Dr. Euripidis MISTAKIDIS

Professor of Structural Analysis

Department of Civil Engineering – University of Thessaly – Volos – Greece

Curriculum Vitae

1 PERSONAL DATA

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1.1 Education - Training

October 1987	Diploma in Civil Engineering, Aristotle University of Thessaloniki, School of Technology, Department of Civil Engineering.
June 1992:	Doctoral degree, Department of Civil Engineering, Aristotle University, Thessaloniki, Greece

1.2 Professional – academic background

Current position	Full Professor of Structural analysis, Dept. of Civil Engineering Univ. of Thessaly – Greece Consultant for the structural analysis and design of special projects
2005-2011	Assoc. Professor of Structural analysis, Dept. of Civil Engineering Univ. of Thessaly - Greece
2000 – 2005	Assistant Professor of Structural analysis, Dept. of Civil Engineering Univ. of Thessaly - Greece
1987 – 1998	Research Associate – Dept. of Civil Eng. Aristotle Univ.- Thessaloniki
1993 – 2000	Software consultant for CUBUS Greece Ltd. Development of the steel structures analysis and design module of the company, according to Eurocode 3. Work as a Structural Engineer. Analysis and design of various structural projects (mainly university, research and medical buildings and complexes, hotels, industrial buildings, etc).
2000 – to date	Work as a Structural Analysis and Design Consultant. Analysis and design of various structural projects (mainly university, research and medical buildings and complexes, hotels, industrial buildings, etc).

1.3 Languages spoken

Greek, English

2 ACADEMIC ACTIVITY

2.1 Teaching (undergraduate courses)

Teaching of the following courses at the Department of Civil Engineering, University of Thessaly:

- Mechanics of the Undeformable body (1994-2000)
- Mechanics I (1995-96)
- Mechanics II (1995-96)
- Structural Analysis I (1995- to date)
- Structural Analysis II (1996- to date)
- Structural Analysis III (1996-2004)
- Modelling of Civil Engineering Structures (2009- to date)

2.2 Teaching (postgraduate courses)

Teaching of the following courses in the context of the Postgraduate Studies Program "Applied mechanics and systems simulation", Dept. of Civil Engineering, University of Thessaly:

- Advanced structural analysis
  Spring semesters 2004-2005, 2005-2006, 2006-2007, 2008-2009, 2009-2010, Winter semester 2010-2011

Teaching of the following courses in the context of the Postgraduate Studies Program "Analysis and Design of energy infrastructure constructions", Dept. of Civil Engineering, University of Thessaly:

- Design of shell structures
  Spring semester 2015-2016, Winter semester 2017-2018.

2.3 Supervision of doctoral dissertations

Supervision of the following dissertations at the Dept. of Civil Engineering, University of Thessaly:

- **Konstantinos Tzaros**
  Start date: 14/12/2005
  Unilateral buckling of geometrically perfect and imperfect beams
  (Defended successfully, April 2011)
- **Kyriaki Georgiadi-Stefanidi**
  Start date: 18/5/2007
  Numerical simulation of the behavior of fiber-reinforced concrete
  (Defended successfully, June 2012)
- **Daphne Pantousa**
  Start date: 16/7/2009
  Behavior of structures in fire-after-earthquake conditions
  (Defended successfully, December 2013)
- **Apostolos Koukouselis**
  Start date: 20/5/2013
  Analysis and design of axially compressed cylindrical cementitious shells
  (Defended successfully, September 2016)

- **Kalliopi Zografopoulou**
  Start date: 20/5/2014
  Fire behaviour of structures with damaged fire protection coatings

2.4 Fields of specialization

- Analysis and design of steel and composite structures
- Buckling and stability of structures
- Behaviour of steel and composite structures at elevated temperatures
- Dynamics of offshore structures, wave-soil-structure interaction
- Buckling of shells (steel, cementitious)
- Development of methods for the assessment of the seismic behaviour of structures. Improvement of the seismic behavior of existing structures through innovative technologies.
- Development of methods for nonconvex – nonsmooth optimization and applications in structural analysis.
- Numerical simulation of the structural response of civil engineering structures and components (steel and composite joints, fibre reinforced concrete members, thin-walled structures).

2.5 Editorial board member

- The open construction & building technology Journal, Bentham open
- Advances in Concrete Constructions
- Coupled Systems Mechanics
- Computers and Structures (Guest editor)

2.6 Participation in conference scientific/organization committees

- International Conference on Nonsmooth/Nonconvex mechanics, Thessaloniki, July 2002 (member of the Scientific Committee).
- 6th International Conference on Computational Structures Technology, 4-6 September 2002, Prague, Czech Republic (member of the Scientific Committee).
- 7th International Conference on Computational Structures Technology, 7-9 September 2004, Lisbon, Portugal (member of the Scientific Committee).
- 10th International Conference on Civil, Structural and Environmental Engineering Computing, 30 August - 2 September 2005, Rome, Italy (member of the Scientific Committee).
- 5th National Conference of Steel Structures, Xanthi, 2005 (member of the Scientific Committee).
- 2nd International Conference on Nonsmooth/Nonconvex mechanics, Thessaloniki, July 2006 (member of the Scientific Committee).
- 8th International Conference on Computational Structures Technology, 12-15 September 2006, Las Palmas de Gran Canaria, Spain (member of the Scientific Committee).
- 11th International conference on Civil, Structural and Environmental Engineering Computing, Malta, 18-21 September 2007 (member of the Scientific Committee).
- 9th International Conference on Computational Structures Technology, 12-15 September 2008, Athens, Greece (member of the Scientific Committee).
- 3rd Hellenic Conference on Seismic Engineering and Seismology, Athens, 2008 (member of the Scientific Committee).
- 6th National Conference of Steel Structures, Ioannina, 2008 (member of the Scientific Committee).

- 5th Contact Mechanics International Symposium, Chania, April 28-30, 2009 (member of the Scientific Committee).
- 12th International conference on Civil, Structural and Environmental Engineering Computing, Madeira, 1-4 September 2009 (member of the Scientific Committee).
- Urban habitat constructions under catastrophic events, COST-C26 Final Conference, Naples, 16-18 September 2010 (member of the Scientific Committee).
- 7th National Conference of Steel Structures, Volos, 2011 (**Chairman of the Conference**, member of the organizing and scientific committees).
- Behaviour of Steel Structures in Seismic Areas (STESSA), Sandiago, Chile, 2012 (Member of the International Advisory Committee).
- 13th International Conference on Civil, Structural and Environmental Engineering Computing, Chania, September 2011 (member of the Scientific Committee).
- III South-East European Conference on Computational Mechanics, June 2013, Kos, Greece (member of the Scientific Committee).
- 12th International Conference on Computational Structures Technology, 2-5 September 2014, Naples, Italy (member of the Scientific Committee).
- CESARE'14 Civil Engineering for Sustainability & Resilience Conference, 24-27 April 2014, Amman, Jordan (member of the Scientific Committee).
- EUROSTEEL 2014: 7th European Conference on Steel and Composite Structures, 10-12 September 2014, Naples, Italy (member of the Scientific Committee).
- 8th National Conference of Steel Structures, Tripoli 2014 (member of the organizing and scientific committees)
- The 2014 International Conference on Advances in Concrete Construction, 24-28 August 2014, 24-28 August 2014, Busan, Korea (member of the Scientific Committee).
- The 2014 International Conference on Advances in Concrete Construction, 24-28 August 2014, 24-28 August 2014, Busan, Korea (member of the Scientific Committee).
- 2016 International Conference on Research Progress of Material Science and Engineering (RPMSE 2016), August 12-14 2016, Guangzhou, China (member of the Scientific Committee).
- PROHITEC 2017: 3rd International Converence on Protection of Historical Constructions, 12-15 July 2017, Lisbon, Portugal (member of the Scientific Committee).
- EUROSTEEL 2017: 8th European Conference on Steel and Composite Structures, 13-15 September 2017, Copenhagen, Denmark (member of the Scientific Committee).
- 9th National Conference of Steel Structures, Larissa, 2017 (**Chairman of the Conference**, member of the organizing and scientific committees).

2.7 Member of scientific committees

- Member of the evaluation committee for the Greek Code on rehabilitation of existing buildings.
- Member of the scientific committee for the planning and monitoring of the seismic evaluation of school buildings (Greek School Buildings Organization).
- Reviewer of research proposals for the Greek Secretariat for Research and Technology.
- Member of the scientific committee for the planning and monitoring of the seismic evaluation of public buildings (Greek Seismic Planning and Protection Organization).
- Expert of the European Science Foundation for the evaluation of proposals submitted in the open calls of FP7.
- National Representative in the COST Committee of Senior Officials (CSO), 2006-2010, following an open call by the Greek Secretariat of Research and Technology.

- Vice-chair of COST-C26 action on “Urban Habitat Constructions under Catastrophic Events”.

