

D. S. Sophianopoulos - Resume

Current Affiliation: **Associate Professor**
Department of Civil Engineering
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A. Educational Qualifications – Teaching Experience

Earned Degrees

Diploma in Civil Engineering (5 year undergraduate courses) – National Technical University of Athens, Greece 1982 (with honors)

Ph.D. in Civil Engineering – National Technical University of Athens, Greece, 1997 (with honors)

Dissertation Title : *Contribution to the nonlinear dynamic instability of discrete and simple continuous dissipative / nondissipative systems*

Teaching Experience

Undergraduate Courses (since 1998)

Metal Structures I
Metal Structures II
Metal Structures III
Elastic Stability

Graduate Courses (1996 – 1999, 2008 – 2013)

Advanced Static and Dynamic Stability of Structures

Academic Experience Abroad

Visiting Professor, Hydraulic Engineering Division, Far Eastern Federal University, Vladivostok, Russian Federation (Spring Semester 2013).

Teaching of the following two Graduate Courses (International Master's Degree Program on *Offshore and Coastal Engineering*).

1. Structural Dynamics
2. Introduction to Advanced Structural Dynamics

Involvement in the research process at FEFU

Supervision of Diploma Theses: 37

Supervision of MSc Theses: 9

B. Journal Papers

1. **Kounadis, A. N. and Sophianopoulos, D.**, (1986) : “*The Effect of Axial Inertia on the Bending Eigenfrequencies of a Timoshenko Two-Bar Frame*”, Earthquake Engineering and Structural Dynamics **14**, 429 – 437.
2. **Sophianopoulos, D. S. and Kounadis, A. N.**, (1989) : “*The Axial Motion Effect on the Dynamic Response of a Laterally Vibrating Frame Subject to a Moving Load*”, Acta Mechanica **79**, 277 – 294.
3. **Michaltsos, G. and Sophianopoulos, D. S.**, (1993) : “*Axial Motion Effect on Dynamic Response of Vibrating Two-Span Beam, Supported on Axially Vibrating Column*”, Journal of Theoretical and Applied Mechanics, Year XXIV, No **1**, 60 – 73.
4. **Sophianopoulos, D. S., Ioannidis, S. S. and Ermopoulos, Ch. I.**, (1993) : “*Dynamic Analysis of Horizontally Stayed Bridges under Wind Loading*”, Computers & Structures **49**(4), 693 – 703.
5. **Sophianopoulos, D. S. and Kounadis, A. N.**, (1994) : “*Dynamic Stability of Imperfect Frames under Joint Displacements*”, Journal of Engineering Mechanics (ASCE) **120**(8), 1661 – 1674.
6. **Michaltsos, G., Sophianopoulos, D. and Kounadis, A. N.**, (1996) : “*The Effect of a Moving Mass and Other Parameters on the Dynamic Response of a Simply Supported Beam*”, Journal of Sound and Vibration **191**(3), 357 – 362.
7. **Sophianopoulos, D. S.**, (1996) : “*Static and Dynamic Stability of a Single-Degree-of-Freedom Autonomous System with Distinct Critical Points*”, Structural Engineering and Mechanics **4**(5), 529 – 540.
8. **Kounadis, A. N. and Sophianopoulos, D. S.**, (1996) : “*On the Dynamic Buckling Mechanism of Single-Degree-of-Freedom Dissipative/Nondissipative Autonomous Systems*”, Journal of Sound and Vibration **193**(3), 645 – 668.
9. **Kounadis, A. N. and Sophianopoulos, D. S.**, (1996) : “*Nonlinear Dynamic Buckling of a Cylindrical Shell Panel Model*”, AIAA Journal **34**(11), 2421 – 2428.
10. **Gantes, Ch. and Sofianopoulos, D.**, (1997) : “*Nonlinear Dynamics of Simple Shell Model with Chaotic Snapping Behavior (J.M. Greer Jr. and A.N. Palazotto)*”, Journal of Engineering Mechanics (ASCE) **123**(1), 96.

