CURRICULUM VITAE
EFSTATHIOS E. THEOTOKOGLOU

Date and Place of Birth:	January 19, 1956, Athens, Greece
Nationality:	Greek
Address (Office):	Department of Mechanics-Laboratory of Testing and Materials, School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Zographou Campus, Theocaris Bld.,
	GR-15773, Athens, Greece.
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ACADEMIC DEGREES

1984	Ph.D. in Numerical Methods in Mechanics, National Technical University of Athens.
1979	M.Sc. in Civil Engineering, National Technical University of Athens.

ACADEMIC CAREER

2008-	Professor
	Department of Mechanics-Laboratory of Testing and Materials, School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Zographou Campus, Theocaris Bld., GR-15773 Athens, Greece.
May 2003-July 2003	Visiting Associate Professor, Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champain 205 N. Mathews Ave. Urbana, IL 61801, USA.

1999-2008	<u>Associate Professor</u> Department of Mechanics-Laboratory of Testing and Materials, School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Zographou Campus, Theocaris Bld., GR-15773 Athens, Greece.
June 1999	<u>Visiting Associate Professor</u> Department of Ship Science, University of Southampton, Highfield, Southampton, S017 1BJ United Kingdom
1992-1999	<u>Assistant Professor</u> Section of Mechanics, Department of Engineering Science, National Technical University of Athens, Zographou Campus, Theocaris Bld., GR-15773 Athens, Greece.
February 1994-June 1994	<u>Visiting Assistant Professor</u>, Department of Mechanical Engineering, Florida Atlantic Univeersity, Boca Raton, Florida 33431, USA.
April 1993-August 1993	<u>Visiting Assistant Professor</u>, Department of Marine Structures, The Norwegian Institute of Technology The Marine Technology Centre, N-7034 Trondheim, Norway.
1988-1992	*<u>Lecturer</u>* Section of Mechanics, Department of Engineering Science, National Technical University of Athens, GR-15773 Athens, Greece.
October 1989 - March 1991	*<u>Postdoctoral Fellowship</u>* Department of Marine Structures, The Norwegian Institute of Technology, The Marine Technology Centre, N-7034 Trondheim, Norway.

1982-1988	*Research and Teaching Associate*
	Section of Mechanics,
	Department of Engineering Science,
	National Technical University of Athens,
	GR-15773 Athens, Greece
1979-1982	*Research Scholar*
	Section of Mechanics,
	Department of Engineering Science,
	National Technical University of Athens,
	GR-15773 Athens, Greece

TEACHING EXPERIENCE

1992-present	National Technical University of Athens,
	Department of Mechanics - Laboratory of Testing and Materials, School of Applied Mathematical and Applied Sciences.
	Lecturer in the following courses:
	Finite Element Method; Fracture Mechanics; Boundary Element Method; Theory of Plates and Shells (graduate courses)
1988-present	National Technical University of Athens,
	School of Applied Mathematical and Applied Sciences, School of Civil Engineering and School of Mechanical Engineering.
	Lecturer in the following courses:
	Statics; Dynamics; Mechanics of Solids; Elasticity; Strength of Materials; Finite Element Method (undergradutate courses).
1995	Florida Atlantic University,
	Dept. of Mechanical Engineering,
	Fracture Mechanics (graduate course).
1980-1988	National Technical University of Athens
	Dept. of Civil Engineering

Assistant Lecturer in the following courses:
Statics; Dynamics; Mechanics of Solids;
Strength of Materials (undergraduate courses).

MAIN FIELDS OF COMPETENCE

- Numerical Methods in Mechanics (Finite Element Method, Singular Integral Equations Method, Boundary Integral Equation Method)
- Fracture Mechanics
- Composite Materials
- Solid Mechanics

SOCIETES

- Member of the Technical Chamber of Greece
- Member of the Hellenic Society of Theoretical and Applied Mechanics-member of International Union of Theoretical and Applied Mechanics (IUTAM).
- Member of the International Association for Computational Mechanics (IACM).

PARTICIPATION IN CONFERENCES AND SYMPOSIA

1. "First USA-Greece Symposium on Mixed Mode Crack Propagation", National Technical University of Athens (NTUA), Athens, August 1980 (see Ref.C.1).

2. "I.U.P.A.C., International Symposium on Interrelations Between Processing, Structure and Properties of Polymeric Materials", NTUA, 1982 (see Ref. C.2).

