NATIONAL TECHNICAL UNIVERSITY OF ATHENS

SCHOOL OF CIVIL ENGINEERING

Professor Dr. Eng, Dr. Phil. Dr. h.c. John T. Katsikadelis

John T. Katsikadelis, Dr. Eng., PhD, Dr. h.c.
Professor Emeritus

Contact

Professor John T. Katsikadelis
Institute of Structural Analysis and Aseismic Research
School of Civil Engineering
National Technical University of Athens
GR-15773 Zografou Campus,
Athens, Greece

Tel: +30-210-7721652
Mobile: +30-6973748241
E-mail: jkats@central.ntua.gr
Homepage: http://users.ntua.gr/jkats

National Technical University of Athens (NTUA)
School of Civil Engineering
Professor : **J.T. Katsikadelis** (Institute of Structural Analysis and Aseismic Research)

A. EDUCATION

A1. Studies

He attended the elite Ionidios Model high school of Piraeus. After graduation he participated in the nation-wide entrance examinations separately for:

1. The School of Civil Engineering of the national technical University of Athens ranking third among all the candidates for the year 1957.
2. The School of Chemistry of the University of Athens ranking first among all the candidates for that year.
3. The School of Mathematics of the University of Athens ranking among the first of all the candidates for that year.

He attended the School of Civil Engineering (1957-1962). In 1970, after 8 years of intense professional activity as licensed civil engineer, he jointed the chair of Structural Analysis at School of Civil Engineering as research and teaching assistant and completed his Degree of Doctor Engineer in 1973. In 1974 he was awarded a scholarship by the Polytechnic University of New York, where he continued his graduate studies in the Department of Applied Mechanics of the School of Aerospace, These studies ended with an MSc and a new PhD in the field of Applied Mechanics under the supervision of Professor Anthony Armenakas. During the years 1972 and 1973 he attended courses of his interest at the School of Mathematics of the University of Athens. He has also attended CISM courses on Finite Elements and Boundary Elements at Udine in 1983 and 1986.

A2. Degrees

PhD (Doctor of Philosophy) in Applied Mechanics, Polytechnic University of New York, Brooklyn, N.Y (1982).

Dr. Eng. (Doctor Engineer), National Technical University, Athens, Greece. (1973)

MSc (Master of Science) in Applied Mechanics, Polytechnic University of New York, Brooklyn, N.Y. (1975)

Diploma Civil Engineer, National Technical University, Athens, Greece. (1962)

Mathematical Studies, Department of Mathematics, University of Athens.(1973)

A3. Languages

Greek, English, German, French

B.HOBBIES

Skiing, mountain hiking and cycling

C. CAREER AND POSITIONS HELD

C1. Academic career

1970-1982	: Scientific Assistant and Senior Lecturer of Structural Analysis at the School of Civil Engineering, NTUA.
1982-2004	: Assistant professor, Associate professor and Full professor of Structural Analysis at the School of Civil Engineering, NTUA.
2004-present	: Emeritus Professor, NTUA
1976-2008	: Professor of Structural Analysis at the School of Corps of Engineers of the Hellenic Army.
	: Professor at Hellenic Open university
1988-1990 & 1993-1995	: Head of the Structural Engineering Division of NTUA.
1984-2004	: Director of the Institute of Structural Analysis and Aseismic Research of NTUA.
1989-1992	: Director of the Earthquake Planning and Protection Organization of Greece.
1989-1992	: Director of European Center on Prevention and Forecasting of Earthquake (ECPFE) of the Council of Europe.
1989-1992	: Permanent Correspondent of Greece in the Open Partial Agreement (OPA) of the Council of Europe for the "*Protection Against and Relief of Major Natural and Technological Disasters"*.
1991-1992	: Representative of Greece in the Permanent Network of National Correspondents for Civil Protection of EU.

As the Director of ECPFE, EPPO, and Permanent Correspondent in OPA he took the initiative and worked for the establishment of the *European Code of Ethics* for scientists in the case of Earthquake Predictions and the *European Advisory and Evaluation Committee for Earthquake Predictions*. He has also been used by EU as an expert in topics of Civil Protection and Seismic Hazard Research.

C2. Current position: 2004-present: Graduate Professor of Structural Analysis

School of Civil Engineering, National Technical University of Athens, Greece

C3. Professional licenses and activities

Registered professional civil engineer in Greece. Experience in the design and construction of concrete and steel structures.

C4. Teaching experience

He has taught over 14 different courses in Structural Analysis, Applied Mechanics and Applied Mathematics at the undergraduate and graduate level. Most of them were introduced by him. He also updated the material of the existing courses. The BEM was introduced by him at the School of Civil Engineering as formal course. He wrote relevant text book for the courses. Among the courses he taught are:

- Structural Analysis I--. Statically Determinate Structures
- Structural Analysis II--. Statically Indeterminate Structures

- Structural Analysis III--. Matrix Structural Analysis
- Theory of Plates
- Theory of Shells
- Plane Elasticity with Application to Shear Walls
- Dynamics of Structures.
- Advanced Structural Dynamics
- Boundary Elements I
- Boundary Elements II
- Continuum Mechanics
- Theory of Elasticity and Elastodynamics
- Buckling of Beams, Plates and Shells
- Applied Mathematics for Physicists

He has also taught the Structural Analysis Courses I, II, III and Structural Dynamics at the School of the Officers of the Hellenic Army for 34 years.

D. HONORS AND DISTINCTIONS

D1. Honors

- Member of the Academia Europaea, elected September 11, 2012
- Member of the European Academy of Sciences (seated in Liege). November 18, 2010
- Member of the European Academy of Sciences and Arts. The Official award ceremony of the Diploma took place in Salzburg on March 6, 2010.
- Corresponding Member of the International Academy of Engineering, (Seated in Moscow). Международная Инженерная Академия, москва, elected on February 26, 2010.
- Doctor Honoris Causa of the University of Nis, Serbia. Elected on May 25, 2009.
- Honorary President of the Hellenic Society of theoretical and Applied Mechanics (HSTAM) 2014.
- Honorary member of the Polish Society of Theoretical and Applied Mechanics (2011).
- Honorary member of the Serbian Society of Mechanics (2007)
- Referee for Queen Elizabeth Prize for Engineering 2013
- Recent Developments in Boundary Element Methods: A Volume to Honour John T. Katsikadelis. WitPress, 2010, U.K.

  This volume is dedicated to Prof. J.T. Katsikadelis on the Occasion of his 72 Birthday. Special talk by Carlos Brebbia: eulogy-to-john-katsikadelis
- President of the *Hellenic Society of Theoretical and Applied Mechanic*s (HSTAM), 2007-2010.
- President of the *Greek Association for Computational Mechanics* (GRACM), affiliated to IACM (*International Association for Computational Mechanics*), 1997-2000 (twice elected).

- General Secretary of the *Office of Theoretical and Applied Mechanics of the Academy of Athens* (2005-present).
- Member of the General Council of the *International Association for Computational Mechanics* (IACM) (2005-2009).
- Member of the *General Assembly of IUTAM* and *Representative of HSTAM in IUTAM* (2007-2014).
- Fellow of the *Wessex Institute*, UK (for "*his outstanding contribution to the development of the Boundary Elements"*). (2000)
- Award plaque *honoris causa* by the General Staff of the Greek Army for *his 34 year contribution as a professor to the School of the Corps of Engineers*, 1986.
- Award plaque *honoris causa* by the General Staff of the Greek Army *for his contribution as professor to the School of the Corps of Engineers* in Special ceremony on the occasion of his retirement, February 18, 2009.
- 2008 Thomaidio Ward of NTUA for the paper: A BEM Based Meshless Variational Method for Solving Linear and Nonlinear Plate Problems. *Proc. of First Serbian (26th YU) Congress on Theoretical and Applied Mechanics*, Kopaonik, Serbia, April 10-13, 2007, pp. 463-474.
- Award plaque of the Greek Army on the 180th Anniversary Commemoration of the establishment of the Corps of Engineers for *his contribution as a professor to the School of the Corps of Engineers*, 18 November 2009.

D2. Distinctions

- Member of the editorial board of the Journals (among them):
  - *Engineering Analysis with Boundary Elements*
  - *Technica Chronica*
  - *Boundary Element Communications*
  - *Facta Universitatis of the University of Nis, Series Architecture and Civil Engineering*
  - *The Open Mechanics Journal*
  - *International Journal for Engineering Analysis and Design*
  - *Journal of the Serbian Society for Computational Mechanics*

- Fulbright Research Scholar as Postdoctoral Research Fellow at the Polytechnic University Of New York (1974-75)
- Chairman or Co-chairman of the Conferences and Symposia:
  - *3rd National Congress on Computational Mechanics,* Volos Greece, June 24-26, 1999.
  - *International Symposium on Recent Advances in Mechanics*: In Honor of Prof. A.N. Kounadis, Athens, Greece, November 25, 2000.
  - *23rd International Conference on Boundary Elements Methods,* Lemnos, Greece May 7-9, 2001.
  - *5th German-Greek-Polish Symposium on Advances in Mechanics,* Bad Honnef, Germany, September 12-17, 2004.
  - *28th International Conference on Boundary Elements and other Mesh reduction Methods,* Skiathos, Greece, May 10-12, 2006.
  - *6th German-Greek-Polish Symposium, on Advances in Mechanics,* Alexandroupolis, Greece, September 17-21, 2007.
  - *3rd Serbian-Greek Symposium "Recent Advances in Mechanics",* Novisad, Serbia , September 15-17, 2008.
  - *7th German-Greek-Polish Symposium on Advances in Mechanics,* Poznań, Poland September 19-22, 2010.

- *8th German-Greek-Polish Symposium, on Advances in Mechanics,* Goslar, Germany, September, 9-13, 2013.
- *9th German-Greek-Polish Symposium, on Advances in Mechanics,* , Kolympari, Chania, Greece, September, 4-9, 2016.

- Listed in *Who's Who in The World 1993-1994*, 11th Edition, *Who's Who in Science and Engineering 1994-1995,* 2nd Edition, *Dictionary of International Biography 1995*, 23rd Edition.

- Man of the Year 1993 for "*His Outstanding Accomplishments to date and the Noble Example his has set for his Peers and Entire Community*", (American Biographical Institute).
- International Man of the Year 1992-1993 in "*Recognition of his Services to Engineering and Technology*, (International Biographic Center of Cambridge, England).

- Member of the Editorial Board of the international Series:
  - *Boundary Element Series*, Computational Mechanics Publications
  - *WIT Transactions on Modelling and Simulation*, WIT press

- Guest editor of the special issues of the Journals
  - *Engineering Analysis with Boundary Elements*, Special Issue on Plates, Vol. 17 (2), pp. 91-181, 1996.
  - *Engineering Analysis with Boundary Elements*, Special Issue on Nonlinear BEM, Vol. 23, (5-6), pp. 363-525,1999
  - *Engineering Analysis with Boundary Elements*, Special Issue on BEM/MRM for inhomogeneous Solids, Vol. 32 (12), pp.995-174 (2008).
  - *Archive of Applied Mechanics*, Special Issue on the 5th German-Greek-Polish Symposium on Advances on Mechanics, Vol. 74, pp. 729-898 (2005). DOI 10.1007/s00419-005-0430-5
  - *Archive of Applied Mechanics*, Special Issue on the 6th German-Greek-Polish Symposium on Advances on Mechanics, Vol. 79, pp. 479-677, (2009), DOI 10.1007/s00419-009-0326-x
  - *Archive of Applied Mechanics*, Special Issue on the 8th German-Greek-Polish Symposium on Advances on Mechanics, Vol. 85, pp. 1173-1174 (2015), DOI 10.1007/s00419-015-1045-0.
  - *Archive of Applied Mechanics*, Special Issue on the 9th German-Greek-Polish Symposium on Advances on Mechanics,
  -
- PhD Thesis advisor after invitation of the King Mongut's University of Technology Bangkok, Thailand.
- Member of the "P.S. Theocaris" Foundation, Treasurer, (2005-2007)
- Member of the *Committee of the Basic Research* of the National Technical University of Athens
- Founding Member of the ESDEP (*European Steel Design Programme*) and Member of WG 8
- Member of the *Technical Council of the Academy of Athens* (2000-2016)
- Member of the Executive Council of *Institute of Engineering Seismology and Earthquake Engineering* (ITSAK) (1989-1992).

- Member of the international committee of the Council of Europe for the preparation of the *European Code of Ethics in Earthquake Prediction* (1990-91).
- Member of the EU Committee of specialists for the *Multilingual Lexicon of Civil Protection* (1991).
- Member of the ECCOMAS Committee on Computational and Applied Mathematics.

E. MEMBERSHIP IN SCIENTIFIC SOCIETIES

- Honorary President of the Hellenic Society of theoretical and Applied Mechanics (HSTAM) 2014
- Member of the *Hellenic Society for Theoretical and Applied Mechanics* (HSTAM), affiliated to IUTAM, Treasurer (1986-2000), Vice President (2000-2006) and President 2007-present.
- Member of the *Greek Association for Computational Mechanics* (GRACM), affiliated to IACM. President 1997-2000. Founding member and member of the Administrative Council until present.
- Fellow of the Wessex Institute, UK.
- Honorary Member of the *Serbian Society of Mechanics* 2007.
- Member of the General Council of the *International Association for Computational Mechanics* (IACM) 2003-present.
- Founding Member of the *International Society for Computational Engineering and Sciences* (ISCES),
- Member of the Administrative Council of *International Society of Boundary Elements* (ISBE).
- Member of the *New York Academy of Sciences.*
- Member of the *Greek Society for Earthquake Engineering*.
- Founding Member of the *Hellenic Society for Steel Structures Research.*
- Member of the *ECCOMAS Committee on Computational and Applied Mathematics*.
- Member of the *Technical Chamber* of Greece.
- Member of the *Greek Society of Civil Engineers*.
- Member of the *American Society of Civil Engineers* (ASCE).
- Member of *Alumni Association of the Poly* (Polytechnic University of New York).
- Member of the Scientific Research Society *Sigma Xi*

F. RESEARCH ACTIVITIES

F1. Research interests and expertise

- Computational Mechanics, especially in the area of Boundary Element and Meshless Methods applied to linear and nonlinear analysis of structures (beams, plates, shells, membranes, cables) under static and dynamic loads.
- Plates reinforced with beams

- Shape optimization of structures.
- Stability of structures (beams, plates and shells).
- Response of structures to nonconservative loads.-. Flutter instability.
- Inverse problems.
- Numerical solution of fractional differential equations and study of the response of structures under fractional type inertia and damping forces.
- Viscoelastic response of Structures.
- Composite structures
- Thick anisotropic plates.
- Numerical solution of discrete hyperbolic and parabolic equations with applications to physical systems.
- Numerical Solution of variable order fractional differential equations with applications to physical systems.
- System identification

His current research is on:

- Thickness optimization of elastic and viscoelastic plates using BEM.
- Linear and nonlinear analysis of viscoelastic beams, membranes, plates modeled with multi-term fractional derivatives.
- Analysis of anisotropic plates. Composite plates
- Shear deformable anisotropic plates
- Generalized fractional derivatives. Applications to Mechanical Systems
- Variable order fractional differential equations with applications to physical systems.
- System identification

F2. Seminal research work: The seminal work of Katsikadelis includes:

1. ***Analysis of plates using the BEM***. Alone or with his former students he published the first papers on plates on elastic foundation with one-parameter (*ASME J. Appl. Mech*. 1984 & *ASCE J. Eng. Mech*., 1984), with two parameters (*ASME J. Appl. Mech*. 1986 & *ASCE J. Eng. Mech*. 1988), with unilateral contact (*ASME J. Appl. Mech*. 1992) and with internal supports (*J. Comp. Mech.* 1990). He published the first papers for large deflection analysis of plates with arbitrary geometry and boundary conditions having uniform thickness (*Acta Mechanica* 1988, *IJSS* 1991 & *J. Comp. Mech*. 1994). The first papers for plates with variable thickness linear (*EABE* 1996) and nonlinear, (*Int. J. Comp. Civil Struct. Eng.* 2003 & *J. Eng. Math.* 2003). He presented a new boundary integral equation method for thin plates (*ASME J. Appl. Mech*. 1989) and for thick plates (*EABE*, 1993). He also presented an exact model for the analysis of plates reinforced with beams and developed a solution method of the problem (*J. Comp. Mech.* 1999 & 2000, *IJSS* 2002).
2. ***The Analog Equation Method.*** In 1994 (*Boundary Element Method XIV*, 1994) he presented the Analog Equation Method (AEM). This method based on the Concept of the Analog Equation can be used to solve ordinary and partial differential equations of

elliptic, parabolic and hyperbolic type, linear or nonlinear, describing the response of mechanical systems. The method was first employed as Domain/BEM and later was developed to boundary-only (*EABE* 1999). The concept of the analog equation in conjunction with integral equation techniques renders the BEM an efficient and versatile computational tool for solving difficult linear and nonlinear engineering problems for general bodies using simple known fundamental solutions (EABE 1999, *Theor. and* Appl*. Mech.* 2002, *Arch. Appl. Mech*., 2005,). The AEM has been extensively employed to solve a variety of problems. The method has been adopted by the investigators of the relevant international scientific community. (e.g. M. Tanaka and coworkers, Qing-Hua Qin and coworkers, Gallego and coworkers et al.).

3. ***The buckling problem***. He published the first paper using BEM on buckling of plates with variable thickness and arbitrary shape (*EABE* 1996). He investigated the postbuckling response of the plates using a BEM-based meshless method (*Facta Universitatis 2007*)
4. ***Flutter instability***. Continuing his early research in dynamic stability, he presented an AEM solution to the problem of nonlinear dynamic stability of damped Beck's column with variable cross-section (*Int. J. of Nonlinear Mech. 2007)*) and arbitrary distribution of the follower force (*Int. J. Mechanical Sciences 2007*) and investigated the damping effect (*Archive of Applied Mechanics 2008*). He also used the AEM to investigate the flutter instability of plates (*Archive of Applied Mechanics 2009*)
5. ***The minimal surface problem***. Using the AEM he solved this problem by direct integration of the governing equation (*J Comp. Mech.* 2001). The solution of this problem is very important in the analysis of space membranes, since this surface is taken as reference configuration (form finding).
6. ***Membranes.*** Using the AEM he solved problems for large deflections of elastic membranes, homogeneous isotropic (*J Comp. Mech*. 2001), nonhomogeneous anisotropic (*EABE* 2001), and vibrations membranes (*CMES*, 2000 & *J. Comp. Mech.* 2002) as well as large deflections of space membranes (*Int. J. Num. Meth. Eng*., 2005 & *J Comp. Mech.* 2005). He recently presented a solution for nonlinear vibrations of viscoelastic membranes (*SEECCM 2009-Rhodes*).
7. ***Fluid-structure interaction.*** He solved the ponding problem of a fluid on an elastic membrane (*J. Comp. Mech.* 2002) and on a floating membrane (*EABE* 2003).
8. ***Non linear analysis of beams with variable mass and stiffness properties***. Static (*Acta Mech.* 2003) and dynamic (J. Sound Vibr.).