11. **Michaltsos, G. T., Sophianopoulos, D. S.**, (1998) : “*Nonlinear Dynamic Buckling of Asymmetrical Suspended Roofs under Step Loading*”, Computational Mechanics **21**, 389 – 397.
12. **Sophianopoulos, D. S.**, (1999) : “*Point Attractors and Dynamic Buckling of Autonomous Systems under Step Loading*”, International Journal of Solids and Structures **36**(35), 5357 – 5385.
13. **Kounadis, A. N., Sophianopoulos, D. S.**, (1999) : “*Conditions for the Occurrence of Limit Cycles in Autonomous Potential Damped Systems*”, International Journal of Non-Linear Mechanics **34**, 949 – 966.
14. **Sophianopoulos, D. S., Michaltsos, G. T.**, (1999) : “*Combined Torsional-Lateral Vibrations of Beams under Vehicular Loading. I : Formulation and Solution Techniques*”, Facta Universitatis, Series Mechanics, Automatic Control and Robotics **2**(9), 877 – 886.
15. **Sophianopoulos, D. S.**, (2000) : “*New Phenomena Associated with the Nonlinear Dynamics and Stability of Autonomous Damped Systems under Various Types of Loading*”, Structural Engineering and Mechanics **9**(4), 397 – 416.
16. **Kounadis, A. N., Sophianopoulos, D. S.**, (2000) : “*Autonomous Weakly Damped Conservative Systems Exhibiting Limit Cycles*”, Facta Universitatis, Series Mechanics, Automatic Control and Robotics **2**(10), 1149 – 1164.
17. **Sophianopoulos, D. S.**, (2001) : “*Nonlinear Stability of Simplified Structural Models Simulating Elastic Shell Panels of Revolution under Step Loading*”, International Journal of Solids and Structures **38**(5), 915 – 934.
18. **Sophianopoulos, D. S., Michaltsos, G. T.**, (2001) : “*Nonlinear Stability of a Simplified Model for the Simulation of Double Suspension Roofs*”, Engineering Structures **23**(6), 705 – 714.
19. **Sophianopoulos, D. S., Michaltsos, G. T.**, (2001) : “*The Effect of a Rotational Spring on the Global Stability Aspects of the Classical von Mises Model under Step Loading*”, Computer Modeling in Engineering and Sciences (CMES) **2**(1), 15 – 26.
20. **Sophianopoulos, D. S., Vakakis, A. F. and Kounadis, A. N.**, (2002) : “*Complex Dynamics of Perfect Discrete Systems under Partial Follower Forces*”, International Journal of Non-Linear Mechanics **37**(7), 1121 – 1138, (Ειδική Έκδοση με θέμα: Nonlinear Dynamic Instability Phenomena).

21. **Sophianopoulos, D. S.**, (2003) : “*The Effect of Joint Flexibility on the Free Elastic Vibration Characteristics of Steel Plane Frames*”, Journal of Constructional Steel Research **59**(8), 995 – 1008.
22. **Sophianopoulos, D. S.** and **Michaltsos, G. T.**, (2003) : “*Analytical Treatment of In-Plane Parametrically Excited Undamped Vibrations of Simply Supported Parabolic Arches*”, Journal of Vibration and Acoustics (ASME) **125**(1), 73 – 79.
23. **Sophianopoulos, D. S.** and **Asteris, P. G.**, (2004) : “*Interpolation based numerical procedure for solving two-point nonlinear boundary value problems*”, International Journal of Nonlinear Sciences and Numerical Simulation **5** (1), 67 – 78.
24. **Michaltsos, G. T.**, **Sarantithou, E.**, **Sophianopoulos, D. S.**, (2005) : “*Flexural – torsional vibration of simply supported open cross-section steel beams under moving loads*”, Journal of Sound and Vibration **280** (3-5), 479 – 494.
25. **Asteris, P. G.**, **Tzamtzis, A. D.**, **Vouthouni, P. P.**, **Sophianopoulos, D. S.** (2005) : “*Earthquake Resistant Design and Rehabilitation of Masonry Historical Structures*”, Practice Periodical on Structural Design and Construction (ASCE) **10** (1), 49 – 55.
26. **Sophianopoulos, D. S.**, **Asteris, P. G.**, **Athnasiadou, D.** (2006) : “*Influence of thermal induced residual stresses on the elastoplastic behavior and strength of non-slender I-shaped steel members under combined*”, Technika Chronica, Scientific Publications of the Technical Chamber of Greece, I, Vol. **1-2**, 37 – 50.
27. **Sophianopoulos, D. S.**, (2007) : “*Bifurcations and Catastrophes of a Two-Degrees-Of-Freedom Nonlinear Model Simulating the Buckling and Postbuckling of Rectangular Plates*”, Journal of the Franklin Institute **344** (5), 463 – 488.
28. **Sophianopoulos, D. S.**, **Asteris, P. G.**, (2006) : “*Numerical Method for the Undamped Forced Dynamics of Steel Cable Network Structures*”, Structural Engineering and Mechanics **23** (4), 449 – 454.
29. **Sophianopoulos, D. S.**, **Asteris, P. G.** and **Michaltsos, G.T.** (2005) : “*Equilibrium based evaluation of stress distribution under steel column base plates. I: Governing Equations*”, Electronic Journal of Structural Engineering **5**, 43 – 54 (www.ejse.org).
30. **Σοφιανόπουλος, Δ. Σ.** (2008) : “*Towards successful design in structural steel*”, Technika Chronica, Scientific Publications of the Technical Chamber of Greece, I, Vol. **1**, 21-29.