3. "Symposium of the Hellenic Society of the Theoretical and Applied Mechanics (H.S.T.A.M.)", NTUA, Athens, Greece, October 1984 (see Ref. C.3).

4. "First Greek National Congress of Mechanics", H.S.T.A.M., Athens, Greece, June 1986 (see Ref. C.4).

5. "Second Greek National Congress of Mechanics", H.S.T.A.M., Athens, Greece, June 1990 (see Ref.C.5).

6. "Eighth International Conference on Composite Materials (ICCM/VIII)", Honolulu, U.S.A., July 1991 (see Ref.C.6).

7. "COMP'88, International Symposium on Phase Interaction in Composite Materials" Patras, Greece, August 1988 (see Ref. C.7).

8. "Second International Conference on Computer-Aided Assessment and Control of Localized Damage", Southampton, U.K., July 1992 (see Ref. C.8).

9. "First Greek National Congress on Computational Mechanics", Greek Association of Computational Mechanics (GR.A.C.M.), Athens, Greece, September 1992 (see Ref.C.9).

10. "Third Greek National Congress of Mechanics", H.S.T.A.M., Athens, Greece, June 1992 (see Ref. C.10).

11. "Ninth International Conference on Composite Materials (ICCM/9)", Madrid, Spain, July 1993 (see Ref. C.11).

12. "Fourth Greek National Congress on Mechanics", H.S.T.A.M., Xanthi, Greece, June 1995 (see Ref. C.12).

13. "Third International Conference on Sandwich Construction", Southampton, U.K., September 1995 (see Ref. C.13).

14. "Second Greek National Congress on Computational Mechanics", GR.A.C.M., Chania, Crete, Greece, June 1996 (see Ref.C.14).

15. "Euromech 360 Colloquium, Mechanics of Sandwich Structures", Saint-Etienne, France, May 1997 (see Ref. C.15).

16. "Fifth Greek National Congress on Mechanics", H.S.T.A.M., Ioannina, Greece, August 1998 (see Refs C.16 and C.17).

17. "Fourth International Conference on Sandwich Structures", Stockholm, Sweden, June 1998 (see Ref. C.18).

18. "Third Greek National Congress on Computational Mechanics", GR.A.C.M., Volos, Greece, June 1999 (see Ref. C.19).

19. "Twelfth International Conference on Composite Materials", Paris, France, July 1999 (see Ref. C.20).

20. "Sixth National Congress on Mechanics", H.S.T.A.M., Thessaloniki, Grecce, July 2001 (see Ref. C.21).

21. "Second European Conference on Computational Mechanics Solids, Structures and Coupled Problems in Engineering", Cracow, Poland, June 2001 (see Ref. C.22).

22. "Tenth European Conference on Composite Materials (ECCM-10)", Brugge, Belgium, June 2002 (see Ref. C.23).

23. "Fourth Greek National Congress on Computational Mechanics", GR.A.C.M., Patra, Greece, June 2002 (see Ref. C.24).

24. "Sixth International Conference on Sandwich Structures", Ft. Lauderdale, U.S.A, April 2003 (see Ref. C.25).

25. "Recent Advances in Composite Materials", Symposium ,Xanthi, Grecce, June 2003 (see Ref. C.26).

26. International Conference, "Influence of Traditional Mathematics and Mechanics on Modern Science and Engineering", Messini, Greece, May 2004 (see Refs C.27 and C.28).

27. "Sixth National Congress on Mechanics", H.S.T.A.M., Chania, Greece, June 2004 (see Refs C.29, C.30 and C.31).

28. "The Eighth International Symposium on Multifunctional and Functionally Graded Materials (FGM2004)", Leuven, Belgium, July 2004 (see Ref. C.32).

29. "5th GRACM International Congress on Computational Mechanics", Limassol, Cyprus June 2005 (see Ref. C.33).

30. "Seventh International Conference on Sandwich Structures", Aalborg, Denmark, August 2005 (see Ref. C.34).

31. "First South-East European Conference on Computational Mechanics", Kragujevac, Serbia, June 2006 (see Ref. C.35).

32. "16th European Conference of Fracture", Alexandroupoli, Greece, July 2006 (see Ref. C.36).

33. "The Nigth Multiscale and Functionally Graded Materials International Conference, *FGM IX*" Oahu Island, Hawaii, USA, October 2006 (see Ref. C.37).