2.8 Membership in Scientific Societies

- Hellenic Steel Structures Research Society (President of the administrative board from 10/1/2016, Vice-president from 2010 to 2015).
- Technical Chamber of Greece
- Greek Society of Civil Engineers
- Greek Society of Computational Mechanics
- Greek Society of Wind Engineering (founding member)
- Hellenic Section for Earthquake Engineering

2.9 Administrative positions

- Vice-chairman of the department of Civil Engineering, University of Thessaly (2006-2008).
- Member of the Technical Council of the Univ. of Thessaly (2003-2015), Vice-Chair of the Council (2004-2014), Chair of the Council (2014-2015).
- Director of the Laboratory of Structural Analysis and Design of the University of Thessaly (from its establishment till today)
- Director of the program of Postgraduate Studies of the Dept. of Civil Engineering with the title "Applied Mechanics and Systems Simulation" (Sept. 2009 – 2013).
- Director of the program of Postgraduate Studies of the Dept. of Civil Engineering with the title " Analysis and Design of energy infrastructure constructions" (Sept. 2017 – to date).

3 PUBLICATIONS

3.1 DOCTORAL DISSERTATION

E.S. Mistakidis, “*Theoretical and Numerical Study of Structures with Nonmonotone Boundary and Constitutive Laws / Algorithms and Applications”*, Doctoral Thesis Aristotle University, 1992 (in Greek)

3.2 BOOKS (Monographs)

1. E.S. Mistakidis, G.E. Stavroulakis, “*Nonconvex Optimization in Mechanics. Smooth and Nonsmooth Algorithms, Heuristics and Engineering Applications by the F.E.M.*”, Kluwer, 1998, ISBN 0-7923-4812-5.

3.3 EDITED VOLUMES

1. F. Mazzolani, E. Mistakidis, R.P. Borg, M. Byfield, G. DeMatteis, D. Dubina, M. Indirli, A. Mandara, J.P. Muzeau, F. Wald, Y. Wang (editors), “Urban habitat constructions under catastrophic events”, University of Malta, 2008, ISBN 978-99909-44-40-2, (518 pages).
2. F. Mazzolani, M. Byfield, G. DeMatteis, D. Dubina, B. Faggiano, M. Indirli, A. Mandara, E. Mistakidis, J.P. Muzeau, F. Wald (editors), Urban Habitat Constructions Under Catastrophic Events, Proceedings of the COST C26 Action Final Conference, CRC Press, 2010, ISBN 978-0-415-60685-1, (1051 pages).
3. F. Mazzolani, M. Byfield, G. DeMatteis, D. Dubina, B. Faggiano, M. Indirli, A. Mandara, E. Mistakidis, J.P. Muzeau, F. Wald (editors), Urban Habitat Constructions Under Catastrophic Events, COST C26 Action Final Report, CRC Press, 2010, ISBN 978-0-415-60686-8, (471 pages).
4. I. Ermopoulos, E. Mistakidis, S. Karamanos, Proceedings of the 7th National Conference on Steel Structures, Volos, 2011.
5. A. Liakopoulos, E. Mistakidis, A. Giannakopoulos, Advances in Civil Engineering Research, A collection of articles on the occasion of the 20th anniversary of the founding of the Civil Engineering Department, University of Thessaly, Volos 2014, ISBN: 978-960-88490-4-4.
6. E. Mistakidis, Proceedings of the 9th National Conference on Steel Structures, Larissa, 2017.

3.4 PAPERS IN SCIENTIFIC JOURNALS

1. P.D. Panagiotopoulos, E.S. Mistakidis and O.K. Panagouli, "Fractal Interfaces with Unilateral Contact and Friction Conditions", *Computer Methods in Applied Mechanics and Engineering*, **99** (1992) 395-412.
2. O.K. Panagouli, P.D. Panagiotopoulos and E.S. Mistakidis, "On the Numerical Solution of Structures with Fractal Geometry. The F.E. approach", *Meccanica*, **27** (1992) 263-274.
3. E.S. Mistakidis, P.D. Panagiotopoulos and O.K. Panagouli, "Fractal Surfaces and Interfaces in Structures. Methods and Algorithms", *Chaos, Solitons and Fractals*, **2** (1992) 551-574.
4. P.D. Panagiotopoulos, O.K. Panagouli and E.S. Mistakidis, "Fractal Geometry and Fractal Material Behavior in Solids and Structures", *Archive of Applied Mechanics*, **63** (1993) 1-24.
5. E.S. Mistakidis and P.D. Panagiotopoulos, "Numerical Treatment of the Nonmonotone (zigzag) Friction and Adhesive Contact Problems with Debonding. Approximation by Monotone Subproblems", *Computer and Structures*, **47** (1993) 33-46.
6. P.D. Panagiotopoulos, O.K. Panagouli and E.S. Mistakidis, "On the Consideration of the Geometric and Physical Fractality in Solid Mechanics I: Theoretical Results", *ZAMM*, **74** (1994)3,167-176.
7. E.S. Mistakidis, K. Thomopoulos, A. Avdelas and P.D. Panagiotopoulos, "Shear connectors in composite beams: A new accurate algorithm", *Thin-Walled Structures*, **18** (1994) 191-207.
8. E.S. Mistakidis and P.D. Panagiotopoulos, "On the Approximation of Nonmonotone Multivalued Problems by Monotone Subproblems", *Computer Methods in Applied Mechanics and Engineering*, **114** (1994) 55-76.
9. P.D. Panagiotopoulos, O.K. Panagouli and E.S. Mistakidis, "Fractal Geometry in Structures. Numerical Methods for Convex Energy Problems", *Solids and Structures*, **31**(16) (1994) 2211-2228.
10. E.S. Mistakidis, K. Thomopoulos, A. Avdelas and P.D. Panagiotopoulos, "On the Nonmonotone Slip Effect in the Shear Connectors of Composite Beams", *Int. J. for Engineering Analysis and Design*, **1** (1994) 395-409.
11. M.A. Tzaferopoulos, E.S. Mistakidis, C.D. Bisbos and P.D. Panagiotopoulos, "Comparison of two Methods for the Solution of a Class of Nonconvex Energy Problems Using Convex Minimization Algorithms", *Computers and Structures*, **57** (1995) 959-971.
12. E.S. Mistakidis, C.C. Baniotopoulos and P.D. Panagiotopoulos, "On the numerical treatment of the delamination problem in laminated composites under cleavage loading", *Composite Structures*, **30** (1995) 453-466.
13. G.E. Stavroulakis and E.S. Mistakidis, "Numerical treatment of hemivariational inequalities in mechanics: two methods based on the solution of convex subproblems", *Computational Mechanics*, **16** (1995) 406-416.
14. O.K. Panagouli, P.D. Panagiotopoulos and E.S. Mistakidis, "Friction laws of fractal type and the corresponding contact problems", *Chaos, Solitons and Fractals*, **5** (1995) 2109-2119.
15. E.K. Koltsakis, E.S. Mistakidis and M. Ap. Tzaferopoulos, "On the numerical treatment of nonconvex energy problems of mechanics", *Journal of Global Optimization*, **6**(4) (1995) 427-448.
16. K.T.Thomopoulos, E.S. Mistakidis, E.K. Koltsakis and P.D. Panagiotopoulos, "Softening Behaviour of Continuous Thin-Walled Beams. Two Numerical Methods", *Journal of Constructional Steel Research*, **36** (1996) 1-13.
17. E.S. Mistakidis and P.D. Panagiotopoulos, "Numerical treatment of problems involving nonmonotone boundary or stress-strain laws, *Computers and Structures*, **64**(1-4) (1997) 553-565.
18. E.S. Mistakidis, "Fractal Geometry in Structural analysis problems: A variational formulation for fractured bodies with nonmonotone interface conditions", *Chaos, Solitons and Fractals*, Special Issue on Application of Fractals in Material Science and Engineering **8**(2) (1997) 269-285.
19. E.S. Mistakidis and P.D. Panagiotopoulos, "The search for substationarity points in the unilateral contact problems with nonmonotone friction*", J. of Mathematical and Computer Modeling*, 26(4-8) (1998) 341-358.
20. O.K. Panagouli, E.S. Mistakidis and P.D. Panagiotopoulos, "On the fractal fracture in brittle structures. Numerical approach", *Computer Methods in Applied Mechanics and Engineering*, **147** (1997) 1-15.
21. E.S. Mistakidis, On the solution of structures involving elements with nonconvex energy potentials, *Structural Optimization*, **13** (1997) 182-190.
22. E.S. Mistakidis, C.C. Baniotopoulos, C.D. Bisbos and P.D. Panagiotopoulos, "Steel T-stub connections under static loading: an effective 2-D numerical model", *Journal of Constructional Steel Research*, **44**(1-2) (1997) 51-67.
23. E.S. Mistakidis, K.T. Thomopoulos and M.A. Tzaferopoulos, "Effective methods for the analysis of steel structures with strain-softening behaviour", *Journal of Constructional Steel Research*, **44**(1-2) (1997) 3-21.