31. **Sophianopoulos, D. S., Michaltsos, G. T., Kounadis, A. N.** (2008) : “*The effect of infinitesimal damping on the dynamic instability mechanism of conservative systems*”, invited paper, Mathematical Problems in Engineering, Special Issue on “Uncertainties in Nonlinear Structural Dynamics”, Volume 2008, **Article ID 471080**, 25 pages.
32. **D. S. Sophianopoulos, S. Katsamagou, N. Kefou** (2010): “*Modal Dynamics Approximations of cantilevers under partial follower load*”, International Journal of Structural Stability and Dynamics **10** (5), 1055 – 1082.
33. **Asteris, P. G., Antoniou, S. T., Sophianopoulos, D. S., Chrysostomou, Ch. Z.** (2011): “*Mathematical Macro-Modelling of Infilled Frames: State-of-the-Art*”, Journal of Structural Engineering (ASCE) **137** (12), 1058 – 1517.
34. **Sophianopoulos, D. S., Deri, A. E.** (2011): “*Parameters affecting response and design of steel moment frame reduced beam section connections: An Overview*”, International Journal of Steel Structures **10**(2), 133 – 144.
35. **Sophianopoulos, D. S., Papachristou, K. S.** (2011): “*In-plane stability of uniform steel beam – columns on a Pasternak foundation with zero end-shortening*”, Archive of Applied Mechanics 82(10-11), 1653 – 1662, special issue.
36. **Giannakopoulos, A.E., Petridis, S., Sophianopoulos, D. S.** (2012): “*Dipolar Gradient Elasticity of Cables*”, International Journal of Solids and Structures **49**(10), 1259 – 1265.
37. **Dova, E., Katsoulas, N., Kittas, C. and Sophianopoulos, D.** (2012): “*Differences in Required Structural Efficiency of Standard Commercial Steel Greenhouses among EU Countries: A Hellenic Experience*”, Acta Horticulturae **927**, 695 – 701, http://www.actahort.org/books/927/927_86.htm.
38. **Sophianopoulos, D.S.** (2013): “*Stability Analysis of a Single-Degree-of-Freedom Mechanical Model with Distinct Critical Points: I. Bifurcation Theory Approach*”, World Journal of Mechanics **3**, 62 – 81.
39. **Papachristou, K.S., Sophianopoulos, D.S.** (2013): “*Buckling of Beams on Elastic Foundation Considering Discontinuous (Unbonded) Contact*”, International Journal of Mechanics and Applications **3**(1), 4 – 12.
40. **Sophianopoulos, D.** (2013): “*Rain-Wind Induced Vibrations in Stay Cables: Response Characteristics, Excitation Mechanisms and Modelling*”, International Journal of Bridge Engineering **1**(1), 29 – 36.

C. Conference Proceedings

1. **Michaltsos, G. T., Sofianopoulos, D. S.**, “*Elastic Stability of a Ring-Shaped Joint Subject to a Moment*”, Proceedings of the 1st National Conference on Steel Structures (A.N. Kounadis editor), Athens, Greece, June 6-7, 1991, pp. 177 – 187.
2. **Sophianopoulos, D. S. and Kounadis, A. N.**, “*Nonlinear Dynamic Stability of a Geometrically Imperfect Frame Under Dynamic Axial Displacement of its Joint*”, Proceedings of the Polish – German – Greek Symposium on Dynamics and Stability of Continua (R. Bogacz – A.N. Kounadis and O. Mahrenholtz eds.), Pultusk, Poland, September 2 –7, 1991.
3. **Michaltsos, G. T., Sofianopoulos, D. S. and Petrovits, N. E.**, “*The Effect of Shear Deformation on the Lateral-Torsional Buckling of Thin-Walled Steel Members*”, Proceedings of the 1st European Conference on Steel Structures, Eurosteel 95 (A.N. Kounadis editor), Athens, Greece, May 18-20, 1995, pp. 63 – 71.
4. **Ermopoulos, J. Ch., Vayas, I., Petrovits, N. E., Sofianopoulos, D. S. and Spanos, Ch.**, “*Cyclic Behaviour of Composite Beam-To-Column Bolted Joints*”, Proceedings of the 1st European Conference on Steel Structures, Eurosteel 95 (A.N. Kounadis editor), Athens, Greece, May 18-20, 1995, pp. 205 – 210.
5. **Kounadis, A. N. and Sophianopoulos, D. S.**, “*Dynamics of a Dissipative Cantilever-Model Under Partial Follower Load*”, Proceedings of the 4th Greek National Congress on Mechanics (P.S.Theocharis, E.E.Gdoutos eds.), Xanthi, Greece, June 26-29, 1995, Vol. I, pp. 712 – 726.
6. **Kounadis, A. N. and Sophianopoulos, D. S.**, “*Nonlinear Dynamic Buckling of a Cylindrical Shell Panel Model*”, Proceedings of the 3rd European Conference on Structural Dynamics, Eurodyn '96, (G.Augusti, C.Borri and P.Spinelli eds.), Florence, Italy, June 5-8, 1996, pp. 671 – 679.
7. **Sophianopoulos, D. S. and Michaltsos, G. T.**, “*Non-Linear Dynamic Buckling of Suspended Roofs Under Step Loading*”, Proceedings of the 2nd National Congress on Computational Mechanics (D.A. Sotiropoulos, D.E. Beskos eds.), Chania, Crete, Greece, June 26-28, 1996, pp.74 – 81.
8. **Michaltsos, G. T., Ermopoulos, I. C., Sophianopoulos, D. S.**, “*Modeling of the Nonlinear Response of a Spherical Shell*”, Proceedings of the 2nd International

Conference on Coupled Instabilities in Metal Structures (J.Rondal, D.Dubina and V.Gioncu eds.), Liege, Belgium, September 5-7, 1996, pp. 491 – 498.