9. ***Optimization of structures.*** He presented a realistic solution for the buckling optimization problem by imposing restrictions on the rate of change of the cross-section variation, so that the Euler Bernoulli theory is valid, as well as lower bounds resulting from serviceability reasons (*Archive Appl. Mech.* 2005). He also presented a solution to the dynamic buckling problem for a cantilever under arbitrary distribution of the follower force and variable cross section and optimized the buckling load of the Beck's column with constant volume (*Int. J. Mechanical Sciences 2007*). In the same context, he solved the problem of regulating the mass and stiffness properties of beams with constant material so that they vibrate with a minimum, a maximum or a specified fundamental eigenfrequency (*J. Sound Vibr.,* 2005). He recently developed an efficient BEM for solving plates with variable thickness and used it to solve plate thickness optimization problems (optimum buckling load, optimum stiffness, regulation of eigenfrequencies) by imposing constraints ensuring the validity of the Kirchhoff plate theory (*BeTeq 2009*). Contrary to possible FEM solutions this method results realistic solutions.
10. ***Inverse problems.*** He presented an AEM solutions to certain inverse problems (*Boundary Elements XVII, ISIP'98*, *ECCM'1999* & *ISIP'03*)
11. ***Shells.*** He developed the AEM for static and dynamic analysis of shells (*CMES*, 2000).
12. ***Composite structures.*** He presented a realistic solution for the estimation of the influence of in-fill walls on the stiffness of framed structures, taking into account interface separation, friction and slip (*IJSS* 1993). He also developed a BEM solution to the torsion problem of composite bars (*ASCE J. Eng. Mech.* 1985).
13. ***Variational methods.*** He presented a BEM based variational method for the derivation of global admissible shape functions for domains of arbitrary shape. This overcomes the basic drawback of the traditional Ritz method and brings it back again to the arena (*EABE, 2008*) as powerful tool for solving PDEs arising in physical problems.
14. ***MAEM.*** He developed the meshless analog equation method (MAEM), a new highly accurate truly meshless method for solving partial differential equations of Continuum mechanics (*BEM/MRM 28 2006, EASEC-10, 2006, EABE 2007, Arch. Appl. Mech. 2008, BeTeq 2009*). He employed this method to analyze 2D and 3D elasticity problems for functionally graded inhomogeneous general anisotropic bodies and thick shells
15. ***Fractional Differential equations.*** He developed an efficient numerical method for solving multi-term fractional differential equations (ZAMM 2009). This seminal work offers an effective computational tool to solve problems described with fractional partial differential equations which have not been solved as yet. In conjunction with the

BEM, this method, has been successfully employed to solve the fractional wave-diffusion equation (2008), viscoelastic problems described with fractional derivative model, such as the postbuckling response of viscoelastic plates with fractional derivative model, (*EABE 2010*), nonlinear vibrations of viscoelastic membranes of fractional derivative type (*BeTeq 2009*), nonlinear resonance of Viscoelastic membranes (*HSTAM 2010*), nonlinear vibrations of viscoelastic plates of fractional derivative type (Open Mechanics Journal, 2010) and post-buckling analysis of viscoelastic plates with fractional derivative models (*EABE 2010*). He recently developed a numerical method for the solution of variable-order fractional differential equations as well as integrodifferential equations involving convolution integrals (*arXiv 2018, Arch. Appl. Mech. 2019*)

16. ***System identification method.*** He developed a system identification method, which derives the physical laws from measured data using simple mathematics. It has been used to derive fundamental laws of mechanics (*Acta Mech. 2015, Arch. Appl. Mech. 2018, 2019*).

•

F4. Thesis research activity

Advisor of the following Doctoral Dissertations:

1. **Sapountzakis E.J.** (1991) "*Contribution to the Solution of Static and Dynamic Behavior of Plates Using the Boundary Element Method*", National Technical University of Athens.
2. **Nerantzaki M.S.** (1992) *"Nonlinear Analysis of Plates by the Boundary Element Method"*, National Technical University of Athens.
3. **Kokkinos F.T.** (1995). *"Three-Dimensional Layerwise Modeling of Layered Media with Boundary Integral Equations"*, Virginia Polytechnic Institute and State University (Co-advisor).
4. **Kandilas C.B.** (2000) *"Solving the Finite Elasticity Problem by the Analog Equation Method. Application to two-dimensional Problems*", National Technical University of Athens.
5. **Yiotis, A.J.** (2003). "*Nonlinear Static and Dynamic Analysis of General Shells Using the Analog Equation Method*", National Technical University of Athens.
6. **Tsiatas, G.C.** (2003). "*Nonlinear Analysis of Space Membranes by the Boundary Element Method*", National Technical University of Athens.
7. **Chinnaboon, B.** (2008) "*A BEM-based Meshless Method for Plates on Biparametric Elastic Foundation with Internal Supports*", King Mongut's University of Technology, Bangkok, Thailand (co-advisor).
8. **Babouskos, N.** (2011) "*Analysis and optimization of Elastic and Viscoelastic Plates*", National Technical University of Athens.

Supervisor of numerous Diploma and MSc theses (over 35), co-advisor and member of the examination committees of many PhD theses at the Technical University of Athens. Two of the supervised diploma theses won the first and second "*award for the best thesis*" nationwide in Greece. Babouskos' PhD thesis was a finalist in the selection process for the 2011 ECCOMAS PhD

Award. His former MSc and Ph.D. students hold faculty positions in Universities and Higher Education Institutes in Greece and abroad.

F3. Research projects:

1. Funded by EU (European Union)
   - *Vulnerability of Buried Pipelines under Seismic Loading*. Main researcher and project coordinator of the Greek and French research teams.
   - *Evaluation of the Behavior of Pipeline Joints under Seismic Loading and Assessment of their Vulnerability.* Project coordinator of the Greek, French and Bulgarian research teams.
2. Funded by the Council of Europe
   - *Influence of In-fill walls on the stiffness of frames*. Main researcher
3. Funded by the General Secretary of Research and Technology of Greece
   - *Determination of the constitutive equations of composite materials*. Main researcher and project coordinator.

G. SCIENTIFIC ACTIVITIES

G1. Distinguished Lectures

1. The Analog Equation Method. A Boundary-only BEM for Nonlinear Static and Dynamic Problems in General Bodies: Opening Speech in 23rd *International Conference on Boundary Elements Methods*, Lemnos, Greece, May 7-9, 2001 (**Opening Plenary Lect.)**
2. Finite Deformation of Elastic Cables under 3-D Loading, *4th German-Greek-Polish Symposium on Advances on Mechanics*, Warsaw-Pultusk, September 18-22, 2001 (**Key Note Lect.**).
3. The Nonlinear BEM: *BEM-FEM Conference*. In Commemoration of the 300th Anniversary of the City of St. Petersburg, Russia, September 24-26, 2003 (**Plenary Key Note Lect.**).
4. The Nonlinear BEM (2004), Serbian Academy of Sciences and Arts, Belgrade, Serbia, April 30, 2004 (**Key Note Lect.**).
5. The Meshless Analog Equation Method. A New Highly Accurate Mesh-free Method for Solving Linear and Nonlinear PDEs*: International Conference on Contemporary Problems in Civil Engineering*, Subotica, June 2- 3, 2006 (**Plenary Lect.**).
6. The Meshless Analog Equation Method (MAEM) for the Elastostatic Problem in Inhomogeneous Anisotropic Bodies, *The Tenth East-Asia Pacific Conference on Structural Engineering and Construction, EASEC-10,* Bangkok, Thailand Bangkok, August 3-5, 2006 (**Key Note Lect.**)
7. The MAEM. A New Highly Accurate Truly Mesh-free Method for Solving Partial Differential Equations: *28th International Conference on Boundary Elements and other Mesh reduction Methods*, Skiathos, Greece, May, 10-12, 2006 (**Opening Plenary Lect.**)
8. A generalized Ritz Method for Partial Differential Equations In Domains of Arbitrary Geometry Using Global Shape Functions, *First Serbian* (26th YU) *Congress on Theoretical and Applied Mechanics*, Kopaonik, Serbia, April 10-13, 2007 (**Plenary Lect.**)
9. Numerical solution of fractional differential equations. Application to structural systems, *Royal Golden Jubilee-PhD Congress X*, Pattaya, Thailand, April, 3-5, 2009 (**Inv. Lect.**).

10. Nonlinear vibrations of viscoelastic membranes of fractional derivative type, *International Conference on Boundary Element Techniques* BeTeq'09, Athens, Greece, July 22-24, 2009 (**Plenary Lect.**)
11. Postbuckling Analysis of Viscoelastic Plates with Fractional Derivative Model, *2nd South-East European Conference on Computational Mechanics,* June 22-24, Rhodes, Greece, 2009 (**Inv. Lect.**).
12. Numerical Solution of Nonlinear Fractional Partial Differential Equations. Applications to Viscoelasticity, *Honorary doctorate Lecture given at the University of Nis on the occasion on the official award ceremony*, December 7, 2009.
13. The Fractional Derivative and its Application to Structural Systems: Analysis of Viscoelastic Structures Described with Generalized Fractional Derivative Models. Lecture presented on March 4, 2014, Johannes Kepler University Linz (**Inv. Lect.**).
14. The principle of the Analog Equation and its Application to the Boundary Integral Equation Method. Lecture presented on March 11, 2015, Johannes Kepler University Linz (**Inv. Lect**.).

G2. Invited Lectures - Seminars

1. A BEM Solution to the Vibration Problem of Plates under Inplane Forces with Application to Stability of Plates, *1st Polish-German-Greek Symposium on Dynamics and Stability of Continua*, Pultusk, Poland, September 2-6, 1991 (**Inv. Lect.**).
2. Solving problems of Mathematical Physics Using the Analog Equation Method: University of Ioannina, Greece, November 26, 1993. (**Seminar**).
3. The Analog Equation Method. A powerful BEM-Based Computational Technique for Solving Engineering Problems: University of Architecture, Civil Engineering & Geodesy, Sofia, Bulgaria, March 2, 1995 (**Inv. Lect.**).
4. The Analog Equation Method. An Efficient Computational Tool for Solving Engineering Problems, *International Symposium Dynamics of Continua*, Bad Honnef, Germany, September 9-13, 1996 (**Inv. Lect.**).
5. Solving Inverse Problems by Use of the AEM. *International Symposium on Inverse Problems in Engineering Mechanics*, ISIP'98, Nagano, Japan, March 24-27, 1998 (**Inv. Lect.**).
6. The Boundary Element Method for Nonlinear Problems, *3rd Greek-German-Polish-Serbian Conference on Recent Advances in Mechanics*, Xanthi, Greece, July 10-12, 1998 (**Inv. Lect.**).
7. Solving Nonlinear Partial Differential Equations by the Analog Equation Method: University of Princeton, U.S.A., August 29, 2000 (**Inv. Lect.**).
8. The Analog Equation Method.-A Boundary-Only Integral Equation Method for Nonlinear Static and Dynamic Problems in General Bodies: *XXIII Yugoslav Congress of Theoretical and Applied Mechanics*, Belgrade, Serbia, October, 12-14, 2001 (**Inv. Lect.**).
9. The BEM for Vibration Analysis of Non-homogeneous bodies" *International Conference on Structural Engineering, Mechanics and Computation,* SEMC 2001, University of Cape Town, South Africa, July 5-7, 2001 (**Inv. Lect.**).
10. A Boundary-Only Integral Equation Method for Nonlinear Static and Dynamic Problems in General Bodies, *4th German-Greek-Polish Symposium on Advances on Mechanics*, Warsaw-Pultusk, September 18-22, 2001 (**Inv. Lect.**).

11. Solving Equationless Problems in Elasticity, *International Symposium of Inverse Problems in Engineering Mechanics,* ISIP '03, Nagano City, Japan, February 18-21, 2003 (**Inv. Lect.**)
12. Buckling Load Optimization of Beams*, 5th German-Greek-Polish Symposium*, Bad Honnef, Germany, September 12-18, 2004 (**Inv. Lect.**).
13. The BEM for Nonlinear Vibrations of Plates with Variable Stiffness and Mass Properties: *International Seminar on Non linear Dynamics- Milutin Milankovic*, University of Nis, June 1, 2006 (**Inv. Lect.**).
14. Optimum design of structures subjected to follower forces", *International Symposium Nonconservative and Dissipative Problems in Mechanics*, Serbian Academy of Sciences and Arts, Novisad, Serbia and Montenegro, Sept. 11-14, 2005 (**Inv. Lect.**).
15. The Meshless Analog Equation Method for PDEs, *6th German-Greek-Polish Symposium, "Recent Advances in Mechanics*, Alexandroupolis, Greece, September 17-21, 2007 (**Inv. Lect.**).
16. The Boundary Integral Equation Method (BIEM) for Partial Differential Equations, *Cockcroft Institute*, Universities of Lancaster, Liverpool and Manchester, UK January 7-9, 2008. (**Seminar 6 hours**)
17. Numerical solution of fractional differential equations – Application to physical Systems, *3rd Serbian-Greek symposium "Recent Advances on Mechanics,"* Serbian Academy of Sciences and Arts, Branch in Novisad, Serbia, September 15-17, 2008 (**Inv. Lect.**).
18. Numerical Solution of Nonlinear Fractional Partial Differential Equations of Mathematical Physics.-Applications to Nonlinear Vibrations of Viscoelastic Plates Modeled with Fractional Derivatives, Lecture given at the University of Architecture, Civil Engineering and Geodesy, November 16, 2009, Sofia, Bulgaria. (**Inv. Lect.**).
19. Analysis of Viscoelastic Structures Described with Generalized Differential Models of Fractional, Lecture given in the framework of the graduate program of the Department of Civil Engineering, University of Thessaly, May 11, 2011.(**Inv. Lect.**).
20. The Principle of the Analog Equation and its Application to the Boundary Integral Equation Method, Mechanics through Mathematical Modelling, Symposium in honor of the 70th birthday of Academician Teodor Atanackovic, Novi Sad, September 7-10, 2015.
21. The Virtual Reciprocal Theorem in Mechanics and its Application to the Boundary Element Method, BEM/MRM 40 International Conference on Boundary Elements, New Forest, UK,, 12-14 September, 2017. (**Inv. Lect.**).
22. The Fractional Derivative and its Application to Physical Systems.-Constant Order, Distributed Order and Variable order Fractional Derivatives.-Numerical Solution of Fractional Differential Equations, Lecture presented at the Mathematical Seminar of the Division of Applied Mathematics, Department of Chemical Engineering, University of Patras, Greece, April 23, 2018 (**Inv. Lect.**).

G3. Conference organizer and member of organizing Committees

1. 1st National Congress of HSTAM, June 25-27, 1986, Athens, Greece.
2. Greek-German Seminar on Structural Dynamics and Earthquake Engineering, December 16-17, 1988, Athens, Greece.
3. 2nd National Congress on Mechanics of HSTAM, June 29-July 1, 1989 Athens, Greece.
4. 3rd National Congress on Mechanics of HSTAM, June 2 5-27, 1992, Athens, Greece.

5. 1st National Congress on Computational Mechanics of GRACM, September 3-4, 1992, Athens, Greece,
6. 4th Greek National Congress on Mechanics of HSTAM, June 26-29, 1995, Xanthi, Greece.
7. 5th National Congress on Mechanics of HSTAM, August 27-30, 1998, Ioannina, Greece.
8. 3rd National Congress on Computational Mechanics, June 24-26, 1999, Volos Greece.
9. International Symposium on Recent Advances in Mechanics-In Honor of Prof. A.N. Kounadis, November 25, 2000, Athens, (Co-Chairman).
10. 23rd International Conference on Boundary Elements Methods, May 7-9, 2001, Lemnos, Greece.
11. 6th National Congress on Mechanics, July 19-21, 2001, Thessaloniki, Greece.
12. ISCES'03 International Conference on Computational & Experimental Engineering and Sciences, July 24-29, 2003, Corfu, Greece.
13. 7th National Congress on Mechanics of HSTAM, June 24–26, 2004, Chania, Greece.
14. 5th German-Greek-Polish Symposium on Advances in Mechanics, September 12-17, 2004, Bad Honnef, Germany (Co-Chairman).
15. International Conference on Boundary Elements and other Mesh reduction Methods, BEM/MRM28, May 10-12, 2006, Skiathos, Greece (Co-Chairman).
16. 8th HSTAM International Congress on Mechanics, July 12-14, 2007, Patras, Greece.
17. 6th German-Greek-Polish Symposium, on Advances in Mechanics, September 17-21, 2007, Alexandroupolis, Greece (Chairman).
18. 3rd Serbian-Greek Symposium "Recent Advances in Mechanics", September 15-17, 2008, Novisad, Serbia (Co-Chairman).
19. 9th HSTAM International Congress on Mechanics, Limassol – Cyprus, July 12-14, 2010 (Co-Chairman).
20. 7th German-Greek-Polish Symposium "Recent Advances in Mechanics", September 19-22, 2010, Poznań, Poland (Co-Chairman).
21. 7th GRACM International Congress on Computational Mechanics, Athens, 30 June – 2 July 2011.
22. 4th Serbian-Greek Symposium "Recent Advances in Mechanics", July 9-10, 2011, Vlasina Lake, Serbia (Co-Chairman)
23. ICCES'12, 2012, Symposium: "Recent Advances in Applied Mechanics", Crete, Greece, April 30- May 4, 2012.
24. 8th German-Greek-Polish Symposium "Recent Advances in Mechanics", September 9-13, 2013, Goslar, Germany (Co-Chairman).
25. 10th HSTAM International Congress on Mechanics, Chania, Crete, Greece, 25-27 May, 2013.
26. 8th GRACM International Congress on Computational Mechanics, Volos, 12 July – 15 July 2015
27. 11th HSTAM International Congress on Mechanics, Athens, Greece, 27 – 30 May, 2016
28. 9th German-Greek-Polish Symposium, Recent Advances in Mechanics, September, 4-9, 2016, Kolympari, Chania, Greece (Chairman).
29. 12th HSTAM International Congress on Mechanics, Thessaloniki, Greece, 22-25 September, 2019.