24. E.S. Mistakidis, O.K. Panagouli and P.D. Panagiotopoulos, “Unilateral contact problems with fractal geometry and fractal friction laws: methods of calculation”, *Computational Mechanics*, **21** (1998) 353-362.
25. E.S. Mistakidis, C.C. Baniotopoulos and P.D. Panagiotopoulos, “An effective two-dimensional numerical method for the analysis of a class of steel connections”, *Computational Mechanics*, **21** (1998) 363-371.
26. E.S. Mistakidis and P.D. Panagiotopoulos, “A multivalued B.I.E. for adhesive contact problems, *Eng. Analysis with Boundary Elements* 21 (1998) 317-327.
27. M.J. Kontoleon, E.S. Mistakidis, C.C. Baniotopoulos and P.D. Panagiotopoulos “Parametric analysis of the structural response of steel base plate connections”, *Computers and Structures* **71** (1999) 87-10.
28. P.S. Theocaris, P.D. Panagiotopoulos, O.K. Panagouli and E.S. Mistakidis “On debonding and delamination effects in adhesively bonded cracks of fractal type”, *Journal of elasticity*, **51**(1998) 177-201.
29. E.S. Mistakidis “Evaluation of the total ductility in steel structures through a nonconvex energy optimization approach”, *Engineering Structures* **21** (1999) 810-822.
30. G.E. Stavroulakis, E.S. Mistakidis “A hemivariational inequality approach for the modeling of hybrid laminates with unidirectional composite constituents”, *AIAA (American Institute of Aeronautics and Astronautics) Journal*, **38(4)** (2000) 680-686.
31. E.S. Mistakidis, “A heuristic method for nonconvex optimization in Mechanics: conceptual idea, theoretical justification, engineering applications, *Journal of Global Optimization* **17**(2000) 301-316.
32. S.M. Karakostas and E.S. Mistakidis, “Evaluation of the ductility features in steel structures with softening moment-rotation behaviour based on a nonconvex optimization formulation”, *Engineering Computations*, **17(5)** (2000) 573-592.
33. S.M. Karakostas and E.S. Mistakidis, “Determination of load-displacement curve of moment resisting frames under horizontal loading”, *Computational Mechanics*, **27**(2001) 341-351.
34. E.S. Mistakidis, "A neural network approach for the solution of frictional contact problems with nonconvex superpotentials", *Advances in Engineering Software*, **33** (2002) 281-290.
35. E.S. Mistakidis and O.K. Panagouli, "Strength evaluation of retrofit shear wall elements with interfaces of fractal geometry", *Engineering Structures*, **24** (2002) 649-659.
36. E.S. Mistakidis, O. Panagouli, Friction evolution as a result of roughness in fractal interfaces, *Engineering Computations*, 20(1) (2003) 40-57.
37. E.S. Mistakidis and C.C. Baniotopoulos “Parametric analysis of axially loaded RHS gap K-joints by means of 2D and 3D F.E. models”, *International Journal of Space Structures*, **18(3)** (2003)139-155.
38. E.S. Mistakidis, D. Georgiou, Fuzzy Sets In Seismic Inelastic Analysis And Design of Reinforced Concrete Frames, *Advances in Engineering Software*, **34**(2003) 589-599.
39. E.S. Mistakidis, S.V. Tsiogas, Failure modes of circular hollow members with flattened edges, *Journal of Constructional Steel Research* **59**(2003) 1573-1592.
40. E.S. Mistakidis, N.P. Politis, A study on the dependency of the interface forces on the F.E. discretization, in nonconvex-nonsmooth frictional contact problems, *Engineering Computations*, **21(6)** (2004) 610-630.
41. E.S. Mistakidis, “Solution of interface problems with nonmonotone contact and friction laws using a neural network optimization environment”, *Advances in Engineering Software*, **35(10-11)** (2004) 653-662.
42. E.S. Mistakidis, G. De Matteis and A. Formisano, “Low yield metal panels as an alternative for the seismic upgrading of concrete structures”, *Advances in Engineering Software*, **38(8-9)**(2007) 626-636.
43. E.S. Mistakidis and K. Dimitriadis, Bending resistance of composite slabs made with thin-walled steel sheeting with indentations or embossments, *Thin-Walled Structures*, **46(2)**(2008) 192-206
44. E.S. Mistakidis, Numerical study of shear walls made of low-yield point steel, *Engineering Computations*, **27(2)** (2010), 257-279.
45. K. Tzaros, E.S. Mistakidis and P.C. Perdikaris, A numerical model based on nonconvex-nonsmooth optimization for the simulation of bending tests on composite slabs with profiled steel sheeting, *Engineering Structures*, **32(3)** (2010) 843-853.
46. K.Georgiadi-Stefanidi, E.S. Mistakidis, D. Pantousa and M. Zygomalas, Numerical modelling of the pull-out of hooked steel fibres from high-strength cementitious matrix, supplemented by experimental results, *Construction and Building Materials* **24** (2010) 2489-2506.
47. K. Georgiadi-Stefanidi, E. Mistakidis, P. Perdikaris, T. Papatheocharis, Numerical simulation of tested reinforced concrete beams strengthened by thin fibre-reinforced cementitious matrix jackets, *Earthquakes and Structures*, 1(4) (2011) pp.345-370.
48. O.K. Panagouli and E.S. Mistakidis, Influence of the resolution of fractal interfaces on the contact area and on the corresponding normal stresses for elastic and inelastic problems, *Engineering Computations*, 26(6) (2011) 717-746).
49. K. Tzaros and E.S. Mistakidis, The unilateral contact buckling problem of continuous beams in the presence of initial geometric imperfections: an analytical approach based on the theory of elastic stability, *International Journal of Nonlinear Mechanics*, 46(2011), 1265-1274.

50. K. Georgiadi-Stefanidi, E. Mistakidis, P. Perdikaris, T. Papatheocharis, Numerical simulation of the nonlinear bending response of fibre-reinforced cementitious matrix beams and comparison with experimental results, *Engineering Structures*, 33(12) (2011) pp.3579-3589
51. D. Pantousa and E. Mistakidis, Advanced modeling of composite slabs with thin-walled steel sheeting submitted to fire, *Fire Technology*, 49(2) (2013) pp. 293-327.
52. K. Georgiadi-Stefanidi, E. Mistakidis, K.C. Styliandis, Simulation of experiments on RC frames strengthened with dissipative steel links, *Advances in Concrete Construction*, Vol. 1(3)(2013), pp.253-273.
53. K. Tzaros and E. Mistakidis, The constrained buckling problem of geometrically imperfect beams: a mathematical approach for the determination of the crtitical instability points, Meccanica, 50(2015) pp.1263-1284.
54. Koukouselis and E. Mistakidis, Numerical investigation of the buckling behavior of thin ferrocement stiffened plates, Computers and Concrete 15(3)(2015) pp.391-410.
55. D. Pantousa and E. Mistakidis, Fire-after-earthquake resistance of steel structures using rotational capacity limits, *Earthquakes and Structures*, Vol. 10, No. 4 (2016) 867-891.
56. D. Pantousa and E. Mistakidis, Interface modelling between CFD and FEM analysis: The dual layer post-processing model, Engineering Computations 34(4) (2017) pp.1166-1190.
57. Koukouselis and E. Mistakidis, Computational modelling of high performance cementitious thin shell elements under in-plane shear, Mechanics of advanced materials and structures, pp. 1-12 (2017).
58. D. Pantousa and E. Mistakidis, Rotational capacity of pre-damaged I-section steel beams at elevated temperatures, Steel and Composite Structures Vol. 23, No. 1 (2017) 53-66.
59. Chatziioannou, V. Katsardi, A. Koukouselis, E. Mistakidis, The effect of nonlinear wave-structure and soil-structure interactions in the design of an offshore structure, Journal of Marine Structures vol. 52(2017) pp. 126-152.
60. Koukouselis, A. Grammatopoulos and E. Mistakidis, Buckling capacity of radially compressed thin-walled reinforced cementitious spheres, Engineering Structures, 157(2018), pp. 66-77.
61. Koukouselis and E. Mistakidis, Failure modes and buckling capacity of thin cylindrical reinforced cementitious shells under axial compression, Construction and Building Materials, 170(2018) pp. 66-77.
62. K. Chatziioannou, V. Katsardi, A. Koukouselis, E. Mistakidis, On the consideration of wave and structural nonlinearities in the design of compliant towers through dynamic analysis, Journal of Ocean Engineering and Marine Energy 4(4) (2018) 323-342.
63. K. Zografopoulou, E. Mistakidis, Numerical simulation of damage on cementitious Sprayed Fire-Resistive Materials applied on steel plates, Fire Technology (2019).