9. **Kounadis, A. N.** and **Sophianopoulos, D. S.**, “*On a Series of Dynamic Bifurcations in Nonconservative Dissipative Systems for Various Levels of a Follower Load*”, in Solid Mechanics, Scientific Meetings of the Serbian Academy of Sciences and Arts, Vol. LXXVII, Department of Technical Sciences, Book 3, Belgrade 1997, pp. 107 – 117.
10. **Michaltsos, G. T.**, **Sophianopoulos, D. S.**, **Konstandakopoulos, T. G.**, “*Buckling and Postbuckling Analysis of a Low Parabolic Arch*”, Proceedings of the Structural Stability Research Council 1997 Annual Technical Session and Meeting, Toronto, Ontario, Canada, June 9-11, 1997, pp. 115 – 126.
11. **Michaltsos, G. T.**, **Sophianopoulos, D. S.** and **Konstandakopoulos, T. G.**, “*Non-Linear Buckling Response of a Conical Shell Panel*”, in Advances in Finite Element Procedures and Techniques, Civil-Comp Press, Edinburgh, 1998 (B.H.V. Topping editor), pp. 239 – 246.
12. **Kounadis, A. N.** and **Sophianopoulos, D. S.**, “*Conditions for the Occurrence of Limit Cycles in Autonomous Potential Damped Systems*”, Proceedings of the 5th National Congress on Mechanics (P.S. Theocaris, D.I. Fotiadis, C.V. Massalas eds.), Ioannina, Greece, August 1998, Vol.2, pp. 1066 – 1078.
13. **Michaltsos, G. T.**, **Sophianopoulos, D. S.** and **Konstandakopoulos, T. G.**, “*Non-Linear Dynamic Buckling of Suspended Roofs on Elastic Supports Under Step Loading*”, Proceedings of the 5th National Congress on Mechanics (P.S.Theocaris, D.I.Fotiadis, C.V.Massalas eds.), Ioannina, Greece, August 1998, Vol.2, pp. 1079 – 1087.
14. **Sbarounis, A. D.**, **Sophianopoulos, D. S.**, **Michaltsos, G. T.**, “*Inelastic Analysis of Beam-Columns*”, Proceedings of the 3rd National Conference on Steel Structures (K.T. Thomopoulos, C.C. Baniotopoulos, A.V. Avdelas eds.), Thessaloniki, Greece, October 30-31, 1998, pp. 118 – 125.
15. **Sophianopoulos, D. S.**, **Kokkinis, V.**, “*Static and Dynamic Stability of Beck’s Column Under Partial Follower Loading*”, Proceedings of the 4th European Conference on Structural Dynamics, Eurodyn ’99, (L.Fryba, J.Naprstec eds.), Prague, Czech Republic, June 7-10, 1999, pp. 399-404.
16. **Michaltsos, G. T.**, **Sophianopoulos, D. S.**, “*Nonlinear Dynamic Stability of 3-D.O.F. Imperfect Damped System Under Step Loading*”, Proceedings of the 3rd

National Congress on Computational Mechanics, Volos, Greece, June 24-26, 1999, pp. 273 – 280.

17. **Sophianopoulos, D. S.**, “*Bifurcations, Point Attractors and Chaoslike Behavior of Perfect Dissipative Systems under Partial Follower Loading*”, Proceedings of the 1st International Conference on Advances in Structural Engineering and Mechanics, Seoul, Korea, August 23-25, 1999, Vol.1, pp. 701 – 707.
18. **Sophianopoulos, D. S.** and **Michaltsos, G. T.**, “*The Effect of a Rotational Spring on the Global Stability Aspects of the Classical von Mises Model under Step Loading*”, Proceedings of ICES’2K, International Conference on Computational Engineering & Sciences, (S.N.Atluri, F.W.Brust eds.), Los Angeles, USA, August 21-25, 2000, Vol.II, pp. 1846 – 1851.
19. **Kounadis, A. N.** and **Sophianopoulos, D. S.**, “*Autonomous Damped Conservative Systems Exhibiting Limit Cycles*”, **invited plenary lecture** in the 5th Yugoslav Symposium on Nonlinear Mechanics, Nis, Yugoslavia, 2-5 October 2000.
20. **Michaltsos, G. T.** and **Sophianopoulos, D. S.**, “*The Effect of Deck Roughness in Conjunction with other Parameters on the Dynamic Response of Steel Highway Bridges under Vehicular Loading*”, Proceedings of the 6th National Congress on Mechanics (E.C. Aifantis, A.N. Kounadis eds.), Thessaloniki, Greece, July 19-21, 2001, Vol. I, pp. 234 – 239.
21. **Sophianopoulos, D. S.** and **Michaltsos, G. T.**, “*Combined Torsional-Lateral Vibration of Beams Under Vehicular Loading*”, Proceedings of the XXIII Yugoslav Congress of Theoretical and Applied Mechanics (D. Ruzic, Editor), Belgrade, Yugoslavia, October 12-14, 2001, Special Issue of the Journal of Theoretical and Applied Mechanics (Yugoslav Society of Mechanics), Vol. (1) 2004, pp. 375 - 380.
22. **Michaltsos, G. T.** and **Sophianopoulos, D. S.**, “*The dynamic effect of distributed loads and other parameters on the behavior of light railway bridges*”, Proceedings of the 5th European Conference on Structural Dynamics, Eurodyn 2002 (Grundmann & Schueller eds.), Munich, Germany, 2 – 5 September 2002, Vol. II, pp. 1101 – 1106.
23. **Konstantakopoulos, T. G.**, **Michaltsos, G. T.** and **Sophianopoulos, D. S.**, “*A simplified model for the study of lateral-torsional vibrations of cable stayed bridges*”, Proceedings of the 5th European Conference on Structural Dynamics,