G4. Reviewer in Scientific Journals

He has reviewed papers for many journals. Among them:

1. Acta Mechanica
2. Applied Mechanics Reviews
3. Archive of Applied Mechanics
4. ASCE Journal of Engineering mechanics
5. ASME Journal of Applied Mechanics
6. Computational Mechanics
7. Computer Methods in Applied Mechanics and Engineering
8. Computer Modeling in Engineering & Sciences
9. Computers and Structures
10. Engineering Analysis with Boundary Elements
11. Facta Universitatis
12. International Journal of Nonlinear Mechanics
13. International Journal for numerical Methods in Engineering
14. International Journal of Solids and Structures
15. Journal of Sound and Vibration
16. Journal Strain Analysis
17. Structural Engineering and Mechanics
18. Technica Chronica
19. Computer Physics Communications
20. Computers & Mathematics with Applications
21. Mathematical Methods in the Applied Sciences

G5. Member of the Scientific and/or Advisory Committee of National and International Conferences

1. European Conference on Structural Dynamics: Eurodyn'90, June 5-7, 1990, Bochum, FR Germany.
2. 2nd International Conference on Computational Structures Technology, August 30 - September 1, 1991, Athens, Greece.
3. 1st National Congress on Computational Mechanics of GRACM, September 3-4, 1992, Athens, Greece.
4. 2nd European Conference on Structural Dynamics: Eurodyn'93, June 21-23, 1993, Trondheim, Norway.
5. 16th International Boundary Element Method Conference (BEM XVI), July 12-15, 1994, Southampton, UK.
6. 17th International Conference on Boundary Elements, (BEM XVII), July 1995, Madison, Wisconsin, USA.
7. 2nd National Congress on Computational Mechanics of GRACM, June 26-28, 1996, Chania, Greece.
8. 2nd Serbian-Greek Symposium on Solid Mechanics, November 14-15, 1996, Belgrade, Serbia.
9. 19th International Conference on the Boundary Element Method, (BEM XIX), September 1997, Rome, Italy.

10. 20th International Conference on the Boundary Element Method, (BEM XX), August 19-21, 1998, Orlando, USA.
11. 3rd National Congress on Computational Mechanics of GRACM, June 24-26, 1999, Volos, Greece.
12. 21st International Conference on Boundary Element, Method, (BEM XXI), August 25-27, 1999, Worcester College, Oxford University, UK.
13. European Conference on Computational Mechanics ECCM'99, August 31 - September 3, 1999, Munich, Germany.
14. 4th International Colloquium on Computation of Shell and Spatial Structures, June 5-7, 2000, Chania, Greece.
15. 22nd International Conference on the Boundary Element Method, (BEM XXII), September 4-6, 2000, Cambridge, U.K.
16. 2nd European Conference on Computational Mechanics ECCM-2001, June 26-29, 2001, Cracow, Poland.
17. XXIII Yugoslav Congress of Theoretical and Applied Mechanics, Belgrade, October, 12-14, 2001.
18. 4th National Congress on Steel Structures, May 24-25, 2002, Patras, Greece.
19. 24th Boundary Element Methods and Meshless Solutions Seminar, (BEM XXIV), June 17-19, 2002, Sintra, Portugal.
20. International Conference on Nonsmooth/Nonconvex Mechanics, July 5-6, 2002, Thessaloniki, Greece.
21. 4th National Congress on Computational Mechanics of GRACM, June 27-29, 2002, Patras, Greece.
22. International Conference on Boundary Element Techniques IV, July 15-17, 2003, Granada, Spain.
23. 25th World Conference on Boundary Elements, (BEM XVI), September 8-10, 2003, Split, Croatia.
24. 26th World Conference on Boundary Elements and other Mesh Reduction Methods, (BEM/MRM XVI), April 19-21, 2004, Bologna, Italy.
25. 2nd International Conference on Structural Engineering, Mechanics and Computation (SEMC 2004), July 5-7, 2004, Cape Town, South Africa.
26. 27th Conference on Boundary Elements and other Mesh Reduction Methods, (BEM/MRM XXVII), Orlando, March, 2005, USA.
27. 5th International Congress on Computational Mechanics of GRACM June 29-July 1, 2005, Limassol, Cyprus.
28. 2nd International Conference on Nonsmooth/Nonconvex Mechanics, July 7-8, 2006, Thessaloniki, Greece.
29. 8th International Conference on Computational Structures Technology, September 12-15, 2006, Las Palmas de Gran Canaria, Spain.
30. 1st International Congress of the Serbian Society of Mechanics, April 10-13, 2007, Kopaonik, Serbia.
31. 29th World Conference on Boundary Elements and other Mesh Reduction Methods, (BEM/MRM XXIX), June 4-6, 2007, The New Forest, UK.
32. 3rd International Conference on Structural Engineering, Mechanics and Computation (SEMC 2007), September 10-12, 2007, Cape Town, South Africa
33. 6th International Congress on Computational Mechanics of GRACM, June 19-21, 2008, Thessaloniki, Greece.

34. 8th World Congress on Computational Mechanics WCCM8/ 5th European Congress on Computational Methods in Applied Sciences and Engineering ECCOMAS 2000*, 30-n June – 4 July, 2008, Venice, Italy
35. 30th International Conference on Boundary Elements and Other Mesh Reduction Methods, (BEM/ MRM 30), July 7-9, 2008, Maribor, Slovenia.
36. 9th International Conference on Computational Structures Technology, September, 2-5 2008, Athens, Greece.
37. 2nd South-East European Conference on Computational Mechanics (SEECCM'2009), June 22-24, 2009, Rhodes, Greece.
38. 31st International Conference on Boundary Elements and Other Mesh Reduction Methods, (BEM / MRM 31), September 2-4, 2009, New Forest, UK.
39. 4th International Conference on Structural Engineering, Mechanics and Computation (SEMC 2010), September 6-8, 2010, Cape Town, South Africa.
40. Symposium dedicated to Professor and Academician Pericles Theocaris in Commemoration of the ten years from his death, Athens 17-19, 2009.
41. International Conference UACEG2009: Science & Practice, 29-31 October 2009, UACEG, Sofia.
42. 32nd International Conference on Boundary Elements and Other Mesh Reduction Methods BEM/MRM 32, 7 – 9 September 2010, New Forest, UK.
43. First National Conference on Fracture Mechanics Alexandroupolis, Greece, June 24-26, 2010
44. 33rd International Conference on Boundary Elements and Other Mesh Reduction Methods BEM/MRM 2011, 29 – 30 June 2011, New Forest, UK.
45. 3rd (28th Yu) Congress on Theoretical and Applied Mechanics, Vlasina lake, Serbia, 5-8 July 2011.
46. International Conference on Computational &Experimental Engineering and Sciences ICCES'12, Crete, Greece, April 30-May 4.
47. International Jubilee Conference UACEG2012: Science & Practice, 15-17 November 2012.
48. 34th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 2012, 25 - 27 June 2012,Split, Croatia
49. 35th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 2013 11 - 13 June, 2013, New Forest, UK, 2013.
50. 36th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM/MRM 22-24, October 2013, Dalian, China
51. 37th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 2014, 8 - 10 September 2014, New Forest, UK
52. 38th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 2015, 21 - 23 September, 2015, New Forest, UK
53. 39th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 2016, 20 - 22 September 2016, Siena, Italy
54. 40th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 40, 12-14 September 2017, New Forest, UK.
55. 41th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 41, 11-13 September 2018, New Forest, UK.

56. 42th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 42, 2-4 July 2019, Coimbra, Portugal.

G6. Participation in International Conferences with presentation

1. International Congress of Applied Mathematics of U.B.M., Thessaloniki, Greece, August 1976.
2. Regional Colloquium on the Stability of Steel Structures, Budapest - Balatonfured, Hungary, September 19-21, 1977.
3. 1st National Congress on Mechanic of HSTAM, Athens, June 25-27 1986.
4. 9th International Conference on Boundary Elements (BEM IX), University of Stuttgart, August 31- September 4, 1987.
5. Greek-German Seminar on Structural Dynamics and Earthquake Engineering, Athens, December 16-17, 1988.
6. 1st European Boundary Element Meeting Conference, Université Libre, Bruxelles, May 8-10, 1988.
7. 10th International Conference on Boundary Element Methods, (BEM X), Southampton, UK. September, 1988.
8. 2nd National Congress on Mechanics of HSTAM, Athens June 29-July 1, 1989.
9. 11th International Conference on Boundary Element Methods in Engineering (BEM XI), Cambridge, Massachusetts, USA, Aug.29-31, 1989.
10. 1st European Conference on Structural Dynamics, Eurodyn '90, Bochum, Germany, June 5-7, 1990.
11. Polish-German-Greek Symposium on Dynamics and Stability of Continua, Pultusk, Poland, September, 1991.
12. 1st National Conference on Steel Structures, Athens, Greece, June 6-7, 1991.
13. 14th International Conference on Boundary Element (BEM XIV), Seville, Spain, November, 1992.
14. 1st National Congress on Computational Mechanics of GRACM, Athens, Greece, September 3-4, 1992.
15. 1992 Engineering Systems Design and Analysis, ASME, Istanbul, Turkey, June 29- July 3, 1992.
16. 3rd National Congress on Mechanics of HSTAM, Athens, Greece, June 25-27, 1992.
17. 15th International Conference on Boundary Element (BEM XV), Worcester, Massachusetts, USA, August 10-13, 1993.
18. 2nd European Conference on Structural Dynamics: Eurodyn'93, Trondheim, Norway, June 21-23, 1993.
19. 16th International Boundary Element Method Conference (BEM XVI), Southampton, UK, July 12-15, 1994.
20. 2nd International Conference on Computational Structures Technology, Athens, Greece, August 30 - September 1, 1994
21. Collaborative European Research Activities Supported by the EC for Seismic Risk Prevention and Reduction, ISMES, Bergamo, Italy, November 19-11, 1994.
22. 17th International Conference on Boundary Elements, (BEM XVII), Madison, Wisconsin, USA, July 1995
23. 1st European Conference on Steel Structures, Eurosteel'95, Athens Greece, May 18-20, 1995
24. 4th Greek National Congress on Mechanics of HSTAM, Xanthi, Greece, June 26-29, 1995.

25. International Symposium Dynamics of Continua, Bad Honnef, Germany, September 9-13, 1996.
26. 2nd National Congress on Computational Mechanics of GRACM, June 26-28, 1996, Chania, Greece.
27. 3rd European Conference on Structural Dynamics: Eurodyn'96, Florence, Italy, June 5-8, 1996.
28. 2nd Serbian-Greek Symposium on Solid Mechanics, Serbian Academy of Sciences and Arts, Belgrade, Serbia, November 14-15, 1996.
29. Recent Advances in Mechanics of Solids and Fluids, Festkolloquium in Honor of Prof. F. Ziegler, Vienna, Austria, 28 November, 1997.
30. 19th International Conference on the Boundary Element Method, (BEM XIX), Rome, Italy, September 1997.
31. 20th International Conference on the Boundary Element Method, (BEM XX), Orlando, USA, August 19-21, 1998.
32. 3rd Greek-German-Polish-Serbian Symposium on Recent Advances in Mechanics, Xanthi, Greece, July 10-12, 1998.
33. 5th National Congress on Mechanics of HSTAM, Ioannina, Greece, August 27-30, 1998.
34. 3rd National Conference on Steel Structures, Thessaloniki, Greece, October 30-31, 1998.
35. International Symposium on Inverse Problems in Engineering Mechanics, ISIP'98, Nagano, Japan, March 24-27, 1998.
36. 3rd National Conference on Steel Structures, Thessaloniki, Greece, October 30-31, 1998.
37. 3rd National Congress on Computational Mechanics of GRACM, Volos, Greece, June 24-26, 1999.
38. European Conference on Computational Mechanics, ECCM'99, Munich, Germany, August 31-September 3, 1999.
39. 1st Interdisciplinary Symposium on Nonlinear Problems, Athens, Greece, January 21-22, 2000.
40. International Conference on Advances Computational Engineering & Sciences, Los Angeles, USA, August 21-25, 2000.
41. The Fourth International Colloquium on Computation of Shell and Spatial Structures, Chania, Greece, June 5-7, 2000.
42. 22nd International Conference on the Boundary Element Method, (BEM XXII), Cambridge, U.K., September 4-6, 2000.
43. International Symposium on Recent Advances in Mechanics: In Honor of Prof. A.N. Kounadis, Athens, Greece, November 25, 2000.
44. 23rd International Conference on Boundary Elements Methods, (BEM XXIII), Lemnos, Greece, May 7-9, 2001.
45. 2nd European Conference on Computational Mechanics, ECCM 2001, Cracow, Poland, June 26-29, 2001.
46. 6th National Congress on Mechanics, Thessaloniki, Greece, July 19-21, 2001.
47. International Conference on Structural Engineering, Mechanics and Computation, SEMC 2001, University of Cape Town, South Africa, July 5-7, 2001.
48. 6th National Congress on Mechanics of HSTAM, Thessaloniki, Greece, July 19-21, 2001.
49. 4th German-Greek-Polish Symposium on Advances on Mechanics, Warsaw-Pultusk, September 18-22, 2001.
50. XXIII Yugoslav Congress of Theoretical and Applied Mechanics, Belgrade, October, 12-14, 2001.

51. 24th Boundary Element Methods and Meshless Solutions Seminar, (BEM XXIV), June 17-19, 2002, Sintra, Portugal.
52. 4th National Congress on Steel Structures, Patras, Greece, May 24-25, 2002.
53. 4th National Congress on Computational Mechanics of GRACM, Patras, Greece, June 27-29, 2002.
54. International Conference on Nonsmooth / Nonconvex Mechanics with Applications in Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece, July 5-6, 2002.
55. International Symposium of Inverse Problems in Engineering Mechanics, ISIP'03, Nagano City, Japan, February 18-21, 2003.
56. International Conference on Boundary Element Techniques IV, Granada, Spain, July 15-17, 2003.
57. International Conference on Computational & Experimental Engineering and Sciences, ISCES 03, Corfu, Greece, July 24-29, 2003.
58. 20th Int. Conference on Mathematical Modeling in Solid Mechanics, Boundary and Finite Element Methods, St. Petersburg, September 24-26, 2003.
59. 7th National Congress on Mechanics of HSTAM, Chania, Greece, June 24–26, 2004.
60. 5th German-Greek-Polish Symposium, Bad Honnef, Germany, September 12-18, 2004.
61. 27th Conference on Boundary Elements and other Mesh Reduction Methods, (BEM/MRM XXVII), Orlando, March, 2005, USA.
62. 5th International Congress on Computational Mechanics of GRACM, Limassol, Cyprus, June 29-July 1, 2005.
63. International Symposium Nonconservative and Dissipative Problems in Mechanics, Serbian Academy of Sciences and Arts, Novisad, Serbia and Montenegro, Sept. 11-14, 2005.
64. 28th International Conference on Boundary Elements and other Mesh reduction Methods (BEM/MRM XXVIII), 10-12, Skiathos, Greece, May, 2006.
65. International Conference on Contemporary Problems in Civil Engineering, Subotica, Serbia, June 2- 3, 2006.
66. The Tenth East-Asia Pacific Conference on Structural Engineering and Construction, EASEC-10, Bangkok, Thailand, August 3-5, 2006.
67. First Serbian (26th YU) Congress on Theoretical and Applied Mechanics, Kopaonik, Serbia, April 10-13, 2007.
68. 8th HSTAM International Congress on Mechanics of HSTAM, Patras, Greece, 12-14 July, 2007
69. 6th German-Greek-Polish Symposium on Recent Advances in Mechanics, Alexandroupolis, Greece, September 17-21, 2007.
70. 6th International Congress on Computational Mechanics of GRACM, Thessaloniki, 19-21 June, 2008.
71. 3rd Serbian-Greek Symposium on *Recent Advances in Mechanics*, Serbian Academy of Sciences and Arts, Novi Sad, Sept. 15-17, 2008.
72. International Conference on Boundary Element Techniques BeTeq'09, Athens, Greece, July 22-24, 2008.
73. 2nd South-East European Conference on Computational Mechanics, Rhodes, Greece, June 22-24, 2009.
74. 10th Royal Golden Jubilee-PhD Congress X, Pattaya, Thailand, April, 3-5, 2009.
75. 9th HSTAM International Congress on Mechanics, Limassol – Cyprus, July 12-14, 2010.
76. 7th German-Greek-Polish Symposium "Recent Advances in Mechanics", September 19-22, 2010, Poznań, Poland.

77. 3rd (28th Yu) Congress on Theoretical and Applied Mechanics, Vlasina lake, Serbia, 5-8 July 2011
78. 4th Serbian-Greek Symposium on "Recent Advances in Mechanics," Vlasina lake, Serbia, 9-11 July 2011.
79. BEM/MRM 2011, 33rd International Conference on Boundary Elements and other Mesh Reduction Methods, 28 - 30 June 2011, New Forest, UK.
80. 7th GRACM International Congress on Computational Mechanics, Athens, 30 June – 2 July 2011.
81. First Greek-Russian Symposium on Mechanics, Xanthi, Greece, October 10-13, 2011
82. International Conference on Computational & Experimental Engineering and Sciences ICCES'12, Crete, Greece, April 30-May 4, 2012.
83. International Conference on Damage Mechanics, Belgrade, Serbia, 25-27 June, 2012.
84. International Jubilee Conference UACEG2012: Science & Practice, 15-17 November 2012.
85. International Conference on Computational &Experimental Engineering and Sciences ICCES'12, Crete, Greece, April 30-May 4.
86. 10th HSTAM International Congress on Mechanics, Chania, Crete, Greece, 25-27 May, 2013.
87. 8th German-Greek-Polish Symposium "Recent Advances in Mechanics", September 9-13, 2013, Goslar, Germany.
88. 8th GRACM International Congress on Computational Mechanics, Volos, 12 July – 15 July 2015
89. 11th HSTAM International Congress on Mechanics, Athens, Greece, 27 – 30 May, 2016
90. 9th German-Greek-Polish Symposium, Recent Advances in Mechanics, September, 4-9, 2016, Kolympari, Chania, Greece
91. 40th International Conference on Boundary Elements and Other Mesh Reduction Methods, BEM / MRM 40, 12-14 September 2017, New Forest, UK.
92. 9th GRACM International Congress on Computational Mechanics, Chania, 4 June – 6 June 2018

H. PUBLICATIONS

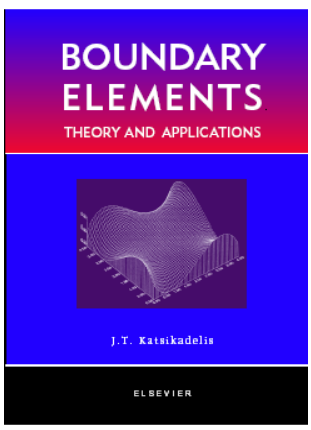
His publication record includes 22 books, 6 guest edited journal special issues (3 of Engineering Analysis with Boundary Elements and 3 of Archive of Applied Mechanics), 8 invited chapters and original papers in books, Editor of 10 Conference Proceedings, 2 Doctoral Dissertations and 277 original papers in the most reputed international journals and International Conference proceedings. His text book: Boundary Elements. Theory and Applications (Elsevier 2002) has been translated into Japanese (Asakura, Tokyo 2004), Russian (Publishing House of Russian Civil Engineering Universities, Moscow 2007) and Serbian Gradjevinska Knjiga, Belgrade 2010. His book "The Boundary Element method for Plate Analysis" is translated in Polish (to appear). His last book is "Dynamic Analysis of Structures", Elsevier, 2020 (currently under production by the publisher, 950 pp). His published work has received until now about 3440 (918 since 2015) citations with an h-index=30. About 215 of his 276 papers are devoted to the development and application of the BEM and in general of integral equation methods and to other mesh reduction methods as well. Katsikadelis has introduced the Principle of the Analog Equation, which enables the BEM (as AEM) to solve any linear and to nonlinear problem described by differential equations (elliptic, hyperbolic, parabolic), whose fundamental solution either cannot be

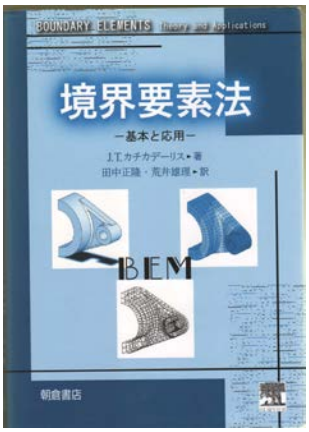
established or is difficult treat analytically and/or numerically as well as by integral equations and fractional differential equations.