3.5 Papers in contributed volumes

1. M.A. Tzaferopoulos, E.S. Mistakidis, C.D. Bisbos and P.D. Panagiotopoulos, “On two Algorithms for Nonconvex Nonsmooth Optimization Problems in Structural Mechanics”, in Large Scale Optimization: State of the Art, (Ed. W.W. Hager, D.W. Hearn and P.M Pardalos), Kluwer Academic Publishers B.V. pp. 439-467, 1994.
2. P.D. Panagiotopoulos, E.S. Mistakidis, G.E. Stavroulakis and O.K. Panagouli, “Multilevel Optimization Methods in Mechanics”, in Multilevel Optimization: Algorithms, Complexity and Applications Kluwer, 1998, pp. 51-90.
3. G.E. Stavroulakis and E.S. Mistakidis, “Nonconvex Energy Functions: Hemivariational Inequalities”, in: Christodoulos A. Floudas and Panos M. Pardalos (eds), Encyclopedia of Optimization, Springer-Verlag 2008.
4. E.S. Mistakidis and G.E. Stavroulakis, “Hemivariational Inequalities: Applications in Mechanics”, in: Christodoulos A. Floudas and Panos M. Pardalos (eds), Encyclopedia of Optimization, Springer-Verlag 2008.
5. E. Stavroulakis, E.S. Mistakidis and O.K. Panagouli, “Multilevel Optimization in Mechanics”, in: Christodoulos A. Floudas and Panos M. Pardalos (eds), Encyclopedia of Optimization, Springer-Verlag 2008.
6. E. Mistakidis, R. Vacareanu and A. Kappos, Performance based evaluation and risk analysis, in: Urban Habitat Constructions Under Catastrophic Events: COST C26 Action Final Report, Balkema, 2010.
7. Pantousa D., Mistakidis E. and Lambrou G., “Fire design of a new building in Athens”, COST Action TU0904 – Case studies, CTU Publishing House, Czech Technical University in Prague, March 2012
8. K. Tzaros and E. Mistakidis, A mathematical method for the determination of the critical axial loads of continuous beams with unilateral constraints for various initial geometric imperfections, in: (G. Stavroulakis, ed.) Advances in Contact Mechanics, pp. 379-400, Springer, 2013.

9. O. Panagouli and E. Mistakidis, A multi-resolution study on the behavior of fractal interfaces with unilateral contact conditions, in: (G. Stavroulakis, ed.) Advances in Contact Mechanics, pp. 433-450, Springer, 2013.
10. O. Panagouli, E. Mistakidis and K. Iordanidoy, Numerical Determination of the Seismic Strength of Reinforced Concrete Shear Walls with Fractal Cracks, in (M. Papadrakakis et al, eds) Computational Methods in Earthquake Engineering, Vol. 2., Springer, Dordrecht, 2013.
11. Zografopoulou K., Mistakidis E., "FDS-CFD analysis of temperature development in an enclosure from a fire with a defined heat release rate", COST Action TU0904 – Benchmark studies, Experimental validation of numerical models in fire engineering, CTU Publishing House, Czech Technical University in Prague, 2014.
12. Pantousa D., Mistakidis E. and Lambrou G., "Fire design of a new building in Athens", COST Action TU0904 – Case studies, CTU Publishing House, Czech Technical University in Prague, March 2012.
13. Georgiadi-Stefanidi K. and Mistakidis E. "Numerical simulation of fibre reinforced cementitious composites" in: A. Liakopoulos, E. Mistakidis, A. Giannakopoulos (eds), Advances in Civil Engineering Research, A collection of articles on the occasion of the 20th anniversary of the founding of the Civil Engineering Department, University of Thessaly, Volos 2014.
14. Koukouselis A. and Mistakidis E. "Modeling techniques for simulating the buckling behavior of thin ferrocement stiffened plates" in: A. Liakopoulos, E. Mistakidis, A. Giannakopoulos (eds), Advances in Civil Engineering Research, A collection of articles on the occasion of the 20th anniversary of the founding of the Civil Engineering Department, University of Thessaly, Volos 2014.
15. Tzaros K. and Mistakidis E. "Determination of the critical contact buckling load of geometrically imperfect beams" in: A. Liakopoulos, E. Mistakidis, A. Giannakopoulos (eds), Advances in Civil Engineering Research, A collection of articles on the occasion of the 20th anniversary of the founding of the Civil Engineering Department, University of Thessaly, Volos 2014.
16. Zografopoulou K. and Mistakidis E. "Numerical simulation of natural fire scenarios in a storage facility" in: A. Liakopoulos, E. Mistakidis, A. Giannakopoulos (eds), Advances in Civil Engineering Research, A collection of articles on the occasion of the 20th anniversary of the founding of the Civil Engineering Department, University of Thessaly, Volos 2014.
17. Pantousa D. and Mistakidis E. "Ductility of steel I-beams at elevated temperatures" in: A. Liakopoulos, E. Mistakidis, A. Giannakopoulos (eds), Advances in Civil Engineering Research, A collection of articles on the occasion of the 20th anniversary of the founding of the Civil Engineering Department, University of Thessaly, Volos 2014.

3.6 Papers in International conference proceedings

1. P.D. Panagiotopoulos, O.K. Panagouli and E.S. Mistakidis, "Fractal Interfaces in Contact Problems. Theory and Numerical Applications" in Proc. Contact Mechanics International Symposium (Ed. A. Curnier), pp. 237-260, PPUR, Lausanne, 1992.
2. E.S. Mistakidis and P.D. Panagiotopoulos, "Adhesive Contact Problems. A Geometric Nonlinear Theory for Large Scale Problems" in Contact Mechanics Computational Techniques, (Eds. M.H. Aliabadi & C. Brebbia), pp. 35-43, CM publ. Southampton, 1993.
3. P.D. Panagiotopoulos and E.S. Mistakidis, "Neural Networks for Computing Contact Problems", in Contact Mechanics Computational Techniques, (Eds. M.H. Aliabadi & C. Brebbia), pp. 45-52, CM publ, Southampton, 1993.
4. E.S. Mistakidis, C.C. Baniotopoulos and P.D. Panagiotopoulos, On the numerical treatment of the delamination problem in laminated composites, Proc. of the 8th International Conference on Advanced Structural Fiber Composites, pp. 564-576, Florence 1994.
5. E.S. Mistakidis and P.D. Panagiotopoulos, A new Method for the Numerical Treatment of Hemivariational Inequalities, in Proc. of the 2nd Conference on Computational Structures Technology, (Ed. M. Papadrakakis and B.H.V. Topping), pp. 123-129, Civil-Comp Press, 1994.
6. E.S. Mistakidis, P.D. Panagiotopoulos and O.K. Panagouli Contact - friction of fuzzy type. Contact - friction of fractal type in Contact Mechanics., (Eds. M. Raous, M. Jean and J.J. Moreau) pp 33-36, Plenum, N. York, 1995.
7. O.K. Panagouli, E.S. Mistakidis, P.D. Panagiotopoulos and A. Liolios, "Fractal interfaces in masonry structures. Methods of calculation" in: Dynamics, Repairs & Restoration, (Eds. C.A. Brebbia, B. Leftheris,) pp. 291-298, CM Pub. 1995.
8. K.T. Thomopoulos, E.S. Mistakidis, E.K. Koltsakis and P.D. Panagiotopoulos, "On the Analysis of Continuous Thin-walled Steel Beams with Softening Behaviour" in: Proc. 1st European Conf. on Steel Structures, (Ed. A.N. Kounadis), pp. 97-104, Balkema, 1995.