34. "Boundary Elements and other Mesh Reduction Methods XXIX Conference" **Invited Lecture**, New Forest, Southampton, United Kingdom, June 2007 (see Ref. C.38).

35. "8th Hellenic Society of Theoretical and Applied Mechanics (H.S.T.A.M.) International Congress of Mechanics", University of Patras, Greece, July 2007 (see Refs C.39 and C.40).

36. "First Engineering Against Fracture Conference ", University of Patras, Greece, May 2008 (see Ref. C.41).

37. "Joint 8th World Congress on Computational Mechanics (WCCM8) and the 5th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2008)", Venice, Italy, 30 June – 4 July 2008 (see Ref. C.42).

38. "2nd South –East European Conference on Computational Mechanics (SEECCM 2009)", Rhodes Island, Greece, June 2009 (see Ref. C.43).

39. "17th International Conference on Composite Materials (ICCM-17)", Edinburg, United Kingdom, July 2009 (see Ref. C.44).

40. "9th International Conference on Sandwich Structures (ICSS-9)", Pasadena, California, USA, June 2010 (see Ref. C.45).

41. "9th HSTAM International Congress on Mechanics", Limassol, Cyprus, July 2010 (see Ref. C.46).

ENCLOSURE

- List of Scientific Publications

LIST

OF SCIENTIFIC PUBLICATIONS

Efstathios E. Theotokoglou

A. Ph.D.

A.1 Theotokoglou, E.E.,

Solution of Crack Problems with the Finite Element Method (in Greek),

Section of Mechanics, Department of Engineeering Science,

National Technical University of Athens, December, 1984.

The results of the thesis are included in the papers numbered B.1, B.2, B.3, B.4, B.6, C.1, and C.3.

B. REFFERED JOURNAL PAPERS

B.1 Theocaris, P.S., Tsqamasphyros, G. and Theotokoglou, E.E., "A Combined Integral-Equation and Finite-Element Method for the Evaluation of Stress Intensity Factors", Comp. Meth. Appl. Mech. Engrg. Vol.31, pp.117-127 (1982).

B.2 Theocaris, P.S., Theotokoglou, E.E. and Tsamasphyros, G., "A Relaxation Technique for Evaluating Stress Intensity Factors by the Finite Element Method", Int. Journal Num. Meth. Engrg, Vol.19, pp.17-26 (1983).

B.3 Theocaris, P.S., Tsamasphyros, G. and Theotokoglou, E.E., "An Alternating Coupling of Finite Elements and Singular Integral Equations for the Solution of Branched Cracks in Finite Sheets" Engrg. Fracture Mech., Vol.20, pp.583-589 (1984).

B.4 Theocaris, P.S., Tsamasphyros, G. and Theotokoglou, E.E., "A Combination of the Finite-Elements and Integral-Equations Methods for the Solution of the Generally Cracked Body", Int. Journal Num. Meth. Engrg, Vol.20, pp.2065-2075 (1984).

B.5 Theotokoglou, E.E. and Tsamasphyros, G., "Plastic Zones in Glassy Polymers Around Cracks Approaching a Bimaterial Interface Under Small Scale Yielding", Journal of Appl. Polymer Science, Vol.31, pp.163-178 (1986).

B.6 Tsamasphyros, G. and Theotokoglou, E.E., "Crack Approaching Perpendicularly the Boundary of a Rectangular Sheet: An Integral Equation and Finite Element Solution", Theoretical and Applied Fracture Mechanics, Vol.5, pp.173-179 (1986).

B.7 Theotokoglou, E.E. and Tsamasphyros, G., "The Influence of the Elastic Constants to the Shape of the Incipient Plastic Zones Around Cracks near a Bimaterial Interface", Materialprufung, Vol.28, pp.391-394 (1986).

B.8 Stabouloglou, J.H. and Theotokoglou, E.E., "Study of the Geometric Properties of the Moments of inertia of a Plane Simple Connected Section", Technica Chronica-A (Journal of the Society of the Greek-Engineers), Vol.7, pp.124-131 (1987).

B.9   Tsamasphyros, G. and Theotokoglou, E.E., "Uncoupled Superposition of Finite Element and Integral Equation Methods for the Solution of Crack Problems", International Journal of Fracture, Vol.36, pp.219-231 (1988).

B.10 Tsamasphyros, G. and Theotokoglou, E.E., "The Problem of the Microdefects in the Matrix and Debondings Along a Circular Inclusion: An Integral Equation Solution", Mech. Research Comm., Vol.16, pp.289-295 (1989).