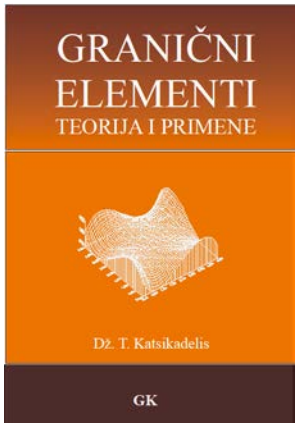
H1. Books

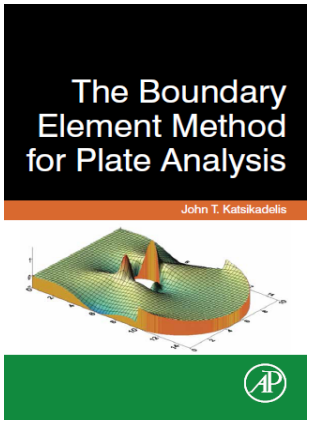
(a) Published by International Publishing Companies

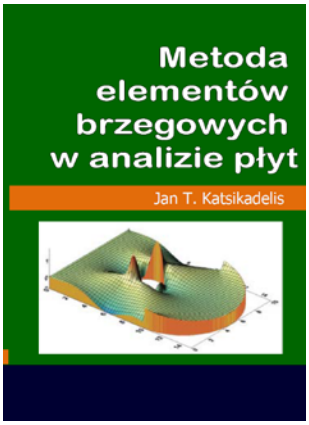
1. **Katsikadelis, J**.T., (2002). *Boundary Elements: Theory and Applications*, Elsevier, London
2. .カチカデーリス Ｊ.Ｔ. 著 (2004), 境界要素法—基本と応用 原書名
   (Katsikadelis, J.T. :*Boundary Elements: Theory and Applications*, (Translation in Japanese of "*Boundary Elements: Theory and Applications*, Elsevier), Asakura, Tokyo, Japan.
3. **Кацикаделис Дж. Т.** (2007) "Граничные элементы. Теория и приложения," (Translation in Russian of "*Boundary Elements: Theory and Applications*, Elsevier), Publishing House of Russian Civil Engineering Universities, Moscow (Russian translation).
4. Katsikadelis, Dž. T. (2011) "*Granični Elementi. Teorija i Primene*", Gradjevinska Knjiga, Belgrade (Serbian Translation)
5. Katsikadelis, J.T. (2014). *Boundary Element Method for Plate Analysis*, Academic Press, Elsevier, Oxford, UK.
6. Katsikadelis, J.T. (2016). The Boundary Element method for Engineers and Scientists, Academic Press, Elsevier, Oxford, UK.
7. Katsikadelis, J.T. (2018). *Metoda elementów brzegowych w analizie płyt,* (Translation in Polish of "*Boundary Element Method for Plate Analysis*, Academic Press, Elsevier, Oxford, UK, 2014) (to appear).
8. Katsikadelis, J.T. (2020) Dynamic Analysis of Structures", Elsevier, 2020 (currently under production by the publisher, 950 pp).

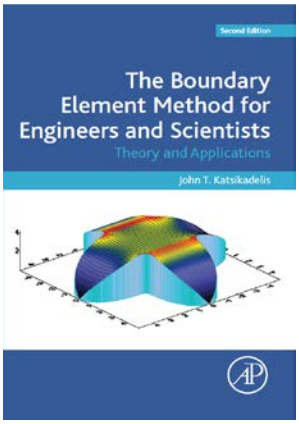


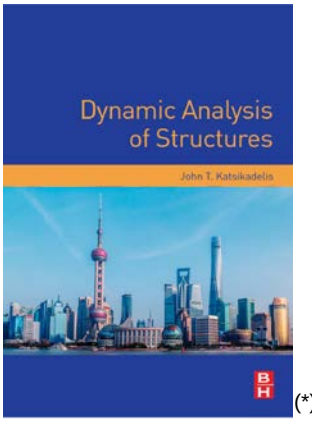








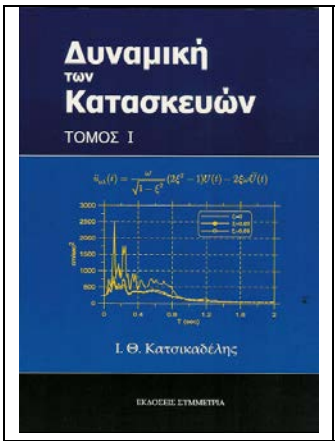


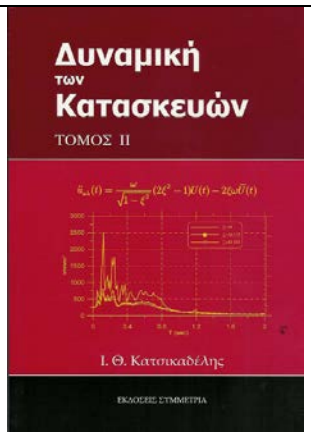


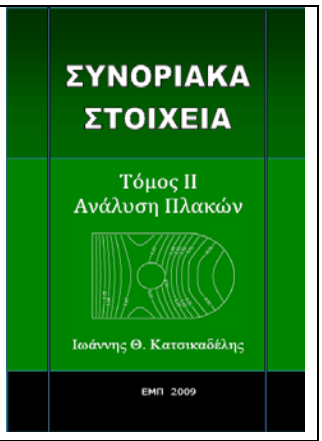
(*)

(b) Published by Greek publishing Companies and NTUA (in Greek)

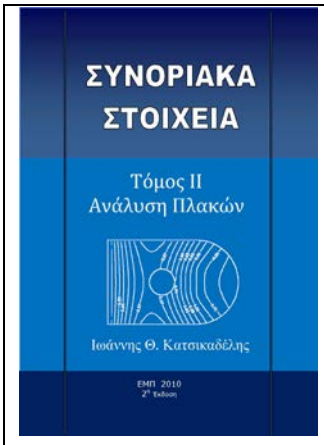
1. **Katsikadelis J.T.** *Plane Elasticity and Shear Walls*, (1977), FOTO & .OFFSET Publications, Athens, pp. 170.
2. **Katsikadelis J.T.** *Theory of Plates*, (1987 & 1983), NTUA, Athens, pp 120.
3. **Katsikadelis J.T.,** *Lessons of Dynamic Analysis of Frame Structures*. (1982, 1985, 1991 & 2000), NTUA, Athens, pp.179.
4. **Katsikadelis J.T.,** *Boundary Elements. Theory and Applications,* (1999), SYMEON Publications, Athens, pp.360.
5. **Katsikadelis J.T.,** *Dynamic of Structures*, Vol. I, Τόμος Ι, (2002), SYMMETRIA Publications, Athens, pp. 394.
6. **Katsikadelis J.T.,** *Dynamic of Structures*, Vol. II, (2004 &2008), SYMMETRIA Publications, Athens, pp. 538.
7. **Katsikadelis J.T.,** *Boundary Elements:* Vol. II, *Analysis of Plates*, (2009), First Edition, NTUA, Athens, 115.
8. **Katsikadelis J.T.,** *Boundary Elements:* Vol. II, *Analysis of Plates*, (2010), Second Edition, NTUA, Athens, 260.
9. **Katsikadelis J.T.,** *Boundary Elements. Theory and Applications,* (2012), SYMMETRIA Publications, Athens, pp.668.
10. **Katsikadelis J.T.,** *Dynamic Analysis of Structures*, (1012), SYMMETRIA Publications, Athens, pp. 996.

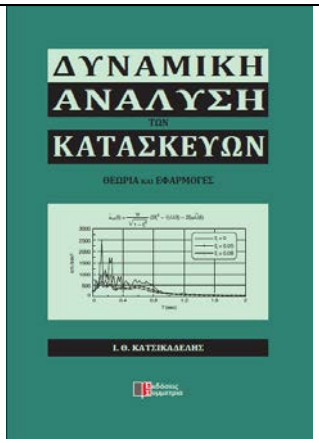






(*) The cover of Dynamic Analysis of Structures is provisional





(c) Lecture Notes published by NTUA (in Greek)

11. **Katsikadelis J.T.,** *Dynamic Analysis of Multistory Buildings*, (2000), NTUA, Athens, pp. 94.
12. **Katsikadelis, J.T.** and **Nerantzaki, M,S.,** (1993), *Lessons of Statics III. Mondern Methods of Structural Analysis*, (1993), NTUA, Athens, pp.94.
13. **Katsikadelis, J.T., Papadrakakis, M, Sapountzakis, E.J.** and **Nerantzaki, M,S.,** (2003), *Applications of the Stiffness Method (STATICS III)*, NTUA, Athens, pp. 104.
14. **Papadrakakis, M., Katsikadelis, J.T., Sapountzakis, E.J.** and **Nerantzaki, M,S.,** (2006). Modern Methods of Structural Analysis (STATICS III), NTUA, Athens, pp. 208.

H2. Editor of Conference Proceedings

1. **Aravas N** and **Katsikadelis J.T.** (1999) *Proceedings of the 3rd National Congress on Computational Mechanics*, Vol. I & Vol. II, June 24-26, .University of Thessaly Press, Volos, Greece.
2. **Katsikadelis J.T.**, **Beskos D.E.** and **Gdoutos E.E.** (2000). *Recent Advances in Applied Mechanics.* Honorary Volume for Prof. A.N. Kounadis, November 25, Athens Greece. Symmetria Press.
3. **Beskos D.E.**, **Katsikadelis J.T., Manolis G.D.** and **Brebbia C.A.** (2001). *Boundary Elements XXIII*, Advances in Boundary Elements Series, WIT Press, Southampton.
4. **Brebbia C.A.** and **Katsikadelis J.T.** (2006) *Boundary Elements and Other Mesh Reduction Methods XXVIII,* WIT Press, Southampton.
5. **Bazeos, N.**, **Karabalis, D.L.**, **Polyzos, D.**, **Beskos, D.E.** and **Katsikadelis J.T.** (2007). *Proc. 8th International Congress on Mechanics of HSTAM*, July 12-14, Patras, Greece.
6. **Katsikadelis J.T.,** (2007) *Recent Advances in Mechanics, Proc. 6th German-Greek-Polish Symposium*, September 17-21, Alexandroupolis, Greece.
7. **Atanackovic T.M.** and **Katsikadelis J.T.** (2008). *Recent Advances in Mechanics, Proc. 3rd Serbian-Greek Symposium*, September 15-17, Novisad, Serbia.
8. **P. Papanastasiou, P. Roussis, D. Loukidis, E. Sarris, J. Katsikadelis**, *Proc. 8th International Congress on Mechanics of HSTAM*, July 12-14, Limassol, Cyprus.
9. **Igic T.M.**, **Katsikadelis J.T.** and **Sumarac D.** (2011). *Recent Advances in Mechanics, Proc. 4th Serbian-Greek Symposium*, September 15-17, Vlasina Lake, Serbia.
10. **Katsikadelis J.T.** and **Stavroulakis G.E.,** (2016) *Recent Advances in Mechanics, Proc. 9th German-Greek-Polish Symposium*, September 4-9, Kolympari, Chania, Greece

H3. Guest editor of Special Issues of International Journals

1. *Engineering Analysis with Boundary Elements*, Special Issue on Plates, Vol. 17 (2), pp. 91-181 (1996).
2. *Engineering Analysis with Boundary Elements*, Special Issue on Nonlinear BEM, Vol. 23, (5-6), pp. 363-525 (1999)
3. *Archive of Applied Mechanics*, Special Issue on the 5th German-Greek-Polish Symposium on Advances on Mechanics, Vol. 74 (11-12) pp. 729-898 (2005). DOI 10.1007/s00419-005-0430-5
4. *Engineering Analysis with Boundary Elements*, Special Issue on BEM/MRM for inhomogeneous Solids, Vol. 32 (12), pp.995-174 (2008).
5. *Archive of Applied Mechanics*, Special Issue on the 6th German-Greek-Polish Symposium on Advances on Mechanics, Vol. 79, pp. 479-677 (2009). DOI 10.1007/s00419-009-0326-x
6. *Archive of Applied Mechanics*, Special Issue on the 8th German-Greek-Polish Symposium on Advances on Mechanics, Vol. 85, pp. 1173–1174 (2015).), DOI 10.1007/s00419-015-1045-0.
7. *Archive of Applied Mechanics*, Special Issue on the 9th German-Greek-Polish Symposium on Advances on Mechanics, (2017), DOI 10.1007/s00419-017-1324-z

H4. Invited Chapters and Original papers in Books

1. **Κατσικαδέλης, Ι.Θ.** Στοιχεία Δυναμικής Ανάλυσης Μονοβαθμίων και Πολυβαθμίων Ελαστικών Συστημάτων (1985), ΔΥΝΑΜΙΚΗ ΣΥΜΠΕΡΙΦΟΡΑ ΤΩΝ ΚΑΤΣΚΕΥΩΝ, Τόμος 1, Ελληνική Εταιρία Θεωρητικής και Εφηρμοσμένης Μηχανικής, Εκδόσεις ΠΛΑΙΣΙΟ, σελ. 12-50.
2. **Katsikadelis, J.T.** and **Vayas, I.** (1990). ESDEP Lecture No 4 Unstiffened plates, WG 8, Plates and Shells.
3. **Katsikadelis, J.T.**, **Sedlacek, G.** and **Ungermann, D.** (1990). ESDEP, Lecture No 1, Basis introduction to plate behavior, WG 8, Plates and Shells.
4. **Katsikadelis, J.T.** (1991). Special Methods for Plate Analysis. In: Beskos, D., (ed.), *Boundary Element Analysis for Plates and Shells*, Springer-Verlag, Berlin, 221-311.
5. **Katsikadelis J.T.** (1994). A New Time Step Integration Scheme for Structural Dynamics Based on the Analog Equation Method", *Collection of papers dedicated to Prof. P.S. Theocaris*, National Technical University of Athens 80-100.
6. **Nerantzaki, M.S.** and **Katsikadelis, J.T.** (1998). Analysis of Plates with Variable Thickness. An Analog Equation Solution. In: Aliabadi, F. (Ed.), *Plate Bending Analysis with Boundary Elements*, Chapt. 9, pp. 275-308, Computational Mechanic Publications.
7. **Kokkinos F.T.** and **Katsikadelis J.T.** (2003). Three-Dimensional Analysis of Thick In-fill Walls under Unilateral Interface Conditions by a Pure Boundary Method, *Scientific Publications of the Greek Military Academy*, 2, 261–281.
8. **Katsikadelis J.T.** (2009). The fractional wave-diffusion equation in bounded inhomogeneous anisotropic media. An AEM solution, In: Manolis, G.D. and Polyzos D. (Eds), *Advances in Boundary Element Methods: A Volume to Honor Professor Dimitri Beskos*, pp. 255-256, Springer Science, Dordrecht, Netherlands.
9. **Katsikadelis J.T.** and **Babouskos G.N.** (2018). Optimum Design of Thick Laminated Anisotropic Plates via Frequency Regulation. A BEM Approach. In: Altenbach H., Jablonski F., Müller W., Naumenko K., Schneider P. (eds), *Advances in Mechanics of*

Materials and Structural Analysis. Advanced Structured Materials, In Honor of Reinhold Kienzler, Vol. 80, pp. 223-239. Springer, https://doi.org/10.1007/978-3-319-70563-7_10.

H5. Doctoral dissertations

1. **Katsikadelis J.T.** (1973) "*A Method for Evaluation of the Plane Stress Components in the Interior of Thin Plates from Given Boundary Stresses Obtained Experimentally*", Dissertation for the Degree of Doctor Engineer, NTUA, Athens.
2. **Katsikadelis J.T.** (1982) "*The Analysis of Plates on Elastic Foundation by the Boundary Integral Equation Method*", Dissertation in partial fulfilment for the Degree of Doctor of Philosophy (PhD) in Applied Mechanics at the Polytechnic University of New York, New York.

H6. Publications in Refereed Journals

1. **Kounadis A.N.** and **Katsikadelis J.T.** (1976). Shear and Rotatory Inertia Effect on Beck's Column. *Journal of Sound and Vibration*, 49 (2), pp. 171-178.
2. **Katsikadelis J.T., Massalas C.V.** and **Tzivanidis G.I.** (1977). An Integral Equation Solution of the Plane Problem of the Theory of Elasticity. *Mechanics Research Communication*, 4 (3), pp.199-208.
3. **Katsikadelis J.T.** (1978). Application of the Rate Equations to the Buckling Problem of Circular Cylindrical Shells. *Technica Chronica*, 1, pp. 53-59.
4. **Massalas C.V., Tzivanidis G.I.** and **Katsikadelis J.T.** (1978). Buckling of a Continuous Beam Resting on a Tensionless Elastic Foundation, *Journal of Franklin Institute*, 306 (6), pp. 449-455.
5. **Kounadis A.N.** and **Katsikadelis J.T.** (1978). Bifurcational Buckling Analysis of a Box-shaped Structure. *Scientific Papers of the Faculty of Civil Engineering, NTUA*, 2 (3), pp. 1-23.
6. **Kounadis A.N.** and **Katsikadelis J.T.** (1979). Coupling Effects on a Cantilever Subjected to a Follower Force. *Journal of Sound and Vibration*, 62, pp. 131-139.
7. **Kounadis A.N.** and **Katsikadelis J.T.** (1980). On the Discontinuity of the Flutter Load for Various Types of Cantilevers. *International Journal of Solids and Structures*, 16 (4), pp. 375-383.
8. **Yotis A.J., Katsikadelis J.T.** and **Kounadis A.N.** (1982). Stability Analysis of Box-Shaped Structures of Rectangular Cross-Section. *Revue Roumaine des Sciences Techniques. Serie Mecanique Appliquee*, 27 (6), pp. 681-695.
9. **Katsikadelis J.T. and Armenakas A.E.** (1983). Numerical Evaluation of Double Integrals with a Logarithmic or Cauchy-Type Singularity. *Journal of Applied Mechanics, Transactions ASME,* 50 (3), pp. 682-684.
10. **Katsikadelis J.T.** and **Kounadis A.N.** (1983). Flutter Loads of a Timoshenko Beam-Column under a Follower Force Governed by two Variants of Equations of Motion. *Acta Mechanica*, 48 (3-4), pp.209-217.
11. **Katsikadelis J.T.** and **Armenakas A.E.** (1984). Analysis of Clamped Plates on Elastic Foundation by the Boundary Integral Equation Method. *Journal of Applied Mechanics, Transactions ASME*, 51, pp. 547-580.
12. **Katsikadelis J.T.** and **Armenakas A.E.** (1984). Plates on Elastic Foundation by the BIE Method. *ASCE, Journal of Engineering Mechanics*, 110, (7), pp. 1086-1105.