9. E.S. Mistakidis, K. Thomopoulos, A. Avdelas and P.D. Panagiotopoulos, “Analysis of Composite Beams with Shear Connectors Allowing for Softening”, in: Proc. 1st European Conf. on Steel Structures, (Ed. A.N. Kounadis), pp. 73-80, Balkema, 1995.
10. A.A. Liolios, P.D. Panagiotopoulos, O.K. Panagouli and E.S. Mistakidis, “Two sided solution bounds in unilateral contact elastomechanics under P-Delta effects” in: Contact Mechanics II - Computational Techniques (Eds. M.H. Aliabadi and C.Alessandri), pp.455-459, CM Pub., Southampton-Boston 1995.
11. E.S. Mistakidis and P.D. Panagiotopoulos, “Numerical methods based on the L.C.P. for the treatment of nonconvex inequality problems in Mechanics” in: Proc. of the Int. Conf. on Complementarity Problems '95, (Eds. J.S. Pang, M.C. Ferris), SIAM publ., 1997, pp. 267-283.
12. O.K. Panagouli, E.S. Mistakidis and P.D. Panagiotopoulos, “Friction laws of fractal type. Theory and numerical application” in: Proc. of 2nd International Conference on Tribology (Ed. K.D. Bouzakis), pp.733-740, P. Ziti & Co. Publ., Thessaloniki, 1996.
13. C.C. Baniotopoulos, E.S. Mistakidis and P.D. Panagiotopoulos, “A numerical method for the analysis of semirigid base plate connections, Proc. of the 2nd European Conference on Numerical Methods in Engineering, (Eds J.A. Desideri, P.Le Tallec, E. Onate, J. Peraux, E. Stein), pp. 842-848, Wiley, 1996.
14. E.S.Mistakidis, K.T. Thomopoulos, C.C. Baniotopoulos, P.D. Panagiotopoulos, “Softening effects of semi-rigid joints to the ultimate strength of steel frames under seismic action” Proceedings of the COST-C1 Conference, Liege, 1998, pp.425-434.
15. M.I. Kontoleon, E.S. Mistakidis, C.C. Baniotopoulos, “Simple two-dimensional finite element models for the simulation of the structural response of steel connections” Proc. of the 4th Conference on Computational Structures Technology, Civil-Comp Press, 1998.
16. T. Gavrielidis, D. Vizoviti, E.S. Mistakidis, C.C. Baniotopoulos, K.T. Thomopoulos, “On the finite element modelling of RHS gap K-joints. Parametric analysis” Proc. of the 4th Conference on Computational Structures Technology, Civil-Comp Press, 1998.
17. S.M. Karakostas and E.S. Mistakidis “Determination of the behavioural curve of eccentrically braced steel structures, Proc. of the 2nd European Conference on Steel Structures, Praha, 1999.
18. D. Vyzoviti, T. Gavrielidies, E.S. Mistakidis and C.C. Baniotopoulos “Parametric analysis of axially loaded SHS gap K-joints by means of 3D F.E. Models, Proc. of the 2nd European Conference on Steel Structures, Praha, 1999.
19. E.S. Mistakidis, O.K. Panagouli and N.P. Politis, “A Nonconvex-Nonsmooth Energy Optimization Approach For The Strength Evaluation Of Retrofit Shear Wall Elements” IASS-IACM 2000 International Conference, Chania, 2000.
20. E.S. Mistakidis, A Nonconvex Optimization Approach For The Determination Of The Capacity Curve And The Performance Point Of MR Steel Frames Exhibiting Softening Under Seismic Loading, in C.C. Baniotopoulos and F. Wald (eds.) The paramount Role of Joints into the Reliable Response of Structures, pp. 227-236, Kluwer, 2000.
21. E.S. Mistakidis and O.K. Panagouli, “The Influence Of Fractality Of The Asperities To The Evolution Of The Friction Mechanism” ECCM-2001 European Conference on Computational Mechanics, Poland, 2001.
22. E.S. Mistakidis, V. Bosiljkow, G. DeMatteis, F. Dinu, M. Fischinger, Structural integrity of buildings under exceptional earthquakes, COST-C12 Conference, Lisbon, April 2002.
23. E.S. Mistakidis, Effect of Softening on The Seismic Performance of SDOF and MDOF Structures, International Conference on Nonsmooth/Nonconvex Mechanics with Applications in Engineering (in Memoriam of Professor P.D. Panagiotopoulos), Thessaloniki, July 2002, pp. 355-362.
24. O.K. Panagouli and E.S. Mistakidis, Effect Of The Different Fractal Approaches For The Modeling Of The Interface Roughness On The Overall Structural Response, International Conference on Nonsmooth/Nonconvex Mechanics with Applications in Engineering (in Memoriam of Professor P.D. Panagiotopoulos), Thessaloniki, July 2002, pp.119-126.
25. E.S. Mistakidis, "Solution of Nonmonotone Friction Unilateral Contact Problems within a Neural Network Environment", in Proceedings of the Third International Conference on Engineering Computational Technology, B.H.V. Topping and Z. Bittnar, (Editors), Civil-Comp Press, Stirling, United Kingdom, paper 81, 2002. CST2002, Prague, September 2002.
26. E.S. Mistakidis and S.V. Tsiogas, “Failure modes of circular hollow sections with flattened edges”, Proceedings of 3rd European Conference on Steel structures, Coimbra, 2002, pp. 183-190.
27. G. De Matteis and E.S. Mistakidis, “Seismic retrofitting of moment resisting frames using low yield steel panels as shear walls”, in Proceedings of the 4th International Conference Behaviour of Steel Structures in Seismic Areas (STESSA 2003), Naples, June 2003.
28. E.S. Mistakidis, “Ultimate compressive strength of CHS members with flattened edges”, in Second M.I.T. Conference on Computational Fluid and Solid Mechanics held at M.I.T., June, 2003.

29. E.S. Mistakidis, G. De Matteis and A. Formisano, “Seismic Upgrade of Concrete Structures Using Low Yield Metal Shear Panels”, in: B.H.V. Topping and C.A. Mota Soares, (eds), Proceedings of the Seventh International Conference on Computational Structures Technology, Lisbon, Civil-Comp Press, Kippen, Stirlingshire, United Kingdom, 2004, paper 279.
30. G. DeMatteis, E.S. Mistakidis, A. Formisano and S.I. Tsirnovas, Seismic retrofitting of steel and concrete structures using low-yield strength shear panels, COST C12 Conference, Innsbruck, 2005.
31. E.S. Mistakidis and G.N. Kofidis, “Numerical study of the behaviour of bare and encased steel shear walls”, EUROSTEEL 2005, Maastricht.
32. E.S. Mistakidis and O.K. Panagouli, Modeling of the behaviour of ultra-high strength fiber reinforced concrete by means of nonconvex energy superpotentials, 5th GRACM International Congress on Computational Mechanics, Limassol, June 2005.
33. E.S. Mistakidis and K. Dimitriadis, Numerical analysis of steel sheeting with indentations or embossments, used for composite slabs, in: B.H.V. Topping, G. Montero and R. Montenegro, (eds), Proceedings of the Eighth International Conference on Computational Structures Technology, Las Palmas de Gran Canaria, Spain, Civil-Comp Press, Kippen, Stirlingshire, United Kingdom 2006, Paper 21.
34. E. Mistakidis, K. Georgiadi-Stefanidi and D. Pantousa, Modelling of the Pull-Out of Hooked Steel Fibres in Fibre-Reinforced High-Strength Concrete, in: B.H.V. Topping, G. Montero and R. Montenegro, (eds), Proceedings of the Eighth International Conference on Computational Structures Technology, Las Palmas de Gran Canaria, Spain, Civil-Comp Press, Kippen, Stirlingshire, United Kingdom 2006, Paper 19
35. E. Mistakidis, O. Panagouli, A nonsmooth-mechanics approach for the analysis of the bending behaviour of fibre-reinforced concrete specimens, 2nd International Conference on Nonsmooth/Nonconvex Mechanics with Applications in Engineering (in Memoriam of Professor P.D. Panagiotopoulos), Thessaloniki, July 2006
36. E. Mistakidis, F. Perdikaris and K. Tzaros, A novel approach for the consideration of the partial connection between steel and concrete in composite slabs 2nd International Conference on Nonsmooth/Nonconvex Mechanics with Applications in Engineering (in Memoriam of Professor P.D. Panagiotopoulos), Thessaloniki, July 2006.
37. E. Mistakidis, R. Apostolska (Petrusevska), D. Dubina, W. Graf, G. Necevska-Cvetanovska, P. Nogueiro, S. Pannier, J.-U. Sickert, L. Simões da Silva, A. Stratan, U. Terzic, Typology of seismic motion and seismic engineering design, in F. Wald F., F. Mazzolani, M. Byfield, D. Dubina, M. Faber (eds), Proc. of workshop on Urban Habitat Constructions under Catastrophic Events, Prague, 2007.
38. K. Tzaros, E. Mistakidis and P. Perdikaris, Nonlinear analysis of thin walled cold formed steel platforms, 5th European Conference on Steel and Composite Structures (EUROSTEEL), Graz, 2008.
39. K. Georgiadi-Stefanidi, E. Mistakidis and P. Perdikaris, Numerical Simulation of Bending Response of Reinforced Concrete and Fibre-Reinforced Concrete Beams, in: M. Papadrakakis and B.H.V. Topping, (eds) Proceedings of the Ninth International Conference on Computational Structures Technology, Athens, 2008, paper 66.
40. K. Tzaros, and E. Mistakidis, Numerical Buckling Behaviour of Thin – Walled Cold Formed Steel Platforms Subjected to Bending, in: M. Papadrakakis and B.H.V. Topping, (eds) Proceedings of the Ninth International Conference on Computational Structures Technology, Athens, 2008, paper 69.
41. K.A. Georgiadi-Stefanidi, E.S. Mistakidis, P.C. Perdikaris, Thin Fibre-reinforced concrete jackets for improving the seismic response of reinforced concrete members: experimental and numerical results, in: F. Mazzolani, E. Mistakidis, R.P. Borg, M. Byfield, G. DeMatteis, D. Dubina, M. Indirli, A. Mandara, J.P. Muzeau, F. Wald, Y. Wang (editors), “Urban habitat constructions under catastrophic events”, University of Malta, 2008.
42. O. Panagouli and E. Mistakidis, Dependence of contact area on the resolution of fractal interfaces for elastic and inelastic problems, in: M. Papadrakakis, M. Kojic, V. Papadopoulos (eds.), 2nd South-East European Conference on Computational Mechanics, Rhodes, 2009
43. E. Mistakidis and D. Pantousa, Numerical simulation of composite slabs in elevated temperatures, in: M. Papadrakakis, M. Kojic, V. Papadopoulos (eds.), 2nd South-East European Conference on Computational Mechanics, Rhodes, 2009
44. K. Tzaros and E. Mistakidis, An efficient analytical technique for the determination of the critical axial loads of continuous beams with unequal spans in the presence of unilateral constraints and arbitrary initial geometric imperfections, in: P. Papanastasiou, P. Roussis, D. Loukidis, E. Sarris, J. Katsikadelis (eds), Proceedings of the 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, 12 – 14 July, 2010.
45. O. Panagouli and E. Mistakidis, Dependence of friction coefficient on the resolution of fractal interfaces in: P. Papanastasiou, P. Roussis, D. Loukidis, E. Sarris, J. Katsikadelis (eds), Proceedings of the 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, 12 – 14 July, 2010.