B.11 Theotokoglou, E.E. and Tsamasphyros, G., "An Integral Equation Solution for Cracked Half-Planes Bonded Together and Containing Debondings along their Interface", International Journal of Fracture, Vol.55, pp.1-16 (1992).

B.12 Tsamasphyros, G. and Theotokoglou, E.E., "The Finite Element Alternating Method", Discussion, Engineering Fracture Mechanics, Vol.42, pp.405-406 (1992).

B.13 Theotokoglou, E.E. and Tsamasphyros, G., "A Circular Inclusion in an Infinite Elastic Medium Weakened by Cracks and/or Holes", Mech. Research Comm., Vol.20, pp.121-128 (1993).

B.14 Theotokoglou, E.E. and Stabouloglou, G., "Study of the Inertial Properties of a Simply Connected Section", Rev. Roum. Sci. Tech.-Mecanique Appliquee, Vol.39, pp.141-155 (1994).

B.15 Theotokoglou, E.E. and Moan T., "Experimental and Numerical Study of Composite T-Joints", Journal of Composite Materials, Vol.30, pp.190-209 (1996).

B.16 Theotokoglou, E.E., "Analytical Determination of the Ultimate Strength of Sandwich Beams", Applied Composite Materials, Vol.3, pp.345-353 (1996).

B.17 Theotokoglou, E.E., "Strength of Composite T-joints under Pull-Out Loads", Journal of Reinforced Plastics and Composites, Vol.16, pp.503-518 (1996).

B.18 Theotokoglou, E.E., "Interlaminar Cracking of Composite Shells", Theoretical and Applied Fracture Mechanics, Vol.27, pp.13-20 (1997).

B.19 Theotokoglou, E.E. and Tsamasphyros, G., "Derivation of Exact Expressions for Two-Dimensional Singular and Finite-Part Integrals Applicable in Solid Mechanics", Engineering Analysis with Boundary Elements, Vol. 22, pp. 125-132 (1998).

B.20 Theotokoglou, E.E., "Study of the Numerical Fracture Mechanics Analysis of Composite T-Joints", Journal of Reinforced Plastics and Composites", Vol. 18, pp. 215-223 (1999).

B.21 Theotokoglou, E.E., "Bonded Cracked Half Planes with an Interface and an Intersecting Crack", International Journal of Fracture, Vol. 98, pp. 361-367 (1999).

B.22. G. Tsamasphyros, E.E. Theotokoglou, "Pade approximants for the numerical solution of singular integral equations", *Computational Mechanics,* Vol. 23, pp. 519-523, (1999).

B.23. E.E. Theotokoglou, G. Tsamasphyros, "An appropriate quadrature rule for the analysis of plane crack problems in the boundary-element method", *Communications in Numerical Methods in Engineering,* Vol. 17, pp. 691-699, (2001).

B.24. I.H. Stampouloglou and E.E. Theotokoglou, "The two-actions theorem and its application to composite materials" , *The Archive in Mechanical Engineering,*Vol. *XLIX,* pp. 297-315, (2002).

B.25. E.N. Theotokoglou, E.E. Theotokoglou, " The interface crack along a cirular inclusion interacting with a crack in the infinite matrix " *International Journal of Fracture,* Vol. 116, pp. 1-23 (2002).

B.26. I.H. Stampouloglou, E.E. Theotokoglou, "The plane elasticity problem of an isotropic wedge under normal and shear distributed loading-application in the case of a multi-material problem, *International Journal of Solids and Structures,* Vol. 40, pp. 5839-5860 (2003).

B.27. E.E. Theotokoglou, "Boundary integral equation method to solve embedded planar crack problems under shear loading", *Computational Mechanics,* Vol. 33, pp. 327-333, 2004.

B.28 E.E. Theotokoglou, I.H. Stampouloglou, "The plane wedge problem loaded at the apex –The self similarity property and the Characteristic vector", Journal of Elasticity, Vol. 76, pp. 21-43, 2004.

B.29 I.H. Stampouloglou, E.E. Theotokoglou and D.E. Panayotounakos, "Exact analytic solutions of the nonlinear partial differential Equations governing rigid perfect plasticity problems", Acta Mechanica, Vol. 174, pp. 1-20, 2005.