Eurodyn 2002 (Grundmann & Schueller eds.), Munich, Germany, 2 – 5 September 2002, Vol. II, pp. 1095 – 1100.

24. **Michaltsos, G. T.** and **Sophianopoulos, D. S.**, “*The effect of thermal residual stresses on the bearing capacity of hot-rolled I sections under combined bending and axial force*”, Proceedings of the 4th National Conference on Steel Structures (D.E. Beskos, D.I. Karabalis, A.N. Kounadis eds.), Patras, Greece, May 24 – 25, 2002, Vol. II, pp. 367 - 375.
25. **Sophianopoulos, D. S.** and **Michaltsos, G. T.**, “*The effect of thermal residual stresses on the bearing capacity of hot-rolled I sections under combined bending and shearing force*”, Proceedings of the 3rd European Conference on Steel Structures, Eurosteel (A. Lamas and L. Simoes da Silva eds.), Coimbra, Portugal, 19 – 20 September 2002, Vol. I, pp. 173 – 182.
26. **Sophianopoulos, D. S.** and **Konstantakopoulos, T. G.**, “*A root-finding approach for the solution of two-point nonlinear boundary value problems arising in engineering applications*”, Proceedings of the Fifth World Congress on Computational Mechanics (WCCM V), July 7-12, 2002, Vienna, Austria, Editors: Mang, H.A.; Rammerstorfer, F.G.; Eberhardsteiner, J., Publisher: Vienna University of Technology, Austria, ISBN 3-9501554-0-6, Paper-ID: 80493, <http://wccm.tuwien.ac.at>.
27. **Sophianopoulos, D. S.** and **Asteris, P. G.**, “*Bifurcations of Periodic Orbits in a Class of Autonomous Non-conservative Perfect Systems*”, Proceedings of the 14th US National Congress of Theoretical and Applied Mechanics (R.C. Batra and E.G. Henneke eds.), Blacksburg, Virginia, USA, June 23 – 28, 2002, Session T2K (Dynamics II), pp. 35/506.
28. **Asteris, P. G.** and **Sophianopoulos, D. S.**, “*Non-linear Finite Element Analysis of Anisotropic Shear Walls*”, Proceedings of the 14th US National Congress of Theoretical and Applied Mechanics (R.C. Batra and E.G. Henneke eds.), Blacksburg, Virginia, USA, June 23 – 28, 2002, Session F4F (Computational Geomechanics), pp. 73/395.
29. **Michaltsos, G. T.**, **Konstantakopoulos, T. G.**, **Sophianopoulos, D. S.**, “*A mathematical model of tall buildings with passive absorb systems under dynamic loadings*”, Proceedings of Stessa 2003, Behaviour of steel structures in seismic areas (Mazzolani, ed.), Naples, Italy, June 9 - 12, 2003, Swets & Zeitlinger, Lisse, pp. 621 – 626.