46. D. Pantousa and E. Mistakidis,Thermo-mechanical analysis of composite slabs under fire conditions, Urban Habitat Constructions Under Catastrophic Events: Proceedings of the COST C26 Action Final Conference, Naples, 2010.
47. K. Georgiadi-Stefanidi and E. Mistakidis, Numerical investigation of old RC frames strengthened against earthquakes by high dissipation steel link elements, Urban Habitat Constructions Under Catastrophic Events: Proceedings of the COST C26 Action Final Conference, Naples, 2010.
48. A.A. Karalis, K.A. Georgiadi-Stefanidi, T.N. Salonikios, K.C. Stylianidis and E.S. Mistakidis, «Experimental and numerical study on the behaviour of high dissipation metallic devices for the strengthening of existing structures», 3rd International Conference on Computational Methods in Structural Dynamic & Earthquake Engineering (COMPDYN 2011), Corfu, Greece, May 2011.
49. K. Georgiadi-Stefanidi, E. Mistakidis, A. Kapatsina and O. Panagouli, Numerical modeling of the pull-out of inclined hooked steel fibres from high-strength cementitious matrix, 7th GRACM International Congress on Computational Mechanics, Athens, 2011.
50. D. Pantousa and E. Mistakidis, Non-linear analysis of steel frames considering fire-after earthquake scenarios, 6th European Conference on Steel and Composite Structures (EUROSTEEL), Budapest, 2011
51. Pantousa D. and Mistakidis E., The effect of the geometric imperfections on the rotational capacity of steel beams at elevated temperatures, 7th GRACM International Congress on Computational Mechanics, Athens, 2011.
52. E. Mistakidis, K.C. Stylianidis, E. Barlas and K. Georgiadi-Stefanidi, Seismic strengthening of R/C buildings with soft storey (pilotis) through dissipative steel links, in Proceedings of the STESSA 2012 International Conference on Behaviour of Steel Structures in Seismic Areas, Santiago, Chile, 2012.
53. Zografopoulou K., Pantousa D. and Mistakidis E., "Numerical Simulation of Natural Fire in an Industrial Building Considering Earthquake Damage of Non-Structural Members" Application of Structural Fire Engineering, Prague, Czech Republic, April 2013.
54. D. Pantousa, E. Mistakidis, “Fire resistance of steel frames under different Fire-after-Earthquake Scenarios based on scaled design accelerograms” Application of Structural Fire Engineering, Prague, Czech Republic, April 2013.
55. K. Tzaros and E. Mistakidis, “Evaluation of a mathematical method for the calculation of the critical instability load in geometrically imperfect beams supported by unilateral supports”, 10th HSTAM International Congress on Mechanics, Chania, Crete, Greece, 25 – 27 May, 2013.
56. A. Koukouselis, E. Mistakidis and K. Georgiadi – Stefanidi, “Buckling behavior of thin ferrocement shells”, 10th HSTAM International Congress on Mechanics, Chania, Crete, Greece, 25 – 27 May, 2013.
57. K. Zografopoulou, D. Pantousa and E. Mistakidis, “The fire–after–earthquake event in a library building, Part 1: simulation of the natural fire”, 10th HSTAM International Congress on Mechanics, Chania, Crete, Greece, 25 – 27 May, 2013.
58. D. Pantousa, K. Zografopoulou and E. Mistakidis, “The fire–after–earthquake event in a library building, Part 2: simulation of the structural behaviour”, 10th HSTAM International Congress on Mechanics, Chania, Crete, Greece, 25 – 27 May, 2013.
59. D. Pantousa and E. Mistakidis, Rotational capacity of damaged and undamaged steel I-beams at elevated temperatures, 7th European Conference on Steel and Composite Structures (EUROSTEEL), Naples, 2014.
60. D. Pantousa and E. Mistakidis, Interface modelling between cfd and fem analysis: The dual layer post-processing model, 7th European Conference on Steel and Composite Structures (EUROSTEEL), Naples, 2014.
61. S. Akritidis, D. Pantousa and E. Mistakidis, Numerical evaluation of the rotational capacity of steel beams at elevated temperatures, 8th GRACM International Conference on Computational Mechanics, Volos, 2015.
62. S. Nasikas, D.-F. Kallias-Ntroumpis, A. Koukouselis and E. Mistakidis, Simulation of bolt prestressing in steel shear connections, 8th GRACM International Conference on Computational Mechanics, Volos, 2015.
63. A. Koukouselis and E. Mistakiids, Simulation of ferrocement elements under in-plane shear, 8th GRACM International Conference on Computational Mechanics, Volos, 2015.
64. K. Chatziioannou, V. Katsardi, A. Koukouselis and E. Mistakidis, Response of offshore structures under the effect of real sea states including structural and soil nonlinearities, 8th GRACM International Conference on Computational Mechanics, Volos, 2015.
65. K. Chatziioannou, V. Katsardi, E. Mistakidis, The increasing importance of accurate calculation of the nonlinear extreme wave kinematics in the design of offshore platforms, 16th International Congress of the International Maritime Association of the Mediterranean IMAM 2015 - Towards Green Marine Technology and Transport, At Pula Croatia, Volume: Towards Green Marine Technology and Transport, DOI: 10.1201/b18855-28.

66. A. Grammatopoulos, A. Koukouselis and E. Mistakidis, Buckling capacity curve of a radially compressed cementitious sphere, 11th HSTAM International Congress on Mechanics, Athens, 27 – 30 May, 2016, Greece.
67. A. Koukouselis and E. Mistakidis, Capacity curve of axially compressed thin cementitious cylinders, 11th HSTAM International Congress on Mechanics, Athens, 27 – 30 May, 2016, Greece.
68. K. Chatziioannou, V. Katsardi, A. Koukouselis and E. Mistakidis, Nonlinear dynamic response of a compliant tower under the effect of steady and unsteady sea states, Proceedings of the ASME 2017 36th International Conference on Ocean, Offshore and Arctic Engineering (OMAE 2017), June 25-30, 2017, Trondheim, Norway.
69. K. Zografopoulou and E. Mistakidis, Numerical simulation of the behaviour of steel members with damaged SFRM fire protection coatings at elevated temperatures, Eurosteel 2017.
70. I. Chatjigeorgiou, K. Chatziioannou, V. Katsardi, A. Koukouselis, E. Mistakidis, Numerical and experimental investigation of the wave loading on a three-legged offshore wind turbine jacket platform. Proceedings of the International Conference on Offshore Mechanics and Arctic Engineering – OMAE 9. (2018)
71. K. Zografopoulou, D. Pantousa, E. Mistakidis, fire-after-earthquake behaviour of industrial facilities with fire protected steel structural system, 16th European Conference on Earthquake Engineering, Thessaloniki, June 2018.

3.7 Papers in National conference proceedings

1. E.S. Mistakidis and P.D. Panagiotopoulos, “Solution of Structures Involving Nonmonotone Boundary Laws”, in Proc. 1st National Congress on Computational Mechanics (Ed. D. Beskos), Vol. 1, pp. 503-510, Athens, 1992.
2. E.S. Mistakidis, C.C. Baniotopoulos, C.D. Bisbos and P.D. Panagiotopoulos, “A 2-D numerical model for the analysis of steel T-stub connections”, in: Proc. of the 2nd National Conference on Computational Mechanics, , (Eds D.A. Sotiropoulos, D.E. Beskos), pp 777-784.
3. O.K. Panagouli, E.S. Mistakidis and P.D. Panagiotopoulos, “Fractal interpolation Functions for the description of friction laws in unilateral contact problems”, in: Proc. of the 2nd National Conference on Computational Mechanics, (Eds D.A. Sotiropoulos, D.E. Beskos), pp. 468-475.
4. G.E. Stavroulakis and E.S. Mistakidis, “Overall Behaviour Of Hybrid Laminates With Unidirectional Composite Constituents. A Hemivariational Inequality Approach”, Proc. 1st Hellenic Conference on Composite Materials and Structures (Ed. E. Gdoutos), pp.148-162, 1997.
5. E.S. Mistakidis, A. Avdelas, C.C. Baniotopoulos and P.D. Panagiotopoulos, “Delamination of laminated composites under cleavage loading: a Hopfield neural network approach”, Proc. 1st Hellenic Conference on Composite Materials and Structures (Ed. E. Gdoutos), pp. 119-133, 1997.
6. E.S. Mistakidis, “Nonconvex optimization in unilateral contact problems with nonmonotone friction”, Proceedings of the 5th National Conference on Mechanics, Ioannina, August 1998.
7. E.S. Mistakidis, “Estimation of the global ductility in moment resisting frames with nonmonotone moment-rotation laws” Proc. of the 3th National Conference on Steel Structures, Thessaloniki, 1998.
8. M. Kontoleon, E. Mistakidis, C. Baniotopoulos, P. Panagiotopoulos “Numerical simulation of column base plates under static loading” 3rd National Conference on Steel Structures, Thessaloniki, 1998 (in Greek).
9. I. Galazoula, D. Kyriakidis, E.S. Mistakidis, C.C. Baniotopoulos and P.D. Panagiotopoulos “Parametric study of the structural response of QHS K-Joints with gap by means of 2D F.E. Models” Proc. of the 3th National Conference on Steel Structures, Thessaloniki, 1998.
10. S.M. Karakostas and E.S. Mistakidis, Determination Of The Behavioural Curve Of Moment Resisting Steel Structures Under Seismic Loading, 3rd National Conference on Computational Mechanics, Volos, 1999.
11. O.K. Panagouli and E.S. Mistakidis, “Friction Evolution In Fractal Interfaces”, 6th National Congress of Mechanics, Thessaloniki, 2001, Vol.II, pp. 84-89.
12. E.S. Mistakidis and N.P. Politis, “Numerical Study Of The F.E. Mesh Dependency In Nonconvex-Nonsmooth Engineering Problems”, 6th National Congress of Mechanics, Thessaloniki, 2001, Vol.II, pp. 90-95.
13. E.S. Mistakidis and D.N. Georgiou, “Fuzzy Sets In Engineering Analysis And Design”, 6th National Congress of Mechanics, Thessaloniki, 2001, Vol.II, pp. 96-101.
14. E. Mistakidis and A. Kanellopoulos, “Reliability of the Displacement Coefficient Method for the simplified nonlinear seismic design of structures”, 2nd Hellenic Conference on Seismic Engineering and Seismology, Thessaloniki, November 2001, pp. 427-436 (in Greek).
15. E.S. Mistakidis, Investigation Of The Structural Stability Of The Space Truss Covering The International Flights Terminal At Corfu Airport, 4th Greek National Conference on Steel Structures, Patras, May 2002, pp. 193-202.