B.30 Stampouloglou, I.H., Theotokoglou, E.E. and Andriotaki, Petra N., "Asymptotic solutions to the nonlinear cantilever elastica", International Journal of Nonlinear Mechanics, Vol. 40, pp. 1252-1262, 2005.

B.31 Theotokoglou, E.E. and Paulino, G.H., "A crack in the homogeneous half plane interacting with a crack at the interface between the nonhomogeneous coating and the homogeneous half-plane", International Journal of Fracture, Vol. 134, L11-L18, 2005.

B.32 Stampouloglou, I.H. and Theotokoglou, E.E., "The anisotropic and angularly inhomogeneous elastic wedge under a monomial load distribution", Archive of Applied Mechanics, Vol. 75, pp. 1-17 (2005).

B.33 Theotokoglou, E.E. and Vrettos, C.D., "A finite element analysis of angle-ply laminate end-notched flexure specimens", Composite Structures, Vol. 73, pp. 370-379 (2006).

B.34 Panayotounakos, D.E., Theotokoglou, E.E. and Markakis M.P., "Exact analysis solutions for the unforced damped duffing nonlinear oscillator", Comptes Rendus – Mechanics Journal, Vol. 334, pp.311-316 (2006).

B.35   Tsamasphyros, G. and Theotokoglou, E.E., "A quadrature formula for integrals with nearby singularities", International Journal for Numerical Methods in Engineering, Vol. 67, pp. 1082-1093 (2006).

B.36   Theotokoglou E.E and Tsamasphyros, G., "A modified Gauss, quadrature formula with special integration points for evaluation of Quasi-singular integrals", Engineering Analysis with Boundary Element, Vol. 30, pp. 758-766 (2006).

B.37   Theotokoglou E.E., "Behavior of thick composite tubes considering of delamination", Theoretical and Applied Fracture Mechanics, Vol. 46 pp.276-285 (2006).

B.38   Andriotaki, P.N., Stampouloglou, I.H. and Theotokoglou E.E. "Nonlinear asymptotic analysis in elastica of straight bars-analytical parametric solutions", Archive of Applied Mechanics, Vol. 76, pp. 525-536 (2006).

B.39   Stampouloglou, I.H. and Theotokoglou , E.E., "Investigation of the plane axisymmetric cylindrical tube under internal and external pressures", International Journal of Mechanics and Materials in Design Vol.3 pp.59-71 (2006).

B.40   Stampouloglou, I.H. and Theotokoglou, E.E., "The plane-self-similar anisotropic and angularly inhomogeneous wedge under power law tractions and the asymptotic analysis of the stress field", European Journal of Mechanics A/Solids, Vol. 26, pp. 55-67 (2007).

B.41   Theotokoglou, E.E., Hortis, D., Carlsson, L.A. and Mahfuz, H., "Numerical study of fractured sandwich composites under flexural loading", Journal of Sandwich Structures and Materials, Vol. 10, pp.75- 94 (2008).

B.42   Tsamasphyros, G. and Theotokoglou, E.E., "Inmost singularities of S.I.Es influencing their numerical solution in the BEM", Engineering Analysis with Boundary Element, Vol. 32, pp. 187-195 (2008).

B.43   Theotokoglou, E.E. and Stampouloglou, I.H., "The radially nonhomogeneous elastic axisymmentric problem", International Journal of Solids and Structures, Vol. 45, pp. 6535-6552 (2008).

B.44   Stampouloglou, I.H. and Theotokoglou, E.E., "Additional separated-variable solutions of the biharmonic equation in polar coordinates", Journal of Applied Mechanics, Transactions ASME, Vol. 77, pp. 1-8 (2010).

B.45   Panayotounakos, D.E., Theotokoglou, E.E. Sotiropoulos N.B. and Sotiropoulou, A.B., "Exact analytic solutions of the plastic spin equations in simple shear", Mathematics and Mechanics of Solids, Vol. 15, pp. 147-164 (2010).

B.46   Theotokoglou, E.E. and Stampouloglou, I.H., "An analytic approach for an adhesive layer in a graded elastic wedge", Mechanics of Advanced Materials and Structures, Vol. 17, pp. 393-405 (2010).

B.47   Theotokoglou, E.E. and Tourlomousis, I.I, "Crack kinking in sandwich structures under three point bending", Theoretical and Applied Fracture Mechanics, Vol. 53, pp. 158-164 (2010).

