CURRICULUM VITAE

Vasilios I. Vavourakis

Personal Data

Date of Birth: 17 March 1978.

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Studies

2002-2006: Ph.D. from the Department of Mechanical Engineers and Aeronautics, University of Patras, Greece (Advisor: Prof. Demosthenes Polyzos).

1996-2001: Diploma from the Department of Mechanical Engineers and Aeronautics, University of Patras, Greece.

Fields of Scientific Interest

- Numerical analysis methods: Boundary Elements Method, Local Boundary Integral Equation and Meshless Local Petrov-Galerkin Method, Finite Element Method.
- Applied Mechanics in wave propagation and scattering theory.
- Non-Destructive Testing and Evaluation through the Acoustic Emission and Acousto-Ultrasonics techniques.
- Object Oriented Programming and Distributed Systems through Message Passing Interface.

Papers in Journals and Books

[1] V. Vavourakis (2008): "A Local Hypersingular Boundary Integral Equation method using a triangular background mesh", Computer Modeling in Engineering & Sciences, (SUBMITTED).

[2] V. Vavourakis, V. C. Protopappas, D. Fotiadis, D. Polyzos (2007): "Numerical determination of modal dispersion and AE signal characterization in waveguides through a LBIE/BEM and Time-Frequency analysis", Computational Mechanics, (IN PRESS).

[3] V. Vavourakis, D. Polyzos (2007): "A MLPG4(LBIE) formulation in elastostatics", Computers, Materials & Continua, Vol. 5, pp. 185–196.

[4] V. Vavourakis, D. Polyzos (2006): "A MLPG(LBIE) numerical method for solving 2D incompressible and nearly incompressible elastostatic problems", Communications in Numerical Methods in Engineering, Vol. 24, pp. 281–296.

[5] V. Vavourakis, D. Polyzos (2006): "A MLPG4(LBIE) formulation for solving axisymmetric problems", Advances in Meshless Methods, eds. J. Sladek and V. Sladek, Tech Science Press, pp. 291–316.

[6] V. Vavourakis, E. J. Sellountos, D. Polyzos (2006): "A comparison study on different MLPG(LBIE) formulations", Computer Modeling in Engineering & Sciences, Vol. 13, pp. 171–184.

[7] E. J. Sellountos, V. Vavourakis, D. Polyzos (2005): "A new Singular/Hypersingular MLPG(LBIE) method for 2D elastostatics", Computer Modeling in Engineering & Sciences, Vol. 7, pp. 35–48.

Presentations in Conferences

[1] V. Vavourakis, Y. Papaharilaou, J. A. Ekaterinaris (2008): "Fluid Structure Interaction Computations in Arterial Geometries", ELEMBIO'08, Athens, Greece.

[2] V. Vavourakis, D. Polyzos (2007): "A new MLPG(LBIE) method for solving elastic problems", ICCES'07 MM, Patras, Greece.

[3] V. Vavourakis, V. I. Protopappas, D. I. Fotiadis, D. Polyzos (2007): "AE signal characterization in fuel tanks through a LBIE/BEM and Time-Frequency analysis scheme", BETEQ 2007, Naples, Italy.

[4] V. Vavourakis, D. Polyzos (2006): "A new MLPG4(LBIE) method for solving elastic problems", ICCES'06 MM, Dubrovnik, Croatia.

[5] V. Vavourakis, D. Polyzos (2006): "A time domain MLPG (LBIE) formulation for solving elastic problems related to Non-Destructive Testing", ICCES'06 MM, Dubrovnik, Croatia.

[6] V. Vavourakis, D. Polyzos (2006): "A MLPG(LBIE) numerical method for solving 2D incompressible and nearly incompressible elastostatic problems", BETEQ 2006, Paris, France.

[7] V. Vavourakis, D. Polyzos (2005): "A numerical study on the propagation of transient elastic waves in axisymmetric vessels", 7th International Workshop of Scattering Theories and Biomedicine, Nymfaio, Greece.

[8] V. Vavourakis, D. Polyzos (2005): "A MLPG(LBIE) method for solving elastic problems with axisymmetry", ICCES'05 MM, Stara Lesna, Slovakia.

[9] E. J. Sellountos, V. Vavourakis, D. Polyzos (2005): "A comparison study on different formulations in the MLPG (LBIE) method", ICCES'05 MM, Stara Lesna, Slovakia.

[10] V. Vavourakis, K. G. Tsepoura, D. Polyzos (2003): "Wave propagation in plates with microstructure", 6th International Workshop of Scattering Theories and Biomedicine, Tsepelovo, Greece.

[11] V. Vavourakis, D. Polyzos (2003): "A BEM/2D-FFT numerical technique for solving wave propagation problems in damaged plates", ICCES'03, Corfu, Greece.

[12] V. Vavourakis, D. Polyzos (2002), "A BEM/2D-FFT numerical technique for solving wave propagation problems in thin plates and shells", Acoustics 2002, Patras, Greece.