16. D. Vyzoviti, T. Gavrielides, E.S. Mistakidis and C.C. Baniotopoulos, Parametric Analysis of Axially loaded SHS gap K-Joints by means of 3D F.E. Models, 4th Greek National Conference on Steel Structures, Patras, May 2002, pp.99-108.
17. F.M. Mazzolani, C.C. Baniotopoulos, F. Perdikaris and E.S. Mistakidis, Structural Integrity Of Steel Constructions Under Earthquake Actions: Activity Of Cost-C12/WG2, 4th Greek National Conference on Steel Structures, Patras, May 2002, pp 691-699.
18. E.S. Mistakidis and G.N. Georgiou, An Extension Of The Nonlinear Static Analysis Procedure For The Estimation Of The Seismic Response Of Structures, Based On The Theory Of Fuzzy Sets, 4th GRACM Congress on Computational Mechanics, Patras, June 2002.
19. E.S. Mistakidis and G.N. Kofidis, "Seismic retrofitting using steel shear walls. A comparative study on the use of low yield point steel verse ordinary steel", 7th National Congress of Mechanics, Chania, 2004.
20. E. Mistakidis and G. Kofidis, "Seismic strengthening with low yield steel shear walls, 5th National Conference on Steel Structures, Xanthi, 2005 (in Greek).
21. E. Mistakidis, F. Perdikaris, A. Giannopoulos, K. Papachristou, K. Tzaros, Experimental and numerical determination of the ultimate loading of composite slabs, 5th National Conference on Steel Structures, Xanthi, 2005 (in Greek).
22. E. Mistakidis, E. Chalkiadaki, Numerical simulation of fibre reinforced concrete in bending, 15th National Congress on Concrete Structrures, Alexandroupoli, 2006 (in Greek).
23. A. Kanellopoulos, E. Mistakidis, Applications of high performance concrete for the new structures and for the strengthening of existing structures, 15th National Congress on Concrete Structrures, Alexandroupoli, 2006 (in Greek).
24. E. Mistakidis, F. Perdikaris, K. Tzaros, Numerical simulation of the shear bond between steel and concrete in composite slabs, 15th National Congress on Concrete Structrures, Alexandroupoli, 2006 (in Greek).
25. K. Georgiadi-Stefanidi, E. Mistakidis, F. Perdikaris, Bending behavior of fibre-reinforced beams and beams strengthened by fibre-reinfrorced jackets, 3rd Hellenic Conference on Seismic Engineering and Seismology, Athens, November 2009 (in Greek).
26. E. Mistakidis, Behaviour of Structures under extreme seismic actions, 3rd Hellenic Conference on Seismic Engineering and Seismology, Athens, November 2009 (in Greek).
27. K. Tzaros, E. Mistakidis, Numerical study of the behavior of thin-walled steel scaffold structures, 6th National Conference on Steel Structures, Ioannina, 2008 (in Greek).
28. Ε. Μπάρλας, Κ. Γεωργιάδη-Στεφανίδη, Ε. Μυστακίδης, Κ. Στυλιανίδης, Εφαρμογη μεταλλικων συνδεσμων υψηλης αποσβεσης για την αντισεισμικη ενισχυση υφισταμενων κτιριων με pilotis, 7th National Conference on Steel Structures, Volos, 2011.
29. D. Pantousa, E. Mistakidis, Determination of the rotational capacity of compact steel beams at elevated temperatures considering local geometric imperfections, 7th National Conference on Steel Structures, Volos, 2011.
30. D. Pantousa, E. Mistakidis, Fire after earthquake analysis of steel frames, 7th National Conference on Steel Structures, Volos, 2011.
31. E. Mistakidis, A. Mihailidis, K. Tzaros, D. Pantousa, M. Malikoutsakis, Design of photovoltaic panels support structures using the design assisted by testing methodology of Eurocode 3, 7th National Conference on Steel Structures, Volos, 2011 (in Greek).
32. I. Avramidis, E. Mistakidis, K. Morfidis, Seismic strengthening of the building of the faculty of rural and surveying engineering, AUTH through an external steel structure, 7th National Conference on Steel Structures, Volos, 2011 (In Greek).
33. K. Tzaros, E. Mistakidis, Ch. Georgiadis, Ph. Perdikaris, Experimental and numerical determination of the ultimate bending load of thin-walled steel platforms with geometric imperfections, used for scaffold applications, 7th National Conference on Steel Structures, Volos, 2011 (in Greek).
34. K. Tzaros, E. Mistakidis, Flexural buckling of geometrically imperfect beams with unilateral constraints, 7th National Conference on Steel Structures, Volos, 2011 (in Greek).
35. M. Lemonis and E. Mistakidis, Energy dissipation in moment resisting steel frames with partial strength beam-to-column joints, 7th National Conference on Steel Structures, Volos, 2011.
36. A. Koukouselis and E. Mistakidis, Buckling behavior of composite ferrocement plates, 8th National Conference on Steel Structures, Tripolis, 2014..
37. D. Pantousa and E. Mistakidis, Fire resistance of a steel structure under different fire-after-earthquake scenarios considering both structural and non-structural damage, 8th National Conference on Steel Structures, Tripolis, 2014.
38. K. Zografopoulou and E. Mistakidis, Fire design of structures with the aid of computational fluid dynamics, 8th National Conference on Steel Structures, Tripolis, 2014.

39. E. Mistakidis, A. Theodorou and M.A. Yildirim, Construction method statement for the steel roof of the Baku Olympic stadium in Azerbaijan, 8th National Conference on Steel Structures, Tripolis, 2014.
40. E. Mistakidis, V. Karagkounakis, J. Kontakiotis, F. Vaklavas, E. Stivaktakis, Construction of the steel dome of the multipurpose Al-Sadd sports hall in Doha, Qatar, 8th National Conference on Steel Structures, Tripolis, 2014.
41. T. Bilis, M. Magnisali, O. Panagouli, E. Mistakidis and T. Kouimtzoglou, Steel canopy in the archeaological site of Kalapodi, 9ο Εθνικό Συνέδριο Μεταλλικών Κατασκευών, Λάρισα, 2017.
42. T. Bilis, M. Magnisali, O. Panagouli, E. Mistakidis, P. Tokmakidis, A. Thodorou, T. Kouimtzoglou, Steel canopy of the gymnasium stoas at ancient Messene, 9th National Conference on Steel Structures, Larissa, 2017.
43. K. Zografopoulou, E. Mistakidis, Numerical study of the thermal behaviour of steel members with damaged SFRM coatings9th National Conference on Steel Structures, Larissa, 2017.
44. E. Anastasiou, N. Stankovic, K. Chatziioannou, V. Katsardi, E. Mistakidis, Dynamic response of a deep-water steel platform considering nonlinear wave-soil-structure interactions, 9th National Conference on Steel Structures, Larissa, 2017 (in Greek).
45. E. Mistakidis, A. Koukouselis, O. Panagouli, N. Naskos, P. Vastarouchas, E. Evaggelopoulou, Design of the reconstruction of the load-bearing system of an existing building with steel structure, 9th National Conference on Steel Structures, Larissa, 2017 (in Greek).

4 PROFESSIONAL DESIGN EXPERIENCE

- Development of software for the design of steel structures according to Eurocode 3, that was integrated in the CUBUS Hellas Ltd suite of programs working in tandem with STATIK5 and FAGUS5 (1995-2000).
- Development of software for the fire design of steel structures according to Eurocode 3, Part 1-2, supporting structural analysis software SAP2000, ETABS2000 (2017-2018). Circulation under negotiation with CSI-Greece.
- Development of software for the analysis and design of composite slabs with SYMDECK73 steel sheeting according to Eurocodes 3 and 4 (including fire design) 2005, 2016.
- Work as structural engineer, running a private structural design office (1991-2000).
- Work as a consultant for the analysis and design of structural projects (2000-today). Involvement of projects in Greece and abroad.