C. CONFERENCE PROCEEDINGS

C.1 Tsamasphyros, G. and Theotokoglou, E.E., "S.I.F. Evaluation by using Finite-Element Method and Schwarz's Alternating Method", Proceedings of First USA-Greece Symposium on Mixed Alternating Method, Athens, August 1980, G.C. Sih and P.S. Theocaris, editors, **Sijthoff and Noordhoff, Alphen aan den Rign, The Netherlands**, pp.235-245 (1981).

C.2 Theotokoglou, E.E., Tsamasphyros, G. and Theocaris, P.S., "Incipient Plastic Zones Around Cracks Approaching a Bimaterial Interface in Glassy Polymers", Proceedings Congress "Interrelations between Processing Structure and Properties of Polymeric Materials", (I.U.P.A.C.), J.C. Seferis and P.S. Theocaris editors, **Elsevier Science Publishers B.V**., pp.423-434 (1984).

C.3 Theotokoglou, E.E., "Solution of Crack Problems in Finite Sheets Combining the Finite Element Method with the Singular Integral Equations Methods" (in Greek), Symposium of the Hellenic Society of the Theoretical and Applied Mechanics (H.S.T.A.M.), pp.151-158 (1984).

C.4 Tsamasphyros, G. and Theotokoglou, E.E., "A Direct Combination of the Finite Element and Singular Integral Equation Methods for the Solution of Crack Problems in Finite Sheets", Proceedings of the 1st National Congress of Mechanics, Athens, 25-27 June 1986, Hellenic Society for Theoretical and Applied Mechanics (H.S.T.A.M.), Vol.1, pp.470-486 (1987).

C.5 Theotokoglou, E.E. and Tsamasphyros, G., "Bonded Cracked and Perforated Half Planes with Debondings Along the Interface", Proceedings of the 2nd National Congress of Mechanics, Hellenic Society for Theoretical and Applied Mechanics (H.S.T.A.M), Athens, June 29-July 1, 1989, Vol.1, pp.346-356 (1990).

C.6 Theotokoglou, E.E. and Moan, T., "Stress Analysis of a GRP/PVC Sandwich T-joint", Proceedings of the 8th International Conference on Composite Materials (ICCM/VIII), Honolulu, July 15-19, 1991, Stephen W. Tsai and George S. Springer editors, **Sampe International**, Vol.1, pp.9.C.1-9.C.10 (1991).

C.7 Tsamasphyros, G. and Theotokoglou, E.E., "Interaction of Cavities in the Matrix with Debonding along a Circular Inclusion", Proceedings of "Phase Interaction in Composite Materials"(COMP'88), Patras, August 1988, S.A. Paipetis and G.C. Papanicolaou editors, **Omega Scientific**, pp. 510-520 (1992).

C.8 Theotokoglou, E.E. and Tsamasphyros, G., "Cracks and Holes Interacting with n Elastic Inclusion", Proceedings of the Second International Conference on Computer-Aided Assessment and Control of Localized Damage, Southampton, U.K., July 1-3, M.H. Aliabadi, H. Nisitani and D.J. Cartwright, editors, **Computational Mechanics Publications and Elsevier Applied Science**, Vol.2, pp.547-565 (1992).

C.9 Theotokoglou, E.E. and Tsamasphyros, G., "Bonded Elastic Half Planes with an Interface Crack and an Intersecting Crack", Proceedings of the 1st National Congress on Computational Mechanics, Athens,3,4 September, 1992, Greek Association of Computational Mechanics (GR.A.C.M.), University of Patras Press, Vol.1, pp.44-52 (1992).

C.10 Theotokoglou, E.E. and Tsamasphyros, G., "The problem of the Interaction Between an Elastic Inclusion and an Array of Curvilinear Cracks or Holes", Proceedings of the 3rd National Congress of Mechanics, Hellenic, Society for Theoretical and Applied Mechanics (H.S.T.A.M), Athens, 25-27 June, 1992, P.S. Theocaris editor, Vol.1, pp.452-459 (1993).

C.11 Theotokoglou, E.E., "Bonded Cracked and Perforated Half Planes with Debondings along their Interafce: The problem of the kinked Crack", Proceedings of the 9th International Conference on Composite Materials (ICCM/9), Madrid, 12-16 July, 1993, Antonio Miravete editor, University of Zaragoza, **Woodhead Publising Limited**, Vol.III, pp.322-326 (1993).

