C. Chew, "The comparison of the Born iterative and distorted Born iterative method for the reconstruction of two dimensional permittivity profiles," 18th International Symposium on Acoustical Imaging, Santa Barbara, 1989.
  54. W. C. Chew, Z. Nie and Y.T. Lo, "The effect of feed on the input impedance of microstrip antennas," Antenna Applications Symposium, Monticello, 1989.
  55. Q.H. Liu and W.C. Chew, "Analysis of discontinuities in planar dielectric waveguides: a recursive numerical mode matching method," National Radio Science Meeting Digest, p. 250, January 3-5, 1990.
  56. Q.H. Liu and W.C. Chew, "Analysis of multi-rectangular dielectric waveguides by numerical mode matching method," National Radio Science Meeting Digest, p. 251, January 3-5, 1990.
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  58. M. Moghaddam, E. Yannakakis and W.C. Chew, "Time-domain scattering in 2.5 dimensions," IEEE AP-S International Symposium, Dallas, May 6-11, 1990.
  59. W.C. Chew and Y.M. Wang, "A recursive algorithm for reducing algorithmic complexity of scattering problems," IEEE AP-S International Symposium, Dallas, May 6-11, 1990.
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  61. W.C. Chew, Z. Nie, Q.H. Liu and B. Anderson, "A full wave analysis of wave propagation in multi-region cylindrically stratified media," IEEE AP-S International Symposium, Dallas, May 6-11, 1990.
  62. Y.M. Wang and W.C. Chew, "Reconstruction of permittivity distribution using the Born iterative and distorted Born iterative methods for geophysical applications," Int. Geoscience and Remote Sensing Symposium, College Park, May 20-24, 1990.
  63. W.C. Chew, Z. Nie, Q.H. Liu and B. Anderson, "Modeling of well logging tools in a multi-bed environment with invasions," Int. Geoscience and Remote Sensing Symposium, College Park, May 20-24, 1990.
  64. W.C. Chew, M. Moghaddam and E. Yannakakis, "Modeling of the subsurface interface radar," Int. Geoscience and Remote Sensing Symposium, College Park, May 20-24, 1990.
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  71. L. Gurel and W.C. Chew, "Recursive T-matrix algorithms for conducting patches," 1991 North

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72. Y.M. Wang and W.C. Chew, "Accelerated iterative algorithms for the solution of nonlinear inverse scattering problems," 1991 North American Radio Science Meeting Abstracts, U. of Western Ontario, London, Ontario, Canada, p. 680, June 24-28, 1991.
  73. L. Gurel and W.C. Chew, "Recursive T-matrix algorithms for 1-D and 2-D clusterings of strips," Antennas and Propagation Society Symposium Digest, U. Western Ontario, London, Ontario, Canada, pp. 276-279, June 24-28, 1991.
  74. M. Moghaddam and W.C. Chew, "Stabilizing Liao's absorbing boundary conditions using single-precision arithmetic," Antennas and Propagation Society Symposium Digest, U. Western Ontario, London, Ontario, Canada, pp. 430-433, June 24-28, 1991.
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  78. W.C. Chew, "Recursion relations for three-dimensional scalar addition theorem," Antennas and Propagation Society Symposium Digest, U. Western Ontario, London, Ontario, Canada, pp. 1639-1642, June 24-28, 1991.
  79. W.C. Chew, Y.M. Wang and M. Moghaddam, "Inverse scattering problems using CW and time domain data," PIERS 1991 Proceedings, Cambridge, Massachusetts, p. 192, July 1-5, 1991.
  80. S.M. Lee, W.C. Chew, M. Nasir, S.L. Chuang, R.W. Herrick and C.L. Balestra, "A finite difference time-domain approach to the study of rough-surface scattering in an optical turning mirror," PIERS 1991 Proceedings, Cambridge, Massachusetts, p. 376, July 1-5, 1991.
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  82. Q.H. Liu and W.C. Chew, "Non-axisymmetric wave propagation in cylindrical structures with horizontal junction discontinuities," PIERS 1991 Proceedings, Cambridge, Massachusetts, p. 701, July 1-5, 1991.
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92. W.C. Chew and C.C. Lu, "NEPAL--An N1.5 algorithm for solving the volume integral equation," IEEE Antennas and Propagation Society International Symposium Digest, pp. 184-187, Chicago, July 18-25, 1992.
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