30. **Sophianopoulos, D. S., Kounadis, A. N. and Vakakis, A. F.**, “*Complex Dynamics of Perfect Discrete Systems under Partial Follower Forces*”, Symposium on Stability and Bifurcation Phenomena, ICCES 03, International Conference on Computational & Experimental Engineering & Sciences, Corfu, Greece, July 25 – 29, 2003 in CD form.
31. **Sophianopoulos, D. S., Argyropoulou, L., Evagorou, E. and Marinithou, V.**, “*Secondary Bifurcations in Postcritical Domains of a Two-Degrees-of-Freedom Nonlinear System with Elements of Catastrophe Theory*”, Proceedings of the 7th Greek National Congress on Mechanics (HSTAM 2004) (Kounadis, Providakis & Exadaktylos eds.), Chania, Crete, Greece, June 24 – 26, 2004, Vol. I, pp. 244 – 249.
32. **Sophianopoulos, D. S., Gazouli, A. V.**, “*Dynamics of Beck’s Column via Nonlinear Normal Modes*, 21st International Congress of Theoretical and Applied Mechanics (21st ICTAM 2004), Warsaw, Poland, August 15-21, 2004, SM25S_10221, Proceedings in CD-ROM, ISBN 83-89697-01-1.
33. **Sophianopoulos, D. S.**, “*Bifurcations and Catastrophes of a Two-Degree-of-Freedom Nonlinear Model Simulating the Buckling and Postbuckling of Rectangular Plates*”, 1st International Conference on Modeling, Simulation and Applied Optimization, Sharjah, UAE, February 1-3, 2005, paper ID 132, Proceedings in CD-ROM, ISBN: 9948-427-00-9.
34. **Sophianopoulos, D. S., Asteris, P. G.**, “*Behavior Prediction and Modeling of Steel Beam-to-Column Semi-Rigid Connections: AN Overview*”, Proceedings of the 5th National Conference on Steel Structures, Xanthi, Greece, 29/9-2/10 2005, (E. Galousis, J. Ermopoulos, Ch. Kalfas eds.), Vol. I, pp. 378 – 387.
35. **Asteris, P. G., Sophianopoulos, D. S.**, “*Seismic Response of Masonry Infilled Steel Frames*”, Proceedings of the 5th National Conference on Steel Structures, Xanthi, Greece, 29/9-2/10 2005, (E. Galousis, J. Ermopoulos, Ch. Kalfas eds.), Vol. I, pp. 313 – 320.
36. **Sophianopoulos, D. S., Konstantakopoulos, T. G.**, “*An Overview of the Method of Non-Smooth Temporal Transformations for the Analysis of the Dynamics of Strongly Nonlinear Systems*”, Proceedings of the 2nd International Conference on NonSmooth/NonConvex Mechanics with Applications in Engineering (NNMAE 2006) (C.C. Baniotopoulos, ed.), 7 & 8 July 2006, Aristotle University of Thessaloniki, Greece, pp. 355 – 362.

37. **Kounadis, A. N., Sophianopoulos, D. S.**, “*The effect of weak damping and other parameters on the occurrence of flutter instability in autonomous systems under conservative loading*”, 6th German-Greek-Polish Symposium “Recent Advances in Mechanics” (J. T. Katsikadelis, *ed.*), September 29-21, 2007, Alexandroupolis, Greece, pp. 57-58 (Book of Abstracts, Session 5: Stability and Chaos).
38. **Sophianopoulos, D. S., Michaltsos, G. T.** “*Lateral Buckling of Steel I-section Beams: Simultaneous Axial Compression and Follower Distributed Loading*”, Proceedings of Eurosteel 2008, 5th European Conference on Steel and Composite Structures, (R. Ofner, D. Beg, J. Fink, R. Greiner, H. Unterweger *eds.*), Publications of ECCS, Graz, Austria, September 3-5, 2008, Vol. B, pp. 1581 – 1586.
39. **Sophianopoulos, D. S., Stavropoulou, E., Delichatsiou, A.** “*THE NEW HELLENIC AVIATION MUSEUM PROJECT: Refurbishment and Rehabilitation of a Historic Air Force Hangar*”, Proceedings of Eurosteel 2008, 5th European Conference on Steel and Composite Structures, (R. Ofner, D. Beg, J. Fink, R. Greiner, H. Unterweger *eds.*), Publications of ECCS, Graz, Austria, September 3-5, 2008, Vol. B, pp. 1281 – 1286.
40. **Sophianopoulos, D. S., Sbarounis, A., Papachristou, K. S.** “*Steel Beam-Columns on Elastic Foundation: Coupled Instability Modes*”, Proceedings of the 6th National Conference of Metal Structures (J. Ermopoulos, I. Vayas, Ch. Gantes, G. Ioannidis *eds.*), Ioannina, Greece, 2 – 4 Oct. 2008, Vol. II, pp. 282 – 289.
41. **Sophianopoulos, D. S., Stavropoulou, E., Delichatsiou, A.** “*Incorporation of a Historical Metal Hangar of the Hellenic Air force in the Design of the New Aviation museum*”, Proceedings of the 6th National Conference of Metal Structures (J. Ermopoulos, I. Vayas, Ch. Gantes, G. Ioannidis *eds.*), Ioannina, Greece, 2 – 4 Oct. 2008, Vol. I, pp. 271 – 278.
42. **Sophianopoulos, D. D.** “*Nonlinear Cable Vibration in Bridges under Internal Resonance Conditions*”, Proceedings of the 1st Workshop of the Hellenic Society for Bridges Studies (Eds: G. Michaltsos, N. Bazeos), Patras, Greece, 12 Oct. 2009, pp. 53 – 72.
43. **Dova, E., Sophianopoulos, D. S., Katsoulas, N., Kittas, C.** “*Differences in Required Structural Efficiency of Standard Commercial Steel Greenhouses among EU Countries: a Hellenic Experience*”, 28th International Horticultural

Congress, Lisbon – Portugal, 22 – 27 August 2010,
<http://www.ihc2010.org/eposters/poster.asp?posterId=3497&searchTerm=&category=>