13. **Massalas C.V., Tzivanidis G.I.** and **Katsikadelis J.T.** (1985). Degeneracy in Plates Subjected to Elastic Constraints. *Revue Roumaine des Sciences Techniques. Serie Mecanique Appliquee*, 30, (6), pp.635-639.
14. **Katsikadelis J.T.** and **Armenakas A.E.** (1985). Numerical Evaluation of Line Integrals with a Logarithmic Singularity. *AIAA Journal*, 23 (7), pp. 1135-1137.
15. **Katsikadelis J.T. and Sapountzakis E.J.** (1985). Torsion of Composite Bars by the boundary Element Method. *ASCE, Journal of Engineering Mechanics*, 111 (9), pp.1197-1210.
16. **Katsikadelis J.T.** (1983). Propagation of Elastic Waves in Plates with Laminated Periodic Structure. *Scientific. Papers of the Faculty of Civil Engineering*, NTUA, 7, (4).
17. **Katsikadelis J.T.** and **Kallivokas L.** (1986). Clamped Plates on Pasternak-type Elastic Foundation by the Boundary Element Method. *Journal of Applied . Mechanics, Transactions ASME,* 53 (4), pp. 909-917.
18. **Katsikadelis J.T. and Kokkinos F.T.** (1987). Static and Dynamic Analysis of Composite Shear Walls by the Boundary Element Method. *Acta Mechanica*, 68 (3-4), pp. 231-250.
19. **Katsikadelis J.T.** and **Sapountzakis E.J.** (1988). An Approach to the Vibration Problem of Homogeneous, Non-homogeneous and Composite Membranes Based on the Boundary Element Method. *International Journal for Numerical Methods in Engineering*, 26 (11), pp. 2439-2455.
20. **Katsikadelis J.T.** and **Kallivokas L.** (1988). Plates on Biparametric Elastic Foundation by BDIE Method. *ASCE Journal of Engineering Mechanics*, 114, (5), pp.847-875.
21. **Nerantzaki M.S.** and **Katsikadelis J.T.** (1988). A Green's Function Method for Nonlinear Analysis of Plates. *Acta Mechanica*, 75 (1-4), pp. 211-225.
22. **Katsikadelis J.T.** and **Armenakas A.E.** (1989). A New Boundary Equation Solution to the Plate Problem. *Journal of Applied Mechanics, Transactions ASME,* 56, pp. 364-374.
23. **Katsikadelis J.T., Sapountzakis E.J.** and **Zorba E.G.** (1990). A BEM Approach to Static and Dynamic Analysis of Plates with Internal Supports. *Computational Mechanics*, 7 (1), pp. 31-40.
24. **Katsikadelis J.T.** and **Kandilas C.B.** (1990). A Flexibility Matrix Solution of the Vibration Problem of Plates Based on the Boundary Element Method. *Acta Mechanica*, 83 (1-2), pp 51-60.
25. **Katsikadelis J.T.** (1990). A Boundary Element Solution to the Vibration Problem of Plates. *Journal of Sound and Vibration*, 141(2), pp. 313-322.
26. **Katsikadelis J.T.** and **Sapountzakis E.J.** (1991). A BEM Solution to Dynamic Analysis of Plates with Variable Thickness. *Computational Mechanics*, 7 (5-6), pp. 369-379.
27. **Sapountzakis E.J.** and **Katsikadelis J.T.** (1991). Boundary Element Solution for Plates of Variable Thickness. *ASCE, Journal of Engineering Mechanics*, 117 (6), pp. 1241-1256.
28. **Katsikadelis J.T.** (1991). Large Deflections of Plates on Elastic Foundation by the Boundary Element Method. *International Journal of Solids and Structures*, 27 (15), pp.1867-1878.
29. **Sapountzakis E.J.** and **Katsikadelis J.T.** (1992). Unilaterally Supported Plates on Elastic Foundation by the Boundary Element Method. *Journal of Applied Mechanics, Transactions ASME*, 59 (3), pp. 580-586.

30. **Katsikadelis J.T.** and **Kokkinos F.T.** (1993). Analysis of Composite Shear Walls with Interface Separation, Friction and Slip Using BEM. *International Journal of Solids and Structures*, 30 (13), pp. 1825-1848.

31. **Katsikadelis J.T.** and **Yotis A.J.** (1993). A New Boundary Element Solution of Thick Plates Modelled by Reissner's Theory. *Engineering Analysis with Boundary Elements*, 12 (1), pp. 65-74.

32. **Katsikadelis J.T.** and **Nerantzaki M.S.** (1994). Non-linear Analysis of Plates by the Analog Equation Method. *Computational Mechanics*, 14 (2), pp. 154-164.

33. **Katsikadelis J.T.** (1996). Editorial. *Engineering Analysis with Boundary Elements*, 17, pp. 91.

34. **Nerantzaki M.S.** and **Katsikadelis J.T.** (1996). An Analog Equation Solution to Dynamic Analysis of Plates with Variable Thickness", *Engineering Analysis with Boundary Elements,* Vol. 17 (2 Special Issue), pp. 145-152.

35. **Nerantzaki M.S.** and **Katsikadelis J.T.** (1996). Buckling of Plates with Variable Thickness - An Analog Equation Solution. *Engineering Analysis with Boundary Elements,* 18 (2), pp. 149-154.

36. **Katsikadelis J.T.** and **Kandilas C.B.** (1997). Solving the Plane Elastostatic Problem by the Analog Equation Method. *Computers and Structures,* 64 (1-4), pp. 305-312.

37. **Katsikadelis J.T.** and **Nerantzaki M.S.** (1999). The Boundary Element Method for Nonlinear Problems. *Engineering Analysis with Boundary Elements,* 23 (5), pp.365-373.

38. **Katsikadelis J.T. and Tanaka M.** (1999). Editorial, *Engineering Analysis with Boundary Elements,* 23, pp. 363.

39. **Sapountzakis E.J.** and **Katsikadelis J.T.** (1999). Dynamic Analysis of Elastic Plates Reinforced with Beams of Doubly-Symmetrical Cross Section. *Computational Mechanics*, 23 (5), pp. 430-439.

40. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2000). Elastic Deformation of Ribbed Plate Systems under Static, Transverse and Inplane Loading. *Computers and Structures*, Vol.74, pp. 571-581.

41. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2000). Interface Forces in Composite Steel-Concrete Structures. *International Journal of Solids and Structures*, 37 (32), pp 4455-4472.

42. **Sapountzakis E.J.** and **Katsikadelis J.T**. (2000). Analysis of Plates Reinforced with Beams, *Computational Mechanics*, 26 (1), pp. 66-74.

43. **Katsikadelis J.T.** and **Nerantzaki M.S.** (2000). A Boundary-only Solution to Dynamic Analysis of Non-homogenous Elastic Membranes. *CMES - Computer Modelling in Engineering and Sciences*, 1 (3), pp. 1-9.

44. **Yiotis, A.J.** and **Katsikadelis J.T.** (2000). Static and Dynamic Analysis of Shell Panels Using the Analog Equation Method. *CMES - Computer Modelling in Engineering and Sciences*, 1 (2), pp. 95-104.

45. **Katsikadelis J.T. and Nerantzaki, M.S.** (2001). A Boundary Element Solution to the Soap Bubble Problem. *Computational Mechanics*, 27 (2), pp.154-159.

46. **Katsikadelis J.T.** and **Tsiatas C.G.,** (2001). The Analog Equation Method for Large deflection Analysis of Heterogeneous Orthotropic Membrane: A Boundary-only Solution. *Engineering Analysis with Boundary Elements*, 25 (8), pp. 655-667.

47. **Katsikadelis J.T., Nerantzaki M.S.** and **Tsiatas G.C.** (2001). The Analog Equation Method for Large Deflection Analysis of Membranes. A Boundary Only Solution. *Computational Mechanics*, 27 (6), pp. 513-523.
48. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2001). Analysis of Prestressed Concrete Slab-and-Beam Structures. *Computational Mechanics,* 27 (6), pp. 492-503.
49. **Katsikadelis J.T.** (2002). Dynamic Analysis of Nonlinear Membranes by the Analog Equation Method. A Boundary-only Solution. *Computational Mechanics*, 29 (2), pp. 170-177.
50. **Katsikadelis J.T** and **Sapountzakis E.J.** (2002). A Realistic Estimation of the Effective Breadth of Ribbed Plates. *International Journal of Solids and Structures*, 39 (4), pp. 897-910.
51. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2002). Creep and Shrinkage Effect on Reinforced Concrete Slab-and-Beam Structures. *ASCE Journal of Engineering Mechanics*, 128 (6), pp.625-634.
52. **Katsikadelis J.T.** and **Nerantzaki, M.** (2002). The Ponding Problem on Membranes. An Analog Equation Solution. *Computational Mechanics,* 28 (2), pp.122-128.
53. **Katsikadelis, J.T.** (2002). The Analog Equation Method. A Boundary-only Integral Equation Method for Nonlinear Static and Dynamic Problems in General Bodies. *International Journal of Theoretical and Applied Mechanics*, 27, pp. 13-38.
54. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2003). Creep and Shrinkage Effect on the Dynamic Analysis of Reinforced Concrete Slab-and-Beam Structures. *Journal of Sound and Vibration*, 260 (3), pp. 403-416.
55. **Katsikadelis J.T.** and **Tsiatas C.G.,** (2003). Nonlinear Dynamic Analysis of Heterogeneous Orthotropic Membranes. *Engineering Analysis with Boundary Elements*, Vol. 27, pp. 115-124.
56. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2002). Influence of the Inplane Boundary Conditions on the Vibration Frequencies and Buckling Load of Ribbed Plates, *International Journal of Structural Stability and Dynamics*, 2, pp. 25-43.
57. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2002). A New Model of Slab and Beam Structures – Comparison with other Models'', *International of Journal Computers and Structures*, 80 (5-6), pp. 459-470.
58. **Katsikadelis, J.T.** (2002). The Analog Boundary Integral Equation Method for Nonlinear Static and Dynamic Problems in Continuum Mechanics, *Journal of Theoretical and Applied Mechanics*, 40, pp. 961-984.
59. **Nerantzaki M.S.** and **Katsikadelis J.T.** (2003). Ponding on Floating Membranes. *Engineering Analysis with Boundary Elements*, 27 (6), pp. 589-596.
60. **Katsikadelis J.T. and Yiotis A.J.** (2003). The BEM for plates of Variable Thickness on Nonlinear Biparametric Elastic Foundation. An Analog Equation Solution. *Journal for Engineering Mathematics*, 46 (3-4), pp. 313-330.
61. **Katsikadelis, J.T.** and **Tsiatas C.G.** (2003). Large Deflection Analysis of Beams with Variable Stiffness. *Acta Mechanica,* 164 (3-4), pp. 1-13
62. **Sapountzakis E.J.** and **Katsikadelis J.T.** (2003). A New Model for the Analysis of Composite Steel-Concrete Slab Beam Structures with Deformable Connection. *Computational Mechanics*, 31 (3-4), pp. 340-349.

63. **Nerantzaki M.S.** and **Katsikadelis J.T.** (2003). Large Deflections of Axisymmetric Circular Plates with Variable Thickness. *International Journal for Computational Civil and Structural Engineering*, 1 (5), pp. 75-83.
64. **Kokkinos F.T.** and **Katsikadelis J.T.** (2003). Three-Dimensional Analysis of Thick Infill Walls under Unilateral Interface Conditions by a Pure Boundary Method. *Scientific Publications of the Greek Military Academy*, 2, pp. 261–281.
65. **Katsikadelis J.T.** and **Tsiatas C.G.** (2004). Nonlinear Dynamic Analysis of Beams with Variable Stiffness. *Journal of Sound and Vibration*, 270 (4-5), pp. 847-863.
66. **Katsikadelis J.T., Kienzler R.** and **Kurnik W.** (2005). Editorial, *Archive of Applied Mechanics*, 74, p. 727, 2005.
67. **Katsikadelis J.T.** (2005). The BEM for Non-homogeneous Bodies, *Archive of Applied Mechanics*, 74 (11-12), pp. 780-789.
68. **Katsikadelis J.T.** and **Tsiatas C.G.** (2005). Buckling Load Optimization of Beams, *Archive of Applied Mechanics,* 74 (11-12), pp.790-799.
69. **Katsikadelis J.T.** and **Tsiatas C.G.** (2006). Regulating the Vibratory Motion of Beams using shape optimization. *Journal of Sound and Vibration*, 292 (1-2), pp.390-401.
70. **Tsiatas C.G.** and **Katsikadelis, J.T.** (2006). Large Deflection Analysis of Elastic Space Membranes, *International Journal for Numerical Methods in Engineering*, 65 (2), pp. 264-294.
71. **Tsiatas C.G.** and **Katsikadelis, J.T.** (2006). A BEM based Domain Decomposition Method for Nonlinear Analysis of Elastic Membrane. *Computational Mechanics,* 38 (2), pp. 119-131.
72. **Nerantzaki M.S.** and **Katsikadelis J.T.** (2007). Nonlinear Dynamic Analysis of Circular Plates with Varying Thickness, *Archive of Applied Mechanics,* 77 (6), pp. 381–391.
73. **Katsikadelis J.T.** and **Tsiatas C.G.** (2007). Optimum Design of Structures Subjected to Follower Forces. *International Journal of Mechanical Sciences*, 49 (11), pp. 1204–1212.
74. **Katsikadelis, J.T.** and **Tsiatas, C.G.,** (2007). Nonlinear Dynamic Stability of Damped Beck's Column with Variable Cross-section, *International Journal of Nonlinear Mechanics*, 42 (1), pp 164-171.
75. **Chinnaboon B., Chucheepsakul S.** and **Katsikadelis, J.T**. (2007) A BEM-based Meshless Method for Buckling Analysis of Elastic Plates. *International Journal of Structural Stability and Dynamics*, 7, (1), pp. 81-89.
76. **Chinnaboon B., Katsikadelis J.T**. and **Chucheepsakul S.** (2007) A BEM-based Meshless Method for Plates on Biparametric Elastic Foundation. *Computer Methods in Applied Mechanics and Engineering*, 196 (33-34), pp. 3165-3177.
77. **Katsikadelis J.T.** and **Babouskos N.** (2007). The Post-Buckling Analysis of Plates. A BEM Based Meshless Variational Solution. *Facta Universitatis, Series Mechanics, Automatic Control and Robotics*, 6, pp. 113-118.
78. **Katsikadelis, J.T.** (2008). A generalized Ritz Method for Partial Differential Equations in Domains of Arbitrary Geometry Using Global Shape Functions. *Engineering Analysis with Boundary Elements*, 32 (5), pp. 353–367 (doi:10.1016/j. enganabound. 2007.001).
79. **Katsikadelis J.T. Manolis G.D.** (2008). Editorial, *Engineering Analysis with Boundary Elements*, 32 (Special issue), pp. 995–996.

80. **Katsikadelis J.T.** (2008). The 2D Elastostatic Problem in Inhomogeneous Anisotropic Bodies by the Meshless Analog Equation Method (MAEM). *Engineering Analysis with Boundary Elements*, 32 (12), pp. 997–1005 (doi:10.1016/j.engbound.2007.10.016).

81. **Tsiatas G.C.** and **Katsikadelis J.T.** (2008) Post-Critical Behavior of Damped Beam Columns with Variable Cross-section Subjected to Distributed Follower Forces. *Nonlinear Dynamics*, DOI 10.1007/s11071-008-9412-9, Article in Press.

82. **Babouskos N.** and **Katsikadelis J.T.** (2009). Flutter instability of Damped plates under combined conservative and nonconservative loads, *Archive of Applied Mechanics*, 79, pp. 541–556, (DOI 10.1007/s00419-008-0290-x).

83. **Katsikadelis J.T.** (2009). The Meshless Analog Equation Method. – I. Solution of Elliptic Partial Differential Equations, *Archive of Applied Mechanics*, 79, 557–578 (DOI 10.1007/s00419-008-0294-6).

84. **Katsikadelis J. T., Kienzler R., Kurnik, W.** (2009). Special issue on the 6th German–Greek–Polish Symposium on recent advances in mechanics, (Editorial), *Archive Applied Mechanics*, 79: 479, (on line DOI 10.1007/s00419-009-0326-x)

85. **Katsikadelis J.T.** (2009). Numerical Solution of Multi-term Fractional Differential Equations, *ZAMM,* Zeitschrift für Angewandte Mathematik und Mechanik, 89, (7), 593 – 608 (2009) / DOI 10.1002/zamm.200900252.

86. **Katsikadelis J.T.** and **Babouskos N.** (2009). Nonlinear Flutter Instability of Thin Damped Plates. An AEM Solution, *Journal of Mechanics of Materials and Structures,* 4 (7-8), pp. 1394-1414 (invited paper).

87. **Babouskos N.** and **Katsikadelis J.T.** (2009). Nonlinear Vibrations of Viscoelastic Plates of Fractional Derivative Type. An AEM Solution, *Open Mechanics Journal*, 3, pp. 25-44.

88. **Katsikadelis J.T.** and **Babouskos N.** (2010). Post-buckling Analysis of Viscoelastic Plates with Fractional Derivative Models, *Engineering Analysis with Boundary Elements,* 34, pp. 1038–1048: doi:10.1016/j.enganabound.2010.07.003.