Details can be found in the report submitted separately.

5 RESEARCH PROJECTS

5.1 Participation as Principal Investigator

1. ***Investigation of the structural stability of the truss structure covering the main building of Corfu airport***
   Funded by: Hellenic Aviation Authority
   Duration: February 2000 - February 2003.
   Budget: 156.279,25 €
2. ***Development of methods for the seismic strengthening of existing buildings.***
   Funded by: Greek Seismic Planning and Protection Organization
   Duration: December 2000 - December 2001.
   Budget: 37.305,54 €
3. ***Development and pilot production and of a new generation of cementitious composites for the seismic strengthening of existing structures***
   Funded by: General Secretariat of Research and Technology
   Duration: July 2003-June 2006
   Budget: 1.642.760 €

4. ***Experimental and numerical determination of the ultimate loads of composite slabs with SYMDECK73 corrugated steel sheeting***
   Funded by: ELASTRON S.A.
   Duration: January 2005-December 2005
   Budget: 125.000 €
5. ***Experimental and numerical determination of the ultimate loads of steel scaffold structures***
   Funded by: ELASTRON S.A.
   Duration: June 2006-December 2006
   Budget: 22.000 €
6. ***Behaviour of structures in fire-after-earthquake scenarios***
   Funded by: Ministry of Education
   Duration: September 2010-August 2013
   Budget: 45.000 €
7. ***Development of software for fire design of composite slabs with SYMDECK73 corrugated steel sheeting***
   Funded by: ELASTRON S.A.
   Duration: 2016
   Budget: 12.000 €

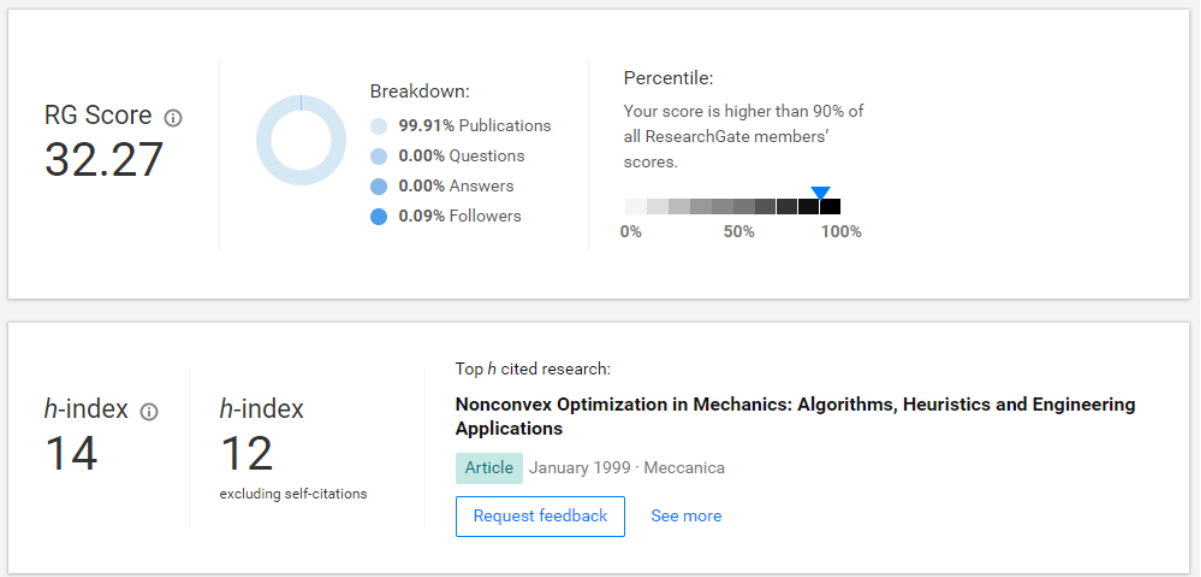
5.2 Participation in the research team

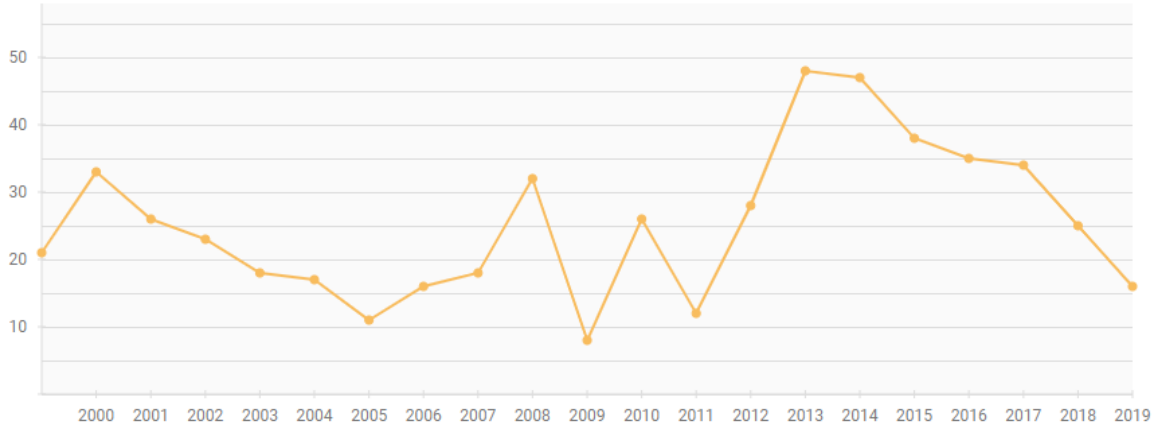
1. ***Analysis and design of properties tailored composite materials*.**
   Funded by: General Secretariat of Research and Technology
   Duration: September 1991 - April 1994.
2. ***Design of neural networks for the analysis and configuration of fibre-reinforced composite materials***
   Funded by: General Secretariat of Research and Technology
   Duration: May 1994 - April 1996.
3. ***Hollow members steel connections. Development of software for static and dynamic analysis.***
   Funded by: General Secretariat of Research and Technology
   Duration: June 1996 - May 1998.
4. ***Solving combinatorial optimization problems in parallel (EU reference: Contract CHRX-CT94-0640).***
   Funded by: European Union
   Duration: December 1994 - November 1996.
5. ***Saddle supported pipelines during seismic events: computation techniques to prevent environmental pollution***
   Funded by: NATO, Scientific and environmental affairs division
   Duration: September 1995 - August 1998.
6. ***COST - C1: Semirigid connections in Civil Engineering Structures***
   Funded by: European Union
   Duration: 1993 – 1999
7. ***COST – C12: Improvement of buildings structural quality by new technologies***
   Funded by: European Union
   Duration: 2001 - 2004
9. **Advanced thermomechanical modelling of engineering and biomechanical materials and joints using nonsmooth and nonconvex computational mechanics.**
   Greek-Hungarian Scientific Cooperation 2003-2006.
10. ***Rapid visual screening of School Buildings in the Prefectures of Fthiotida, Magnesia, Karditsa, Larissa, Trikala, Arta, Euritania, Thesprotia***
    Funded by: School Buildings Organization S.A.
    Duration: December 2004 – December 2009
    Budget: 340.000 €

11. ***COST – C26: Urban Habitat Constructions under Catastrophic Events***
    Funded by: European Union
    Duration: 2006 - 2010
    Chairman: F. Mazzolani, University of Naples, Italy
    Vice-Chairman: E. Mistakidis
12. ***Experimental and numerical verification of steel structures for the installation of PV panels***
    Funded by: EXEL Group S.A.
    Duration: May - June2010
13. ***Experimental and numerical verification of steel structures for the installation of PV panels***
    Funded by: PTOLEMEO S.A.
    Duration: June – August 2010
14. ***Strengthening of existing concrete structures exhibiting soft-storey through dissipative metallic devices***
    Duration: March 2009 – March 2010
    Budget: 36.900 €

6 CITATIONS

Detailed citations list can be provided on request. Below, snapshots are presented from the Research Gate and Google scholar profiles, taken on October 24, 2019.





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TITLE	CITED BY	YEAR
Nonconvex optimization in mechanics: algorithms, heuristics and engineering applications by the FEM ES Mistakidis, GE Stavroulakis Springer Science & Business Media	196	2013
Numerical treatment of the nonmonotone (zig-zag) friction and adhesive contact problems with debonding. Approximation by monotone subproblems ES Mistakidis, PD Panagiotopoulos Computers & structures 47 (1), 33-46	42	1993
Numerical modelling of the pull-out of hooked steel fibres from high-strength cementitious matrix, supplemented by experimental results K Georgiadi-Stefanidi, E Mistakidis, D Pantousa, M Zygomalas Construction and Building Materials 24 (12), 2489-2506	41	2010
Low yield metal shear panels as an alternative for the seismic upgrading of concrete structures ES Mistakidis, G De Matteis, A Formisano Advances in Engineering Software 38 (8-9), 626-636	41	2007

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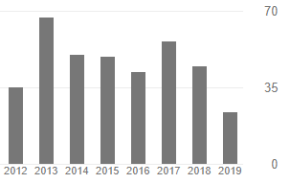

Co-authors EDIT

No co-authors