44. **Giannakopoulos, A. E., Sophianopoulos, D. S.** “*Gradient Elasticity of Steel Cables*”, Proceedings of the 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, 12 – 14 July 2010, pp. 129 – 136.
45. **Sophianopoulos, D. S., Papachristou, K. S.** “*Steel Beam-Columns on Winkler Foundation: Simulation of Fundamental Mode-Coupling*”, Proceedings of the 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, 12 – 14 July 2010, pp. 649 – 656.
46. **Sophianopoulos, D. S., Konstantakopoulos, Th. G.** “*Loads on Bridges: European Regulations and Hellenic Provisions*”, Proceedings of the 2nd Workshop of the Hellenic Society for Bridges Studies (Eds: G. Michaltsos, D. Sophianopoulos), Volos, Greece, 7 May 2010, pp. 31 – 56.
47. **Sophianopoulos, D. S., Papadioti, D.-Ch. P.** “*Direct Stability Analysis of Steel Structures: Theory, Software Implementation and Computational Aspects*”, Proceedings of the 7th GRACM International Congress on Computational Mechanics, Athens, Greece, 30 June – 2 July 2011 (in CD ROM), paper No. 97.
48. **Sophianopoulos, D. S., Deri, A. E.** “*Steel End-Plate Beam-to-Column RBS Connections: Optimum Design under Monotone Loading Utilizing European I-profiles*”, Proceedings of Eurosteel 2011, 6th European Conference on Steel and Composite Structures (Dunai L. et al eds.), Budapest, Hungary, August 31 – September 2, 2011, Vol. A., pp. 501 – 506.
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50. **Dova, E., Sophianopoulos, D., Katsoulas, N., Kittas, C.** “*Additional Design Requirements of Steel Commercial Greenhouses in High Seismic Hazard EU Countries*”, Proceedings of the 7th National Conference on Steel Structures (Ermopoulos I, Mistakidis E, Karamanos S eds.), Volos, Greece, September 29 – October 1, 2011, Vol. 2, pp. 552 – 559.

51. **Sophianopoulos, D., Asteris, P.** “*In-Plane Buckling of Shallow Circular Steel Arches via Catastrophe Theory*”, Proceedings of the 7th National Conference on Steel Structures (Ermopoulos I, Mistakidis E, Karamanos S eds.), Volos, Greece, September 29 – October 1, 2011, Vol. 1, pp. 225 – 232.
52. **Sophianopoulos, D., Argyriou, A., Papanikolaou, C.** “*Second Order Plastic Analysis and Design of a Steel Schwedler Dome by means of Special Software*”, Proceedings of the 7th National Conference on Steel Structures (Ermopoulos I, Mistakidis E, Karamanos S eds.), Volos, Greece, September 29 – October 1, 2011, Vol. 1, pp. 482 – 489.
53. **Sophianopoulos, D., Tsopelas, P.** “*Bridge with Un-Bonded Post-Tension Piers: Dynamics Simulation under Base Excitation*”, Proceedings of the International Conference on Bridges and Soil-Bridge Interaction (in CD-Rom) (G.T. Michaltsos and G. Gazetas, eds.), Athens, Greece, October 13 – 15, 2011, pp. 229 – 236.
54. **Sophianopoulos, D., Konstantakopoulos, Th.** “*Stay Cables’ Rain-Wind Induced Vibrations: Response Characteristics, Exciting Mechanisms, and Modelling*”, Proceedings of the International Conference on Bridges and Soil-Bridge Interaction (in CD-Rom) (G.T. Michaltsos and G. Gazetas, eds.), Athens, Greece, October 13 – 15, 2011, pp. 505 – 512.
55. **Deri, D., Sophianopoulos, D.S.** “*Parametric Analysis and Optimization of Reduced Beam Section Steel Frame Connections*”, Proceedings of the 7th European Conference on Steel and Composite Structures (in electronic form), Naples, Italy, September 10-12, 2014, No. 09-55.
56. **Sophianopoulos, D. S., Kovalenko, R. G., Sabodash, O. A.** “*Long Term Modelling of Marine Corrosion Wear of Steel Pile Walls in Far Eastern Russia Ports Accounting for Water Pollution Effects*”, Proceedings of the 7th European Conference on Steel and Composite Structures (in electronic form), Naples, Italy, September 10-12, 2014, No. 08-309.
57. **Sophianopoulos, D. S., Papachristou, K. S., Papatheocharis, Th., Tsopelas, P., Perdikaris, Ph.** “*Theoretical – Experimental Investigation and Optimization of the Seismic Strengthening of Existing RC Buildings with Pilotis via Steel Concentric X-Braces: I. Parametric Study*”, Proceedings of the 8th Hellenic National Conference of Steel Structures, Tripoli, Greece, 2-4 October 2014.