89. **Chinnaboon, B., Chucheepsakul, S.** and **Katsikadelis, J.T.**, 2010, A BEM-based Domain Meshless Method for the Analysis of Mindlin Plates with General Boundary Conditions, *Computer Methods in Applied Mechanics and Engineering*, 200 (13-16), pp. 1379-1388: doi: 10.1016/j.cma.2010.12.014.

90. **Tsiatas, C.G. and Katsikadelis, J.T.** (2011). A New Microstructure-dependent Saint-Venant Torsion Model Based on a Modified Coupled Stress Theory, *European Journal of Mechanics A/Solids*, 30, pp. 741-747.

91. **Tsiatas C.G. and Katsikadelis, J.T**. (2011). Nonlinear Analysis of Elastic Cable-Supported Membranes, *Engineering Analysis with Boundary Elements*, 35, pp. 1149–1158.

92. **Katsikadelis,** J.T. (2011). The BEM for Numerical Solution of Partial Fractional Differential Equations, *Computers and Mathematics with Applications*, 62, pp. 891–901,doi:10.1016/j.camwa.2011.04.001.

93. **Katsikadelis J.T.** and **Babouskos N.** (2012). Stiffness and Buckling Optimization of Thin Plates with BEM, *Archive of Applied Mechanics,* 82:1403–1422.

94. **Katsikadelis, J.T.** (2012). Nonlinear Dynamic Analysis of Viscoelastic Membranes Described with Fractional Differential Models, *Journal Theoretical and Applied Mechanics,* 50th Anniversary Issue, Vol. 50, No. 3 pp. 743-753 (invited).

95. **Katsikadelis, J.T.** (2012). The Fractional Distributed Order Oscillator. A Numerical Solution, *Journal of the Serbian Society for Computational Mechanics* Vol. 6, No.1, pp. 148-149 (invited).

96. **Yotis A.J.** and **Katsikadelis J.T.** (2013). Analysis of cylindrical shell panels. A meshless solution, *Engineering Analysis with Boundary Elements,* Vol.,37, 928–935, doi.org/10.1016/j.enganabound.2013.03.005

97. **Katsikadelis, J.T. (2013).** A New Direct Time Integration Method for the Equations of Motion in Structural Dynamics, *ZAMM, Zeitschrift für Angewandte Mathematik und Mechanik*, 1-18 (2013)/DOI 10.1002/zamm.201200245))

98. **Katsikadelis, J.T.** (2013). Numerical solution of distributed order fractional differential equations, *Journal of Computational Physics*, 259 (2014) 11–22.

99. **Yotis A.J.** and **Katsikadelis J.T.** (2014). Buckling of cylindrical shell panels: a MAEM solution, *Archive of Applied Mechanics*, Special Issue, 85:1545–1557, DOI 10.1007/s00419-014-0944-9.

100. **Katsikadelis, J.T.** (2014). Generalized Fractional Derivatives and their Applications to Mechanical Systems, Special Issue, *Archive of Applied Mechanics*, Special Issue, 85:1307–1320, DOI 10.1007/s00419-014-0969-0.

101. **Babouskos N.** and **Katsikadelis J.T.** (2014). Optimum design of thin plates via frequency optimization using BEM, *Archive of Applied Mechanics*, Special Issue, 85:1175–1190, DOI 10.1007/s00419-014-0962-7**.**

102. **Katsikadelis, J. T., Kienzler, R and Kurnik, W**. (2014). EDITORIAL, Special issue on the 8th German–Greek–Polish symposium on recent advances in mechanics, *Arch Appl Mech*, 85:1173–1174, DOI 10.1007/s00419-015-1045-0

103. **Fama, G. S.A., Rashed, Y. F. and Katsikadelis, J.T.** (2015). The analog equation integral formulation for plane piezoelectric media, *Engineering Analysis with Boundary Elements*, 51, 199–212.

104. **Katsikadelis, J. T.** (2015). Derivation of Newton's law of motion using Galileo's experimental data, *Acta Mech*, 226, 3195–3204, DOI 10.1007/s00707-015-1354.

105. **Katsikadelis J.T. and Tsiatas G.C** (2016). Saint-Venant Torsion of Non-homogeneous Anisotropic Bars, *Journal of Applied and Computational Mechanics*, Vol. 2, No. 1, 42-53

106. **Katsikadelis, J. T.** (2016). A new direct time integration method for the semi-discrete parabolic equations, *Engineering Analysis with Boundary Elements*, Vol. 73, 180-190, doi.org/10.1016/j.enganabound.2016.09.0090955-7997.

107. **Katsikadelis, J. T.** (2017). Derivation of Newton's law of motion from Kepler's laws of planetary motion, *Archive of Applied Mechanics*, DOI 10.1007/s00419-017-1245-x.

108. **Katsikadelis J.**T. (2017). The derivative of Sine and Cosine. Anew Approach, International Journal of IJTSE and **arXiv:1708.08060 [math.NA]**

109. **Katsikadelis J.**T. (2018). Numerical solution of variable order fractional differential equations, **arXiv:1802.00519 [math.NA]**

110. **Yiotis, A.J. and Katsikadelis, J.T.** (2018). A Meshless Solution to the Vibration Problem of Cylindrical Shell Panels, *Front. Built Environ.* 4: 40, doi: 10.3389/fbuil.2018.00040.

111. **Katsikadelis, J.T.** (2019). Is Newton's Law of Motion Really of Integer Order? *Arch Appl Mech*, 89:639–647 https://doi.org/10.1007/s00419-018-1486-3.

112. **Katsikadelis, J.T.** (2019). Numerical solution of integrodifferential equations with convolution integrals, *Arch Appl Mech*, 89:2019–2032, https://doi.org/10.1007/s00419-019-01557-6

H7. Publications in International Conference Proceedings

1. **Katsikadelis J.T.** (1976). Application of the Rate Equation to the Buckling Problem of the Circular Cylindrical Shell. *Proc. of the International Congress of Applied Mathematics of U.B.M.*, Thessaloniki, August, pp. 302-318.
2. **Massalas C.V. and Katsikadelis J.T.** (1976). Stiffness Matrix of an Element of Axisymmetric Solids under Axisymmetric Loading. *Proc. of the International Congress of Applied Mathematics of U.B.M.*, Thessaloniki, August, pp.486-496.
3. **Kounadis A.N. and Katsikadelis J.T.** (1977), Coupling Effects on a Cantilever Subjected to a Follower Force. *Proc. of the Regional Colloquium on the Stability of Steel Structures*, Hungary, Budapest - Balatonfured, September 19-21, Final Report, pp.239-247.
4. **Katsikadelis J.T. and Armenakas A.E.** (1984). Analysis of Clamped Plates on Elastic Foundation by the Boundary Integral Equation Method. *Winter Annual Meeting*, ASME, New Orleans, December 9-14.
5. **Katsikadelis J.T. and Kokkinos F.T.** (1986). A Boundary Element Approach to the Dynamic Analysis of Composite Shear Walls. *Proc. of the 1st National Congress of HSTAM*, Athens, Greece, June 25-27.
6. **Katsikadelis J.T. and Kokkinos F.T.** (1986). Static Analysis of Composite Shear Walls by the Boundary Element Method. *Proc. of the 1st National Congress of HSTAM*, Athens, June 25-27.
7. **Katsikadelis J.T. and Sapountzakis E.J.** (1986). Numerical Evaluation of the Green Function for the Laplace Equation with Applications to Linear and Non-Linear Potential Problems by the Boundary Element Method. *Proc. of 3rd International Conference on Computational methods and Experimental Measurements*, Porto Carras, Greece, Sept. 2-5, Springer, Berlin, pp. 877-890.
8. **Katsikadelis J.T. and Sapountzakis E.J.**(1987). Numerical Evaluation of the Green Function for the Biharmonic Equation Using BEM with Applications to Static and Dynamic Analysis of Plates. In: Brebbia C.A, Wendland W.K. and Kuhn G. (Eds), *Boundary Elements IX*, Vol.2, pp.51-67, *Proc. of 9th International Conference on Boundary Element Methods in Engineering*, University of Stuttgart, August 31-September 4, Springer, Berlin.
9. **Katsikadelis J.T.** (1988). A Boundary Element Solution to the Vibration Problem of Plates. *Proc. of the Greek-German Seminar on Structural Dynamics and Earthquake Engineering*, Athens, Greece, December 16-17.
10. **Katsikadelis J.T. and Nerantzaki M.S.** (1988). A Green's Function Method for Nonlinear Analysis of Plates. *Proc. of the 1st European Boundary Element Meeting Conference*, (ed. Migeot J.L.), Structural Dynamic Research Corp., Université Libre, Bruxelles, May 8-10, pp.1.23-1.41.
11. **Katsikadelis J.T. and Nerantzaki M.S.** (1988). Large Deflections of Thin Plates by the Boundary Element Method", In: C.A. Brebbia (ed.) *Boundary Elements X*, Vol. 3: Stress Analysis, pp. 435-456, *Proc. of 10th International Conference on Boundary Element Methods,* (BEM X), Southampton, UK. September 1988, Springer-Verlag, Berlin.

12. **Katsikadelis J.T. and Sapountzakis E.I.** (1988). A New Method for the Analysis of Plates on Elastic Foundation. *Proc. of the First Hellenic Conference on Geotechnical Engineering*, Vol.2, pp.197-202, Athens, Greece, February 3-5.
13. **Katsikadelis J.T., Sapountzakis E.J. and Zorba E.G.** (1988). A BEM Approach to Static and Dynamic Analysis of Plates with Internal Supports. In: C.A. Brebbia (ed.) *Boundary Elements X*, Vol. 4: Geomechanics, Wave propagation and Vibrations, pp. 431-444, *Proc. of the 10th International Conference on Boundary Element Methods in Engineering*, September 6-8, Springer Verlag, Berlin.
14. **Sapountzakis E.J. and Katsikadelis J.T.** (1988). Unilaterally Supported Plates on Elastic Foundation by the Boundary Element Method, *Proc. of the XVII International Congress of Theoretical and Applied Mechanics of IUTAM*, Grenoble, France, August 21-27, pp.165-166.
15. **Katsikadelis J.T.** (1989). Non-linear Bending of Plates on Elastic Foundation by the Boundary Element Method. *Proc. of the 2nd National Congress on Mechanics of HSTAM*, Athens, Greece, June 29- July 1.
16. **Katsikadelis J.T. and Armenakas A.E.** (1989). A New Boundary Equation Solution to the Plate Problem. *Applied Mechanics, Biomechanics, and Fluid Engineering Conference*, ASCE/ASME, San Diego, Calif., USA, July 9-12.
17. **Katsikadelis J.T. and Kandilas C.B.** (1989). A Flexibility Matrix Solution of the Vibration Problem of Plates Based on the Boundary Element Method. *Proc. of the 2nd National Congress on Mechanics of HSTAM*, Athens, Greece, June 29- July 1.
18. **Katsikadelis J.T. and Sapountzakis E.J.** (1989). A BEM Solution to Dynamic Analysis of Plates with Variable Thickness. In: Brebbia C. A. and Connor J.J. (Eds), *Advances in Boundary Elements*,Vol.3, pp.285-302, *Proc. of the 11th International Conference on Boundary Element Methods in Engineering*, Cambridge, Massachussets, USA, August 29-31, Springer Verlag, Berlin.
19. **Sapountzakis E.J. and Katsikadelis J.T.** (1989). A Boundary Element Solution for Plates with Variable Thickness. *Proc. of the 2nd National Congress on Mechanics of HSTAM*, Athens, Greece, June 29- July 1.
20. **Katsikadelis J.T., Yiotis A.J. and Sapountzakis E.J.** (1990). An Integral Equation Approach to the Vibration Problem of Thick Elastic Plates. In: Krätzig W. B. et al. *Structural Dynamics*, Vol. 2, pp. 869-875, *Proc. of the European Conference on Structural Dynamics*, Eurodyn '90, Bochum, June 5-7, Germany.
21. **Katsikadelis J.T. and Sapountzakis E.J.** (1991). A BEM Solution to the Vibration Problem of Plates under Inplane Forces with Application to Stability of Plates. *1st Polish-German-Greek Symposium on Dynamics and Stability of Continua*, Pultusk, Poland.
22. **Katsikadelis J.T. and Kokkinos F.T. E.J.** (1991). A boundary Element Analysis of Composite Shear walls with interface Separation, Friction and Slip. *Proc. International Conference on Computational Engineering Science 1991*, Patras Greece, April 21-25.
23. **Katsikadelis J.T. and Sapountzakis E.J.** (1991) "Influence of the Inplane Boundary Conditions to the Buckling Load of Plate Panels", *Proc. of the 1st National Conference on Steel Structures*, pp.163-176, Athens, Greece, June 6-7.
24. **Katsikadelis J.T. and Nerantzaki M.S.** (1992), The Boundary Element Method Applied to Dynamic Problems. In: Brebbia C.A., Dominguez J. and Paris, F. (Eds), *Boundary Elements XIV*, Vol.2: Stress Analysis and Computational Aspects, pp.55-64, Proc. *14th International Conference on Boundary Element* (BEM XIV), Seville, Spain, November, 1992, Computational Mechanics Publications, Southampton.

25. **Katsikadelis J.T.** (1992). The Boundary Element Method for Non-Linear Problems. *Proc. 1st National Congress on Computational Mechanics of GRACM*, Athens, Greece, September 3-4, Vol. I, pp.268-273.
26. **Katsikadelis J.T. and Sapountzakis E.J.** (1992). A BEM Solution to Dynamic Analysis of Plates Subjected to Inplane Forces. In: Ertas A., Ovunc, B. and Konuk I. (Eds) Vol.5, pp.41-48, ASME, *Structural Dynamics and Vibrations*, *Proc. of the 1992 Engineering Systems Design and Analysis Conference*, Istanbul, Turkey, June 29- July 3.
27. **Katsikadelis J.T. and Yiotis A. J.** (1992). Analysis of Thick Plates by the Boundary Element Method. *Proceedings of the 3rd National Congress on Mechanics of HSTAM*, Athens, June 25-27, Vol. 1, pp. 305-316.
28. **Katsikadelis J.T. and Nerantzaki M.S.** (1993). Non-linear Analysis of Plates by the Analog Equation Method. In: Brebbia C.A. & Rencis J.J. (Eds), *Boundary Elements XV*, Vol.2: Stress Analysis, pp.165-178, *Proc. 15th International Conference on Boundary Element* (BEM XV), Worcester, Massachusetts, USA, August 10-13, Computational Mechanics Publications, Elsevier Applied Science.
29. **Katsikadelis J.T., Nerantzaki M.S. and Kandilas C.B.** (1993). A BEM Approach to Non-linear Vibrations of Plates. In: Moan T. et al. (Eds), *Structural Dynamics-EURODYN '93*, pp.659-671, *Proc. of the 2nd European Conference on Structural Dynamics*: EURODYN,93, Trondheim, Norway, June 21-23, Balkema, Rotterdam.
30. **Katsikadelis J.T.** (1994). The Analog Equation Method - a Powerful BEM-based Solution Technique for Solving Linear and Nonlinear Engineering Problems. In: Brebbia C.A. (ed.), *Boundary Element Method XVI*, pp.167-182, *Proc. 16th International Boundary Element Method Conference* (BEM XVI), Southampton, UK, July 12-15, Computational Mechanics Publications.
31. **Katsikadelis J.T. and Kandilas C.B.** (1994). Solving the Elastostatic Problem by the Analog Equation Method. In: Papadrakakis M and Topping B.H.V. *Advances in Computational Mechanics*, pp.269-274, *Proc. 2nd International Conference on Computational Structures Technology*, Athens, Greece, August 30 - September 1, 1994, CIVIL-COMP Press.
32. **Katsikadelis J.T., Papadrakakis M., Koumousis V., Spiliopoulos C., Morel M., Foure B. and Raynaud D.** (1994)., Vulnerability of Buried Pipelines under Seismic Loading. Workshop: *Collaborative European Research Activities Supported by the EC for Seismic Risk Prevention and Reduction*, 9-11 November 1994, ISMES S. p. A. - Bergamo.
33. **Katsikadelis J.T.** (1995). System Identification by the Analog Equation Method. In: Brebbia C.A. (ed.), *Boundary Elements XVII*, Proc. pp.33-44, *Proc. 17th International Conference on Boundary Elements* (BEM XVII), Madison, Wisconsin, USA, July 1995. Computational Mechanics Publications, Southampton.
34. **Katsikadelis J.T. and Apostolopoulos N.** (1995). Finite Deformation Analysis of Cables by the Analog Equation Method. In: A.N. Kounadis (ed.), *Steel Structures,* pp. 355-360, *Proc. 1st European Conference on Steel Structures, Eurosteel'95*, Athens Greece, May 18-20, BALKEMA, Rotterdam.
35. **Katsikadelis J.T. and Kandilas C.B.** (1995). Plane Stress Analysis of Thin Plates with Variable Thickness by the Analog Equation Method. *Proc. of the 4th Greek National Congress on Mechanics of HSTAM*, Xanthi, June 26-29, pp.562-573.
36. **Kandilas C.B. and Katsikadelis J.T.** (1996). An Efficient Method for Solving Finite Elasticity Problems. *Proceedings of the International Symposium Dynamics of Continua,* Bad Honnef, Germany, September 9-13, pp.164-174.

37. **Katsikadelis J.T.** (1996). The Analog Equation Method. An Efficient Computational Tool for Solving Engineering Problems. *Proceedings of the International Symposium Dynamics of Continua,* Bad Honnef, Germany, September 9-13, pp.175-184.

38. **Katsikadelis J.T. and Nerantzaki M.S.** (1996). Non-Linear Structural Problems by the Analog Equation Method. *Proceedings of 2nd National Congress on Computational Mechanics*, Chania, Vol. II, pp.841-850.

39. **Nerantzaki M.S. and Katsikadelis J.T.** (1996). Vibrations of Plates with Variable Thickness. An Analog Equation Solution. In: Augusti G. et al. (Eds) *Structural Dynamics*, Eurodyn'96, Vol. II, pp. 711-717, *Proc. of the 3rd European Conference on Structural Dynamics*: EURODYN'96, Florence, Italy, June 5-8.

40. **Yiotis A.J. and Katsikadelis J.T.** (1996). Vibration Analysis of Shell Panels Using the Analog Equation Method. *International Symposium Dynamics of Continua,* September 9-13, Bad Honnef, Germany.

41. **Katsikadelis J.T. and Nerantzaki M.S.** (1997). Solving Non-linear Dynamic, Problems by the Analog Equation Method. *Proc. of the 2nd Serbian-Greek Symposium on Solid Mechanics*, Serbian Academy of Sciences and Arts, Vol. LXXII, pp.129-136, Beograd, Serbia, November 14-15, 1996.

