【河海工程學系】
Department of Harbor and River Engineering

姓　　名：陳正宗 (Jeng-Tzong Chen, Ph.D.)

職　　稱：特聘教授 (Professor)

學　　歷：國立台灣大學土木工程博士 (Natl. Taiwan Univ., R.O.C.)

專　　長：邊界元素法、有限元素法、結構動力、地震工程、破壞力學、振動與噪音、熱傳熱應力、推進劑力學分析、設計與實驗、結構控制與阻尼、計算力學與反算問題 (Boundary Element Method, Vibration and Acoustics)

電　　話：(02)24622192 ext.6140 or 6177

e-mail ：jtchen@mail.ntou.edu.tw

Refereed Papers

1. J. T. Chen, K. H. Chen, I. L. Chen and L. W. Liu, 2003, A new concept of modal participation factor for numerical instability in the dual BEM for exterior acoustics, *Mechanics Research Communications*, 26(2):161-174. (SCI and EI)

2. J. T. Chen, S. R. Lin, K. H. Chen, I. L. Chen and S. W. Chyuan, 2003, Eigenanalysis for membranes with stringers using conventional BEM in conjunction with SVD technique, *Computer Methods in Applied Mechanics and Engineering*, 192(11-12):1299-1322. (SCI and EI)

3. J. T. Chen, I. L. Chen, K. H. Chen, Y. T. Lee, 2003, Comments on "Free vibration analysis of arbitrarily shaped plates with clamped edges using wave-type functions," *J. Sound and Vibration*, 262(2):370-378. (SCI and EI)

4. J. T. Chen, W. C. Chen, S. R. Lin and I. L. Chen, 2003, Rigid body mode and spurious mode in the dual boundary element formulation for the Laplace equation, *Computers and Structures*, 81(13):1395-1404. (SCI and EI)

5. S. W. Chyuan, Y. S. Liao and J. T. Chen, 2003, An innovative and efficient method － DBEM for the electrostatic problems with singularity arising from degenerate boundary, *IEEE Computing in Science and Engineering*, 5(3):52-58. (SCI and EI)

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7. J. T. Chen, S. R. Kuo, I. L. Chung and C. X. Huang, 2003, Study on the true and spurious eigensolutions of two-dimensional cavities using the dual multiple reciprocity method, *Engineering Analysis with Boundary Elements,* 27(7):655-670. (SCI and EI)

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9. Y. S. Liao, S. W. Chyuan and J. T. Chen, 2004, Numerical studies of variations in gap & finger with width ratio and traveled distance for the MEMS device, J. Mechanical Engineering Science, Proceedings of the Institution of Mechanical Engineers Part C, Vol.218, No.10, pp.1243-1253. (SCI and EI)

10. Y. S. Liao, S. W. Chyuan and J. T. Chen, 2004, Efficaciously modeling the exterior

electrostatic problems with singularity for electron devices, IEEE Circuits & Devices, Vol.20, No.5, pp.25-34. (SCI and EI)

11. K. H. Chen, J. T. Chen, S. Y. Lin and Y. T. Lee, 2004, Dual boundary element analysis of normal incident wave passing a thin submerged breakwater with rigid, absorbing and permeable boundaries, Journal of Waterway, Port, Coastal and Ocean Engineering, ASCE, Vol.130, No.4, pp.179-190. (SCI and EI)

12. Y. S. Liao, S. W. Chyuan and J. T. Chen, 2004, An alternatively efficient method for simulating the electrostatic field and levitating force of MEMS combdrive, J. Micromechanics and Microengineering, Vol.14, No.8, pp.1258-1269. (SCI and EI)

13. J. T. Chen, Y. T. Lee, I. L. Chen and K. H. Chen, 2004, Mathematical analysis and treatment for the true and spurious eigenequations of circular plates in the meshless method using radial basis function, J. Chinese Institute of Engineers, Vol.27, No.4, pp.547-561. (SCI and EI)