58. **Sophianopoulos, D. S., Papachristou, K. S., Papatheocharis, Th., Tsopelas, P., Perdikaris, Ph.** “*Theoretical – Experimental Investigation and Optimization of the Seismic Strengthening of Existing RC Buildings with Pilotis via Steel Concentric X-Braces: II. Experiments*”, Proceedings of the 8th Hellenic National Conference of Steel Structures, Tripoli, Greece, 2-4 October 2014.
59. **Sophianopoulos, D. S., Deri, A. E.** “*Recent Advances in Optimum Design of Steel Latticed Domes*”, Proceedings of the 8th Hellenic National Conference of Steel Structures, Tripoli, Greece, 2-4 October 2014.

D1. Reviewer in the following Scientific Journals:

1. International Journal of Non-Linear Mechanics
2. Nonlinear Dynamics
3. European Journal of Mechanics A/Solids
4. Journal of Sound and Vibration
5. Mechanism and Machine Theory
6. Computers and Structures
7. Meccanica
8. International Journal of Mechanical Sciences
9. Structural Engineering and Mechanics
10. International Journal of Solids and Structures
11. Engineering Structures
12. Steel and Composite Structures
13. Computer Methods in Applied Mechanics and Engineering
14. Journal of Mechanics of Materials and Structures
15. International Journal of Structural Stability and Dynamics
16. Journal of Engineering Mechanics (ASCE)
17. Computers and Mathematics with Applications
18. ASME Journal of Pressure Vessel Technology
19. Archive of Applied Mechanics
20. Journal of Vibration and Control
21. Engineering Review
22. The Open Construction and Building Technology Journal

D2. Peer Reviewer in the following Scientific Journals:

American Journal of Civil Engineering

(<http://www.sciencepublishinggroup.com/journal/peerreviewers.aspx?journalid=229>)

International Journal of Mechanical Engineering and Applications

(<http://www.sciencepublishinggroup.com/journal/peerreviewers.aspx?journalid=220>)

D3. Member of the Editorial Board in:

Scientific Journals International (Civil, Architecture and Environmental Engineering)

International Journal of Mechanics and Applications

E. Memberships

1. Technical Chamber of Greece – member
2. Hellenic Society of Theoretical and Applied Mechanics – member
3. New York Academy of Sciences (NYAS) – member
4. American Society of Civil Engineers (ASCE) – member
5. International Society of Computational Engineering and Sciences (ISCES) – member
6. Structural Stability Research Council (SSRC) – member
7. American Institute of Aeronautics and Astronautics (AIAA) – member
8. Metal Structures Research Society (MSRS) – member
9. Greek Association in Computational Mechanics (GRACM) – member
10. Hellenic Society of Bridges Studies – founding member

F. Current Research Interests

Behavior, Analysis and Design of Steel Structures

Nonlinear Static and Dynamic Stability of Steel Structures

Elasto - Plastic Response of Steel Structures under seismic loading

Modeling of Infilled Frames

Analysis and Design of Greenhouse Structures

Nonlinear Dynamics and Chaos

Applications of Catastrophe Theory on the Stability of Metal Structures

G. Working Experience

Date	October 4 th 2007 - present
Occupation or position held	Assistant Professor of Metal Structures
Main activities and responsibilities	Research, Teaching, Administration, Grant Supervision, Theses (Diploma, MSc, PhD) Supervision
Name and address of employer	Department of Civil Engineering, University of Thessaly, Pedion Areos, 38334 Volos, Greece
Type of business or sector	Faculty Member
Date	September 1 st 1998 – October 3 rd 2007
Occupation or position held	Adjunct Lecturer (9/1/1998 – 8/31/2000), Adjunct Assistant Professor (9/1/2000 – 2/28/2005), Adjunct Associate Professor (3/1/2005 – 8/31/2007)
Main activities and responsibilities	Research, Teaching of four undergraduate courses on Metal Structures, Supervision of Diploma Theses
Name and address of employer	Department of Civil Engineering, University of Thessaly, Pedion Areos, 38334 Volos, Greece
Type of business or sector	Adjunct Faculty Member
Date	November 1987 – August 2003
Occupation or position held	Civil Engineer
Main activities and responsibilities	Design and Construction of Civil Engineering Public Works
Name and address of employer	Ministry of National Defence, Hellenic Air Force, Air Support Command, Branch C5, Department of Public Works, Elefsina Airport
Type of business or sector	Civil Servant
Date	September 2003 – August 2004
Occupation or	Department Head – Special Programs in Civil Engineering

position held	
Main activities and responsibilities	Supervising of Civil Engineers in Special Programs related to Hospitals, Airfields and other facilities
Name and address of employer	Public Works Directorate, Hellenic Air Force General Staff, Branch C5, Holargos, Greece
Type of business or sector	Civil Servant
Date	September 2004 – October 4th 2007
Occupation or position held	Department Head – Design of Nationally Funded Civil Engineering Public Works
Main activities and responsibilities	Supervising of Civil Engineers in the design and construction of nationally funded civil engineering public works
Name and address of employer	Hellenic Air Force Public Works Service, Holargos, Greece
Type of business or sector	Civil Servant

H. Number of Citations: 228