42. **Katsikadelis J.T. and Nerantzaki M.S.** (1997). The Boundary Element Method for Non-linear Problems. *Recent Advances in Mechanics of Solids and Fluids,* Festkolloquium, Vienna, 28 November, Festschrift Vol. II.

43. **Nerantzaki M.S. and Katsikadelis J.T.** (1997). Vibrations of Plates with variable Thickness Subjected to Inplane Forces," In: Marchetti, M., Brebbia, C.A. and Aliabadi, N.H. (Eds), *Boundary Elements XIX*, pp.193-202, *Proc. of 19th International Conference on the Boundary Element Method* (BEM XIX), Rome, Italy, September 1997. Computational Mechanics Publications, Southampton.

44. **Katsikadelis J.T. and Nerantzaki, M.** (1998). A boundary-Only BEM for Linear and Non-linear Problems. In: Kassab, A., Brebbia, C.A. and Chopra, M. (Eds.), *Boundary Elements XX*, Proc. 20th International Conference on the Boundary Element Method, (BEM XX), Orlando, USA, August 19-21, Computational Mechanics Publication, Southampton, pp.309-320.

45. **Katsikadelis J.T. and Nerantzaki, M.S.** (1998). The Boundary Element Method for Nonlinear Problems. *Recent Advances in Mechanics*, *Proc. of the Greek-German-Polish-Serbian Conference*, pp.49-50, Xanthi, Greece.

46. **Nerantzaki M.S. and Katsikadelis J.T.** (1998). A BEM Solution to Static Analysis of Inhomogeneous Elastic Membranes. *Proc. of the 5th National Congress on Mechanics of HSTAM*, Vol. 2, pp. 655-652, Ioannina, Greece, August 27-30.

47. **Nerantzaki M.S. and Katsikadelis J.T.** (1998). Solving Inverse Problems by Use of the AEM. In: Tanaka. M. and Dulikravich, G. (Eds.), ISIP'98, I*nverse Problems in Engineering Mechanics*, pp. 335-340, *Proc. of the International Symposium on Inverse Problems in Engineering Mechanics*, Nagano, Japan, March 24-27, Elsevier, Tokyo.

48. **Sapountzakis E.J. and Katsikadelis J.T.** (1998). Static and Dynamic Analysis of Valley bridge Deck Slabs Reinforced with Beams. *2nd Interscientific Conference "Technology, Civilization and Decentralisation"*, Metsovo, June 3-6.

49. **Sapountzakis E.J. and Katsikadelis J.T.** (1998). Analysis of Plates Reinforced with Beams. *Proc. of the 5th National Congress on Mechanics of HSTAM*, Ioannina, August 27-30, Vol.1, pp.92-100.

50. **Sapountzakis E.J. and Katsikadelis J.T.** (1998). Analysis of Ribbed Plate Systems under Transverse and Inplane Loading. *Proc. of the 3rd National Conference on Steel Structures*, Thessaloniki, October 30-31, pp.76-83.
51. **Sapountzakis E.J. and Katsikadelis J.T.** (1998). Dynamic Analysis of Plates Reinforced with Beams. *Proc. of the Eleventh European Conference on Earthquake Engineering*, CNIT, Paris, September 6-11, Balkema, Rotterdam, pp.306.
52. **Katsikadelis J.T. and Nerantzaki M.S.** (1999). A boundary Element Solution to the Soap Bubble Problem. In: Aravas N. and Katsikadelis J.T. (Eds.), *Proc. of the 3rd National Congress on Computational Mechanics of GRACM*, Volos, Greece, June 24-26, pp.283-290.
53. **Katsikadelis J.T. and Nerantzaki M.S.** (1999). Solving Equationless Problems from Boundary Only Data. ECCM'99, *Proc. of the European Conference on Computational Mechanics*, Munich, Germany, August 31 - September 3, pp.818 & CD.
54. **Katsikadelis J.T. and Tsiatas G.C.** (1999). The Boundary Element Method for the Torsion Problem of Nonhomogeneous Anisotropic Bars. In: Aravas N. and Katsikadelis J.T. (Eds.), *Proc. of the 3rd National Congress on Computational Mechanics of GRACM*, Volos, June 24 – 26, pp. 517-526.
55. **Sapountzakis E.J. and Katsikadelis J.T.** (1999). Creep and Shrinkage Effect on the Dynamic Analysis of Reinforced Concrete Slab-and-Beam Structures. *Proc. of the European Conference on Computational Mechanics*, ECCM'99, Munich, Germany, August 31 - September 3, pp.370 & CD.
56. **Sapountzakis E.J. and Katsikadelis J.T.** (1999). Creep and Shrinkage Effect on Reinforced Concrete Slab-and-Beam Structures. *Proc. of the International Congress "Creating with Concrete"*, Dundee, Scotland, September 6-10, Volume: *Innovation in Concrete Structures*, pp.531-542.
57. **Sapountzakis E.J. and Katsikadelis J.T.** (1999). Evaluation of Interface Forces in Composite Steel - Concrete Structures. In: Aravas N. and Katsikadelis J.T. (Eds.), *Proc. of the 3rd National Congress on Computational Mechanics of GRACM*. Volos, June 24 – 26, pp.199-206.
58. **Sapountzakis E.J. and Katsikadelis J.T.** (1999). Influence of the Inplane Boundary Conditions on the Buckling Load of Ribbed Plates. *Proc. of the 2nd European Conference on Steel Structures*, Praha, Czech Republic, May 26-29, Vol.1, pp.71-74.
59. **Yiotis A.J. and Katsikadelis J.T.** (1999). Static and Dynamic Analysis of Shell Panels by the Analog Equation Method. In: Aravas N. and Katsikadelis J.T. (Eds.), *Proc. of the 3rd National Congress on Computational Mechanics*, Volos, June 24 – 26, pp.479-488.
60. **Katsikadelis J.T.** (2000). Solving Nonlinear Partial Differential Equations by the Analog Equation Method. *1st Interdisciplinary Symposium on Nonlinear Problems*, January 21-22, Athens.
61. **Katsikadelis J.T.** (2000). Dynamic Analysis of Nonlinear Membranes by the Analog Equation Method Los Angeles. In: Atluri, S.N. and Burst, F.W. (Eds.), *Advances Computational Mechanics*, Vol. II. pp. 1281-1286, *Proc. of the International Conference on Advances Computational Engineering & Sciences*, August 21-25, Los Angeles, USA. Tech Science Press, USA.
62. **Katsikadelis J.T. and Nerantzaki M.S.** (2000). The Analog Equation Method for Form Finding of Membranes by Minimal Surfaces. *Proc. of the Fourth International Colloquium on Computation of Shell and Spatial Structures*, Chania, Greece, June 5-7, Book of Abstracts, pp.154-155 and CD.

63. **Katsikadelis J.T. and Tsiatas C.G.** (2000). The Analog Equation Method for Large Deflection Analysis of Heterogeneous Anisotropic Membranes. A Boundary-only Solution, In: Brebbia, C.A. and Power, H. (Eds.), *Boundary Elements XXII*, pp. 329-338, *Proc. 22nd International Conference on the Boundary Element Method,* (BEM XXII), Cambridge, U.K., September 4-6. WITpress, Southampton.

64. **Katsikadelis J.T., Nerantzaki M.S. and Tsiatas G.C.** (2000). The Analog Equation Method for Large Deflection Analysis of Membranes. A Boundary-only Solution. *Proc. of the Fourth International Colloquium on Computation of Shell and Spatial Structures*, Chania, Greece, June 5-7, Abstract pp.144-155 & CD.

65. **Katsikadelis, J.T. and Nerantzaki, M.S.** (2000). The Ponding Problem on Membranes. An Analog Equation Solution. In: Katsikadelis J.T. et al. (Eds), *Recent Advances in Applied Mechanics,* pp.194-205, *Proc. of the International Symposium in Honor of Prof. A.N. Kounadis*, Athens, Greece, November 25.

66. **Sapountzakis E.J. and Katsikadelis J.T.** (2000). Analysis of Prestressed Concrete Slab – and – Beam Structures. *Proc. of the Fourth International Colloquium on Computation of Shell and Spatial Structures*, Chania, Greece, June 5-7, Book of Abstracts, pp. 410-411 & CD.

67. **Katsikadelis J.T.** (2001). The Analog Equation Method. A Boundary-only BEM for Nonlinear Static and Dynamic Problems in General Bodies. *Opening Lecture in 23rd International Conference on Boundary Elements Methods*, May 7-9, Lemnos, Greece.

68. **Katsikadelis J.T. and Nerantzaki, M.** (2001). The Ponding Problem on Membranes. An Analog Equation Solution. *Proc. 2nd European Conference on Computational Mechanics ECCM-2001,* June 26-29, Cracow, Poland, Book of Abstracts, pp. 552 & CD.

69. **Katsikadelis J.T. and Sapountzakis E.J.** (2001). A Realistic Estimation of the Effective Breadth of Ribbed Plates. *Proc. of the 6th National Congress on Mechanics of HSTAM,* Thessaloniki, Greece, July 19-21, Greece, Vol. I, pp. 222-227.

70. **Katsikadelis J.T. and Tsiatas G.C.** (2001). Large Deflection Analysis of Beams with Variable Stiffness. An Analog Equation Solution. *Proc. of the 6th National Congress on Mechanics of HSTAM*, July 19-21, Thessaloniki, Greece, Vol. I, pp. 172-177.

71. **Katsikadelis J.T. and Tsiatas G.C.** (2001). Nonlinear Dynamic Analysis of Heterogeneous Orthotropic Membranes. In: Beskos, D.E., Brebbia, C.A., Katsikadelis J.T. and Manolis G. (Eds), *Boundary Elements XXIII*, pp. 139-148,WITpress, Southampton.

72. **Katsikadelis, J.T.** (2001). The BEM for Vibration Analysis of Non-homogeneous bodies. In: Zingoni A. (Ed.) *Structural Engineering, Mechanics and Computation*, Vol. 1, pp. 99-110, Proc. of the International Conference on Structural Engineering, Mechanics and Computation, SEMC 2001, University of Cape Town, South Africa, July 5-7, Elsevier, Amsterdam.

73. **Sapountzakis E.J. and Katsikadelis J.T.** (2001). Optimised Model of Slab and Beam Structures. *Proc. of the 1st ALBERT CAQUOT International Conference,* Paris-CNIT, October 3-5, pp. 55-56.

74. **Yiotis A.J. and Katsikadelis J.T.** (2001). Static and Dynamic Analysis of Shell Panels Using the Analog Equation Method. *Proc. of the 6th National Congress on Mechanics of HSTAM*, July 19-21, Thessaloniki, Greece, Vol. I, pp.204-209.

75. **Katsikadelis J.T.** (2001). Finite Deformation of Elastic Cables Under 3-D Loading. *Proc. of the 4th German-Greek-Polish Symposium on Advances in Mechanics*, Warsaw-Pultusk, Poland, September 18-22.

76. **Tsiatas G.C and Katsikadelis, J.T.** (2001). Large Deflection Analysis of Cable Supported Membranes. *Proc. of the 4th German-Greek-Polish Symposium on Advances on Mechanics,* pp.65-66, Warsaw-Pultusk, Poland, September 18-22.

77. **Yiotis A.J. and Katsikadelis J.T.** (2001). The Boundary Element Method for Nonlinear Analysis of Shells. *Proc. of the 4th German-Greek-Polish Symposium on Advances on Mechanics*, Warsaw-Pultusk, Poland, September 18-22.

78. **Tsiatas G.C and Katsikadelis, J.T.** (2001). The Domain Decomposition Method for Nonlinear Problems with Application on Membranes. *Proc. of the XXIII Yugoslav Congress of Theoretical and Applied Mechanics*, Belgrade, October, 12-14.

79. **Katsikadelis J.T.** (2001). The Analog Equation Method.-A Boundary-Only Integral Equation Method for Nonlinear Static and Dynamic Problems in General Bodies**.** *Proc. of the 4th German-Greek-Polish Symposium on Advances on Mechanics*, Warsaw-Pultusk, Poland, September 18-22.

80. **Katsikadelis J.T.** (2001). The Analog Equation Method.-A Boundary-only Integral Equation Method for Nonlinear Static and Dynamic Problems in General Bodies. *Proc. of the XXIII Yugoslav Congress of Theoretical and Applied Mechanics*, Belgrade, October, 12-14.

81. **Sapountzakis E.J. and Katsikadelis J.T.** (2002). Interface Forces in Composite Steel-Concrete Structures with Deformable Connection. *Proc. of the 4th National Congress on Steel Structures*, Patras, May 24-25, Vol. II, pp. 412-420.

82. **Nerantzaki, M. and Katsikadelis J.T.** (2002). Ponding on Floating Membranes. In: Brebbia, C.A., Tadeu, A and Popov, V. (Eds), *Boundary Elements XXIV*, pp. 119-230, *Proc. of the 24th Boundary Element Methods and Meshless Solutions Seminar* (BEM XXIV), June 17-19, Sintra, Portugal, WITpress, Southampton.

83. **Katsikadelis J.T.** (2002). Finite Deformation of Cables under 3-D Loading: An Analytic Solution. In: D.E. Beskos, D.L. Karabalis and A.N. Kounadis (Eds), *Proc. of the 4th National Congress on Steel Structures*, Patras, May 24-25, Vol. II, pp. 526-534.

84. **Katsikadelis J.T. and Tsiatas G.C.** (2002). Nonlinear Dynamic Analysis of Beams with Variable Stiffness.-An Analog Equation Solution. In : D.E. Beskos, D.L. Karabalis and A.N. Kounadis (Eds), *Proc. of the 4th National Conference on Steel Structures*, Patras, Greece, May 24-25, Vol. II, pp. 376-384.

85. **Katsikadelis J.T. and Yiotis A.J.** (2002). The BEM for Linear Buckling of Plates with Variable Thickness. An Analog Equation Solution. In: D.E. Beskos, D.L. Karabalis and A.N. Kounadis (Eds), *Proc. of the 4th National Congress on Steel Structures*, Patras, May 24-25, Vol. II, pp. 175-183.

86. **Katsikadelis J.T. and Yiotis A.J.** (2002). The BEM for Plates with Variable Thickness on Biparametric Elastic Foundation. An Analog Equation Solution. In: Tsahalis D.T. (Ed.), *Proc. of the 4th National Congress on Computational Mechanics of GRACM*, Patras, Greece, June 27–29, Vol. VI., pp. 1528-1534.

87. **Tsiatas G.C and Katsikadelis, J.T.** (2002). Nonlinear Analysis of Elastic Space Membranes. In: Tsahalis D.T. (Ed.), *Proc. of the 4th National Congress on Computational Mechanics of GRACM*, Patras, Greece, June 27–29, Vol. III, pp. 1162-1169.

88. **Kokkinos, F.T. Katsikadelis, J.T.** (2002). A boundary-only Method for 3D-Stress Analysis of Plates Based on the Analog Equation Concept. In: Tsahalis D.T. (Ed.), *Proc. of the 4th GRACM Congress on Computational Mechanics*, Patras, Greece, June 27–29, Vol. I, pp. 21-28.

89. **Kokkinos, F.T. Katsikadelis, J.T.** (2002). A Boundary-only 3-D Analysis of Thick Infill Walls under Unilateral Interface Conditions. In: Baniotopoulos Ch. (Ed.), *Proc. of the International Conference on Nonsmooth / Nonconvex Mechanics with Applications in Engineering*, Aristotle University of Thessaloniki , Thessaloniki, Greece, July 5-6, pp. 183-190.

90. **Nerantzaki, M. and Katsikadelis J.T.** (2003). The BEM for Large Deflection Analysis of Plates with Variable Thickness. In: Callego R. and Aliabadi M.H. (Eds), *Proc. of the 4th International Conference on Boundary Element Techniques*, Granada July 15-17, Granada, Spain, pp. 353-358.

91. **Tsiatas G.C and Katsikadelis J.T.** (2003). The Domain Decomposition Method for Nonlinear Analysis of Elastic Space Membranes. *Proc. of the International Conference on Computational & Experimental Engineering and Sciences*, ISCES'03, Corfu, Greece, July 24-29, CD-ROM.

92. **Katsikadelis J.T. and Yiotis A. J.** (2003). The BEM for Dynamic Analysis of Plates of Variable Thickness. *Proc. of the International Conference on Computational & Experimental Engineering and Sciences*, ISCES 03 Corfu, Greece, July 24-29, CD-ROM.

93. **Katsikadelis J.T.** (2003). Solving Equationless Problems in Elasticity Using Only Boundary Data. In: Tanaka M. (Ed.), *Inverse Problems In Engineering Mechanics IV, Proc. of the International Symposium on Inverse Problems in Engineering Mechanics,* ISIP'03, Nagano City, Japan, February 18-21. Elsevier.

94. **Katsikadelis J.T. (**2003). The Nonlinear BEM. *Proc. of the 20th Int. Conference on Mathematical Modeling in Solid Mechanics, Boundary and Finite Element Methods*, *St.* Petersburg, Russia, September 24-26, Vol. II, pp. 232-242.

95. **Kokkinos, F.T. Katsikadelis, J.T.** (2004). 3D-Stress Analysis of Anisotropic Plates Using a Boundary-Only Hybrid Method, *Proc. 11th European Conference on Composite Materials*, May 31-June 3, Rhodes Greece, pp. ?-?.

96. **Katsikadelis, J.T. and Yiotis, A.J.** (2004). Nonlinear Vibrations of Shell Panels Using the Analog Equation Method. In: Kounadis A., Providakis C. and Exadaktylos G. (Eds.), *Proc. of the 7th National Congress on Mechanics of HSTAM*, Chania, Greece, June 24–26, pp. 124-129.

97. **J.T. Katsikadelis, G.C. Tsiatas** (2004). Vibration Control of Beams by Shape Optimization. In: Kounadis A., Providakis C. and Exadaktylos G. (Eds.), *Proc. of the 7th National Congress on Mechanics of HSTAM*, Chania, Greece, June 24–26, Vol. II, pp. 118-123.

98. **Nerantzaki, M.S., Katsikadelis, J.T. and Platanidi, J.G** (2004). The BEM for the Elastostatic Problem in Inhomogeneous Plane Bodies. In: Kounadis A., Providakis C. and Exadaktylos G. (Eds.), *Proc. of the 7th National Congress on Mechanics of HSTAM*, (eds.), Chania, Greece, June 24–26, pp. 112-117

99. **Katsikadelis, J.T**. (2004)**.** The BEM for Non-homogeneous Bodies. *German-Greek-Polish Symposium* September 12-18, Bad Honnef, Germany, Book of Abstracts, pp. 31-32.

100. **J.T. Katsikadelis, G.C. Tsiatas** (2004). Buckling Load Optimization of Beams*. German-Greek-Polish Symposium* September 12-18, Bad Honnef, Germany, Book of Abstracts, pp. 33-34.