14. J. T. Chen, T. W. Lin, K. H. Chen and S. W. Chyuan, 2004, True and spurious eigensolutions for the problems with the mixed-type boundary conditions using BEMs, Finite Elements in Analysis and Design, Vol.40, No.11, pp.1521-1549. (SCI and EI)

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18. J. T. Chen, S. Y. Lin, K. H. Chen and I. L. Chen, 2004, Mathematical analysis and numerical study of true and spurious eigenequations for free vibration of plates using real-part BEM, Computational Mechanics, Vol.34, No.3, pp.165-180. (SCI and EI)

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20. S. W. Chyuan, Y. S. Liao and J. T. Chen, 2004, An efficient technique for solving the arbitrarily multilayered electrostatic problems with singularity arising from degenerate boundary, Semiconductor Science Technology, Vol.19, R47-58, 2004. (SCI and EI)

21. S. S. Lin, J. C. Liao, J. T. Chen and L. Chen, 2005, Lateral performance of piles evaluated via inclinometer data, Computers and Geotechnics, Vol.32, pp.411-421. (SCI and EI)

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Helmholtz equation subject to the mixed-type boundary condition using BEM, Mechanics Research Communications, Vol.32, No.1, pp.75-92. (SCI and EI)

26. J. T. Chen, I. L. Chen and Y. T. Lee, 2005, Eigensolutions of multiply-connected membranes using method of fundamental solution, Engineering Analysis with Boundary Elements, Vol.29, No.2, pp.166-174. (SCI and EI)

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29. J. T. Chen, C. S. Wu, K. H. Chen and Y. T. Lee, 2006, Degenerate scale for analysis of circular plate using the boundary integral equations and boundary element method, Computational Mechanics, Accepted. (SCI and EI)

30. J. T. Chen, C. C. Hsiao and S. Y. Leu., 2006, Null-field integral equation approach for plate problems with circular holes, ASME, J. Appl. Mech., Vol.73 (SCI and EI)

31. J. T. Chen, S. Y. Lin, I. L. Chen and Y. T. Lee, 2006, Mathematical analysis and numerical study of true and spurious eigenequations for free vibration of plates using imaginary-part BEM, Journal of Sound and Vibration, Accepted. (SCI and EI)

32. J. T. Chen, W. C. Shen and P. Y. Chen, 2006, Analysis of circular torsion bar with circular holes using null-field approach, Computer Modelling in Engineering Science, Accepted. (SCI and EI)

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35. J. T. Chen, C. C. Hsiao and K. H. Chen, 2006, Study of free surface seepage problems using hypersingular equations, Communications in Numerical Methods in Engineering, Revised.

36. J. T. Chen, W. C. Shen and A. C. Wu, 2006, Null-field integral equations for stress field around circular holes under anti-plane shear, Engineering Analysis with Boundary Elements, Vol.30, No.3, pp.205-217. (SCI and EI)

37. J. T. Chen, S. Y. Lin, I. L. Chen and Y. T. Lee, 2006, Mathematical analysis and numerical study for free vibration of annular plates using BIEM and BEM, Int. J. Numer. Meth. Engng., Vol.65, pp.236-263. (SCI and EI)

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Other Publications

1. 陳正宗、陳桂鴻、2003,對偶邊界積分式於快速多重級架構下在聲學與潛堤斜向入射水波之應用、國科會專題研究成果報告，NSC-91-2211-E-019-010，國立台灣海洋大學河海工程研究所。

2. 陳正宗、陳義麟、陳桂鴻, 2003, 邊界元素法中退化問題之統一推導(1/3), 國科會專題研究成果報告，NSC-91-2211-E-019-009，國立台灣海洋大學河海工程研究所。

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4. 陳正宗、陳義麟、陳桂鴻, 2005, 邊界元素法中退化問題之統一推導(3/3), 國科會專題研究成果報告，NSC 93-2211-E-019-002，國立台灣海洋大學河海工程研究所。

5. 陳正宗、陳義麟、陳桂鴻, 2005, , 邊界元素法求解板問題中退化尺度之研究, 國科會專題研究成果報告，NSC 93-2211-E-019-010，國立台灣海洋大學河海工程研究所。

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