C.12 Theotokoglou, E.E., "Analytical Determination of the Ultimate Strength of Sandwich Beams", Proceedings of the 4th Greek National Congress on Mechanics, Hellenic Society for Theoretical and Applied Mechanics (H.S.T.A.M), Xanthi, Greece, 26-29 June, 1995, P.S. Theocaris and E.E. Gdoutos editors, Vol.1, pp.175-183 (1995).

C.13 Theotokoglou, E.E. and Moan, T., "Non-linear Behaviour of Sandwich T-Joints", Proceedings of the 3rd International Conference on Sandwich Construction, University of Southampton, UK, 12-15th September 1995, Howard G. Allen, editor, **Engineering Materials, Advisory Services LTD. (EMAS)**, Vol.2, pp. 591-600 (1996).

C.14 Theotokoglou, E.E., "Numerical Fracture Mechanics Studies of Composite T-Joints", Proceedings of the 2nd National Congress on Computational Mechanics, Greek Association of Computational Mechanics (GR.A.C.M.), Chania, Crete, Greece, June 26-28, 1996, D.A. Sotiropoulos and D.E. Beskos editors, Vol.1, pp. 439-445 (1996).

C.15 Theotokoglou, E.E., "Failure Modes in Sandwich T-Joints", Proceedings of the Euromech 360 Colloquium "Mechanics of Sandwich Structures", Saint-Etienne, France, 13-15, May 1997, A. Vautrin editor, **Kluwer Academic Publishers**, pp. 415-422, (1998).

C.16. Theotokoglou E.E., *Behaviour of Composite Tubes Considering Delamination: A Finite Element Approach,* Proceedings of the 5th National Congress on Mechanics, Hellenic Society for Theoretical and Applied Mechanics (H.S.T.A.M.), Ioannina, Greece, 27-30 August, 1998, P.S. Theocaris, D.I. Fotiadis and C.V. Massalas editors, The University of Ioannina Press, GR-451 10 Ioannina, Greece, Vol.1, pp.148-153 (1998).

C.17. Theotokoglou E.E. and Tsamasphyros G., *Exact Expressions for Two-Dimensional Singular and Finite-Part Integrals Appearing During The Numerical Solution of Problems in Three Dimensional Elastostatics,* Proceedings of the 5th National Congress on Mechanics, Hellenic Society for Theoretical and Applied Mechanics (H.S.T.A.M.), Ioannina Greece, 27-30 August, 1988, P.S. Theocaris, D.I. Fotiadis and C.V. Massalas editors, The University of Ioannina Press, GR-45110 Ioannina, Greece, Vol.1, pp.460-465 (1998).

C.18. Theotokoglou E.E., *Integral Equation Solution for a Cracked Sandwich Layer,* Proceedings of the Fourth International Conference on Sandwich Structures, Stockholm, Sweden, June 9-11, 1998, Karl-Axel Olsson editor, **Engineering Materials Advisory Services LTD**, Vol. I, pp. 239-250 (1998).

C.19. Theotokoglou E.E. and Tsamasphyros G., *Efficient Extrapolation Formulae in the Boundary Element Method for the Analysis of Crack Problems,* Proceedings of the 3rd National Congress

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D. BOOKS

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      ISBN: 960-266-140-2,
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      The purpose of this book is to present and demonstrate the use of the finite element based methods for the solution of problems of engineering and applied sciences. The book contains material for a two semester course. The first volume I includes an introduction in the Finite Element Method (FEM), a general description of the FEM based on the displacement approach, truss and beam elements, plane stress and plain strain elements, axi-symmetric stress analysis, three dimensional stress analysis, isoparametric elements, general families of elements, plate (thin and thick plates) and shell elements, dynamics of structures, methods for the solution of large systems in the FEM, pre-processing and post-processing of data and other techniques in the FEM and a finite element program for the solution of plane stress and plane strain problems.

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D.3   Panayotounakos, D.E., Theotokoglou, E.E. and Stampouloglou, I.H
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       The purpose of this book is to present and analyze the elastic static behaviour of elastic shells under combined loading. The book contains material for a two semester course. It includes an introduction with the basic suppositions from the shell theory, the differential geometry of lines and surfaces, the bending theory of smooth shells (thick and thin), analytic methods for the solution of shells, applications in the case of thick and thin shells, the membrane theory of elastic shells the membrane theory in the case of shells in revolution and applications of the membrane theory in the case of shells in revolution