101. **Nerantzaki, M. and Katsikadelis J.T.** (2005). Nonlinear Vibrations of Axisymmetric **Circular** Plates with Variable Thickness. In: Kassab A. et al. (Eds) *Boundary Elements XXVII*, pp. 275-276, *Proc. of the 27th International Conference on Boundary Elements and*

other Mesh Reduction Methods (BEM/MRM 27), March, 2005, Orlando, USA, WITpress, Southampton.

102. **Katsikadelis, J.T**. (2005). A BEM based Meshless Variational Method for the Complete Second Order Partial Differential Equation on Domains of Arbitrary Shape. *Proc. of the 5th GRACM International Conference on Computational Mechanics, GRACM'05,* Limassol, Cyprus, June 29-July 1, pp.903-910.

103. **Katsikadelis, J.T. and Tsiatas, C.G.** (2005). Optimum Design of Structures Subjected to Follower Forces. *Proc. of the International Symposium of Nonconservative and Dissipative Problems in Mechanics*, Serbian Academy of Sciences and Arts, Novisad, Serbia and Montenegro, Sept. 11-14.

104. **Katsikadelis, J.T.** (2006). The Meshless Analog Equation Method. A New Highly Accurate Truly Mesh-Free Method for Solving Partial Differential Equations. In: Brebbia C.A. and Katsikadelis J.T. (Eds) *Boundary Elements and Other Mesh Reduction Methods,* pp. 13-22, *Proc of the 28th International Conference on Boundary Elements and other Mesh reduction Methods (BEM/MRM 28),* May 10-12, 2006, Esperides Hotel, Skiathos, Greece.

105. **Katsikadelis, J.T.** (2006). The Meshless Analog Equation Method. A New Highly Accurate Mesh-Free Method for Solving Linear and Nonlinear PDEs. *Proceedings, International Conference on Contemporary Problems in Civil Engineering*, Subotica, June 2- 3, 2006.

106. **Chinnaboon B, Chucheepsakul S. and Katsikadelis J.T.** (2006). A BEM-based Meshless Method for Plates on Biparametric Elastic Foundation. In: Kanok-Nikulchi W. et al. (Eds), *Proceedings of The Tenth East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-10),* August 2-4, Bangkok, Thailand, Vol. 1, pp. 155-160.

107. **Katsikadelis, J.T.** (2006). The Meshless Analog Equation Method (MAEM) for the Elastostatic Problem in Inhomogeneous Anisotropic Bodies. In: Kanok-Nikulchi W. et al. (Eds), *Proc. 10thEast Asia-Pacific Conference on Structural Engineering & Construction* (EASEC-10). EMERGING TRENDS: Keynote lectures and Symposia, pp. 167-174 August 2-4, Bangkok.

108. **Chinnaboon B, Chucheepsakul S. and Katsikadelis J.T.** (2006). A BEM-based Meshless Method for Buckling Analysis of Elastic Plates. *CST 2006*, *The Eighth International Conference on Computational Structures Technology*, Spain, September 12-15, paper 173.

109. **Katsikadelis, J.T.** (2007). A generalized Ritz Method for Partial Differential Equations In Domains of Arbitrary Geometry Using Global Shape Functions. *Proc. of First Serbian (26th YU) Congress on Theoretical and Applied Mechanics*, Kopaonik, Serbia, April 10-13, 2007, pp. 15-28.

110. **Katsikadelis, J.T. and Platanidi, J.** (2007). 3D Analysis of Thick Shells by the Meshless Analog Equation Method (MAEM). *Proc. of First Serbian (26th YU) Congress on Theoretical and Applied Mechanics*, Kopaonik, Serbia, April 10-13, 2007, pp. 475-484.

111. **Katsikadelis, J.T. and N. Babouskos** (2007). A BEM Based Meshless Variational Method for Solving Linear and Nonlinear Plate Problems. *Proc. of First Serbian (26th YU) Congress on Theoretical and Applied Mechanics*, Kopaonik, Serbia, April 10-13, 2007, pp. 463-474. (The paper Received the NTUA Thomaidio Award)

112. **Katsikadelis, J.T. and Yiotis, A.** (2007). Nonlinear Analysis of Cylindrical Shells Using the Analog Equation Method. A Boundary-only Solution. *Proc. of First Serbian*

(26th YU) Congress on Theoretical and Applied Mechanics, Kopaonik, Serbia, April 10-13, 457-461.

113. **Tsiatas, C.G. and Katsikadelis, J.T.** (2007). Post-critical Behaviour of Damped Beam Columns with Variable Cross-section Subjected to Distributed Follower Forces. *Proc. of 8th International Congress on Mechanics of HSTAM*, Patras, Greece, July 12 – 14, Vol. II, pp. 859-866.

114. **Katsikadelis, J.T. and Babouskos N.** (2007). Post-buckling Analysis of Plates. - A BEM Based Meshless Variational Solution. *Proc. of 8th International Congress on Mechanics of HSTAM*, Patras, Greece, July 12 – 14, Vol. I, pp. 177-184.

115. **Katsikadelis, J.T.** (2007). The Meshless Analog Equation Method (MAEM) for the 3D Elastostatic Problem in Inhomogeneous Anisotropic Bodies. *Proc. of 8th International Congress on Mechanics of HSTAM*, Patras, Greece, July 12 – 14, Vol. I, pp. 137-144.

116. **Katsikadelis, J.T.** and **Yiotis, A.** (2007). Linear Buckling Analysis of Cylindrical Shell Panels Using BEM. *Proc. of 8th International Congress on Mechanics of HSTAM*, Patras, Greece, July 12 – 14, Vol. II, pp. 889-896.

117. **Katsikadelis J.T.** (2007). The Meshless Analog Equation Method for PDEs. In: Katsikadelis J.T. (Ed.), *Recent Advances in Mechanics*, Book of Abstracts, pp. 93-94, *6th German-Greek-Polish Symposium on Recent Advances in Mechanics,* September 17-21, Alexandroupolis, Greece.

118. **Katsikadelis J.T.** and **Babouskos N.** (2007). Flutter Instability of Damped Plates under Conservative and Nonconservative Loads. In: Katsikadelis J.T. (Ed.), *Recent Advances in Mechanics*, Book of Abstracts, pp.101-102, *6th German-Greek-Polish Symposium on Recent Advances in Mechanics,* September 17-21, Alexandroupolis, Greece.

119. **Katsikadelis J.T.** (2008). Fractional Vibrations of Inhomogeneous Membranes. *Proc. of the 6th International Congress on Computational Mechanics of GRACM,* Thessaloniki, Greece, June19-21, Book of Abstracts, pp. 44 and CD.

120. **Babouskos, N. Katsikadelis J.T.** (2008). Nonlinear Flutter Oscillations of Thin Plates. *Proc. of the 6th International Congress on Computational Mechanics of GRACM,* Thessaloniki, Greece, June19-21, Book of Abstracts, pp. 46, & CD.

121. **Yiotis, A.J** and **Katsikadelis, J.T.** (2008). The Meshless Analog Equation Method for the Solution of Plate Problems. *Proc. of the 6th International Congress on Computational Mechanics of GRACM,* Thessaloniki, Greece, June19-21, Book of Abstracts, pp. 94, & CD

122. **Katsikadelis J.T.** (2008). Numerical Solution of Fractional Differential Equations. – Applications to Physical Systems. In: Atanackovic, T.M. and Katsikadelis, J.T. (Eds), *Recent Advances in Mechanics*, pp. 37-38, *Proc. of the 3rd Serbian-Greek Symposium*, Novi Sad, Sept. 15-17.

123. **Katsikadelis J.T. and Babouskos N.** (2008). The Nonlinear Fractional Oscillations of Viscoelastic Plates and their Postbuckling Response. In: Atanackovic, T.M. and Katsikadelis, J.T. (eds.) *Recent Advances in Mechanics*, pp. 47-48, *Proc. of the 3rd Serbian-Greek Symposium*, Novi Sad, Sept. 15-17.

124. **Tsiatas, C.G. and Katsikadelis, J.T.** (2009). A BEM Solution of the Saint-Venant Torsion Problem for Micro-bars. *Proc. of the International Conference on Boundary Element Techniques* BeTeq'09, July 22-24, Athens, Greece.

125. **Yiotis, A.** and **Katsikadelis, J.T.** (2009). The Meshless Analog Equation Method for the Buckling of Plates with Variable Thickness. *International Conference on Boundary Element Techniques* BeTeq'09, July 22-24, Athens, Greece.

126. **Babouskos, N.** and **Katsikadelis, J.T.** (2009). The BEM for Optimum Design of Plates. *Proc. of the International Conference on Boundary Element Techniques* BeTeq'09, July 22-24, Athens, Greece.

127. **Katsikadelis J.T.** (2009). Nonlinear Vibrations of Viscoelastic Membranes of Fractional Derivative Type. *Proc. of the International Conference on Boundary Element Techniques* BeTeq'09, July 22-24, Athens, Greece.

128. **Bacas N., Babouskos N., Kokkinos F.T.** and **Katsikadelis J.T.** (2009). Influence of Infill Walls in the Dynamic Response of Buildings via a B.E. Modeling. *Proc. of the International Conference on Boundary Element Techniques* BeTeq'09, July 22-24, Athens, Greece.

129. **Katsikadelis, J.T. and Babouskos, N.** (2009). Postbuckling Analysis of Viscoelastic Plates with Fractional Derivative Model. *Proc. of the 2nd South-East European Conference on Computational Mechanics,* June 22-24, Rhodes, Greece.

130. **Katsikadelis, J.T.** (2009). Numerical Solution of Fractional Differential Equations. Application to Structural Systems. *Proc. of the Royal Golden Jubilee-PhD Congress X*, pp. 78, April, 3-5, Pattaya, Thailand.

131. **Babouskos, N.G.** and **Katsikadelis, J.T.** (2010). Plate Buckling Optimization under Conservative and Nonconservative Loads. An AEM Solution, *Proc. 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, 12 – 14 July, 2010*, Book of Abstracts and CD.

132. **Katsikadelis, J.T.** (2010). Nonlinear Resonance of Viscoelastic Membranes of Fractional derivative type, *Proc. 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, 12 – 14 July, 2010*, Book of Abstracts and CD.

133. **Katsikadelis, J.T. and Babouskos, N.** (2010). Preventing Debonding in RIB-Stiffened Plates, *Proc. First Greek- Ukrainian- First National Congress on Fracture Mechanics*, Xanthi, Greece, October 20-23, 2010, Book of Abstracts, pp.68-69.

134. **Katsikadelis, J.T.** (2010), Numerical solution of partial fractional differential equations. Application to engineering structures, *Proc. 7th German-Greek-Polish Symposium "Recent Advances in Mechanics"*, Poznań, Poland September 19-22, 2010, Book of Abstracts pp. 43-46.

135. **Yiotis, A.J. and Katsikadelis, J.T.** (2010). The MAEM for the Dynamic Analysis of Plates with Variable Thickness, *Proc. 7th German-Greek-Polish Symposium "Recent Advances in Mechanics"*, Poznań, Poland September 19-22, 2010, Book of Abstracts, pp. 121-124.

136. **Tsiatas, G.C. and Katsikadelis, J.T** (2011). Nonlinear Analysis of Elastic Space Cable-Supported Membranes, *7th GRACM International Congress on Computational Mechanics*, Athens, 30 June – 2 July 2011.

137. **Babouskos, N.G. and Katsikadelis, J.T** (2011). Dynamic Analysis of Viscoelastic Plates of Variable Thickness Modeled with Fractional Derivatives, *7th GRACM International Congress on Computational Mechanics*, Athens, 30 June – 2 July 2011.

138. **Katsikadelis, J.T** (2011). A New Direct Time Integration Method for the Equations of Motion in Structural Dynamics, *Proc.* 3rd *(28th Yu) Congress on Theoretical and Applied Mechanics*, Vlasina lake, Serbia, 5-8 July 2011, pp. 1221-1235

139. **Katsikadelis, J.T and Babouskos, N.G.** (2011). Nonlinear Flutter Instability of Viscoelastic Plates, *4th Serbian-Greek Symposium on "Recent Advances in Mechanics,"* Vlasina lake, Serbia, 9-11 July 2011.

140.**Katsikadelis, J.T and Babouskos, N.G.** (2011). The BEM for buckling analysis of viscoelastic plates modelled with fractional derivatives, *BEM/MRM 2011, 33rd International Conference on Boundary Elements and other Mesh Reduction Methods*, 28 - 30 June 2011, New Forest, UK.

141. **Yiotis, A.J. and Katsikadelis, J.T.** (2011). The Meshless Analog Equation Method for Plates with Variable Thickness on Biparametric Elastic Foundation, *4th Serbian-Greek Symposium on "Recent Advances in Mechanics,"* Vlasina lake, Serbia, 9-11 July 2011.

142.**Katsikadelis, J.T.** (2011)., Numerical solution of distributed Order Fractional Differential Equations with Applications to Mechanics, *Proc. 1st Greek-Russian Symposium on Mechanics*, Xanthi, Greece, October 10-13, 2011, Book of Abstracts, pp.?

143.**Katsikadelis, J.T.** (2012). The Problem of Distributed Order Fractional Oscillator and its Numerical Solution, ICCES'12, Crete, Greece, April 30- May 4, 2012.

144.**Katsikadelis, J.T and Babouskos, N.G.** (2012). Debonding in Beam-Reinforced Plates, *Proc. International Conference on Damage Mechanics*, Belgrade, Serbia, 25-27 June , 2012

145.**Katsikadelis, J.T.and Babouskos**, **N.G.** (2012). Flutter Load Optimization of thin Elastic Plates, *Proc. International Jubilee Conference UACEG2012: Science & Practice*, 15-17 November 2012.

146.**Yiotis, A.J. and Katsikadelis, J.T.** (2013). Thick plates on Biparametric Elastic Foundations: a MAEM Solution, *c 10th HSTAM International Congress on Mechanics*, Chania, Crete, Greece, 25 – 27 May, 2013**.**

147.**Katsikadelis, J.T.** (2013). A New Direct Time Integration Scheme for Nonlinear Equations of Motion in Structural Dynamics, *Proc. 10th HSTAM International Congress on Mechanics*, Chania, Crete, Greece, 25 – 27 May, 2013

148.**Katsikadelis, J.T.** (2013). Generalized Fractional Derivatives and beyond them. Applications to Mechanical Systems, *Proc. 8th German-Greek Polish Symposium September*, Goslar, Germany, September, 9-13, 2013.

149.**Yiotis, A.J. and Katsikadelis, J.T** (2013). Modeling Via the MAEM: Buckling of Cylindrical Shell Panels, *Proc. 8th German-Greek Polish Symposium,* Goslar, Germany, September, 9-13, 2013.

150.**Babouskos, N.G. and Katsikadelis, J.T** (2013). Regulating the Vibratory Motion of Plates Using Thickness Optimization", *Proc. 8th German-Greek Polish Symposium*, September, Goslar, Germany, September, 9-13, 2013.

151.**Babouskos, N.G. and Katsikadelis, J.T** (2015). Static analysis of thick layered anisotropic plates with BEM, *8th GRACM International Congress on Computational Mechanics*, Volos, 12 July – 15, 2015

152.**Yiotis, A.J. and Katsikadelis, J.T.** (2015). Dynamic analysis of cylindrical shell panels. A MAEM solution, *8th GRACM International Congress on Computational Mechanics*, Volos, 12 July – 15, 2015

153.**Katsikadelis, J.T.** (2015). A new direct time integration method for the semi-discrete parabolic equations, *8th GRACM International Congress on Computational Mechanics*, Volos, 12 July – 15, 2015.

154.**Katsikadelis, J.T.**,(2016) The principle of the analog equation and its application to the boundary element method, Mechanics through Mathematical Modelling, Symposium in the honor of the 70th birthday of Academician Teodor Atanackovic, Novi Sad, September 7-10, 2015, Book of Abstracts.

155. **Yiotis, A.J. and Katsikadelis, J.T**. (2016). Dynamic Analysis of Thick Plates on Biparametric Elastic Foundation. A MAEM Solution, 11th HSTAM International Congress on Mechanics, Athens, Greece, 27 – 30 May, 2016, Book of Abstarcts

156. **Katsikadelis J.T.** (2016). The Virtual Reciprocal Theorem in Mechanics and Its Application to the Boundary Element Method, 11th HSTAM International Congress on Mechanics, Athens, Greece, 27 – 30 May, 2016, Book of Abstracts

157. **Babouskos N. and Katsikadelis J.T.** (2016). Dynamic Analysis of Thick Laminated Anisotropic Plates With BEM, 11th HSTAM International Congress on Mechanics, Athens, Greece, 27 – 30 May, 2016, Book of Abstracts

158. **Nerantzaki M.S. and Katsikadelis, J.T.** (2016). A New Boundary Element Solution of the Plate Problem Based on Almansi Representation of the Biharmonic Equation, 11th HSTAM International Congress on Mechanics, Athens, Greece, 27 – 30 May, 2016, Book of Abstracts

159. **Katsikadelis J.T.** (2016). Derivation of Newton's law of motion from Kepler's laws of planetary motion, 9th German-Greek-Polish Symposium, Recent Advances in Mechanics, September, 4-9, 2016, Kolympari, Chania, Greece, Book of Abstracts.

160. **Yiotis A.J. and Katsikadelis J.T.** (2016). Dynamic Analysis of Thick Plates on Biparametric Elastic Foundation. A MAEM Solution, 9th German-Greek-Polish Symposium, Recent Advances in Mechanics, September, 4-9, 2016, Kolympari, Chania, Greece, Book of Abstracts.

161. **Katsikadelis J.T.** (2018) Numerical solution of variable order fractional differential equations. Applications to mechanics, 9th GRACM International Congress on Computational Mechanics, Chania, 4 June – 6 June 2018.

162. N**erantzaki M.S.** and **Katsikadelis J.T.** (2018) A new boundary Element solution to plates on elastic foundation via Helmholtz's potentials, 9th GRACM International Congress on Computational Mechanics, Chania, 4 June – 6 June 2018.

163. **Yiotis A.J**. and **Katsikadelis J.T.** (2018), The MAEM for the viscoelastic analysis of cylindrical shell panels, 9th GRACM International Congress on Computational Mechanics, Chania, 4 June – 6 June 2018.

164. **Babouskos N**. and **Katsikadelis J.T.** (2018) Influence of time derivatives in the boundary conditions of viscoelasticity problems, 9th GRACM International Congress on Computational Mechanics, Chania, 4 June – 6 June 2018.

165. **Yiotis A.J. and Katsikadelis J.T.** (2019). Vibration Analysis of Orthotropic Plates: A MAEM Solution, Book of Abstracts, (eds. Euripides Papamichos and George D. Manolis), pp. 105-106, Thessaloniki, Greece, September 22-25.