# **CURICILUM VITAE**

NAME: BIRTH DATE: TOWN: VISSARION PAPADOPOULOS 26 /11 / 1968 ATHENS, GREECE

## **EDUCATION**

α) Elementary – high-school education

1974 - 1980 : Elementary school of Filothei, Athens. 1980 - 1986 : High-school of Filothei, Athens.

- b) Graduate studies
- 1986 1991: National Technical University of Athens (NTUA), Dept. of Civil Engineering
- c) Post-graduate studies
- 1992 1993: Master of Science (MSc) and Diploma of Imperial College (DIC) in «Earthquake Engineering and Structural Dynamics», Imperial College of Science Technology and Medicine, Dept. of Civil Engineering, London, UK.
- 1992 1998: PhD Thesis, NTUA : «Limit reliability analysis of 3D framed structures using the Stochastic Finite Element Method».

# ACADEMIC RECORD

- 2000 2005: Post doctoral research in NTUA with prof. Manolis Papadrakakis in the area of computational mechanics.
- 2002 2005: Post doctoral research in Columbia University New York with Prof. George Deodatis in the area of computational stochastic mechanics. This research cooperation initiated in 2002 with a 3 months stay in Columbia University and continued remotely.
- 2001 2003: Lecturer with PD/407 contract at the department of Civil Engineering and Mechanical Engineering in the university of Thessaly.
- 2004: Assistant Professor with PD/407 contract at the department of Civil Engineering and Mechanical Engineering in the university of Thessaly.
- 2007-2011: Lecturer at the department of Civil Engineering in the National Technical University of Athens.
- 2012-today: Assistant Professor at the department of Civil Engineering in the National Technical University of Athens.

# LANGUAGES

English:	First Certificate in English – University of Cambridge, Toefel (score 540).
Γαλλικά:	Cerificat de langue Francaise.

# **PROGRAMMING LANGUAGES**

Fortran, Matlab, C# (.net)

# **TEACHING ACTIVITIES**

- **Special issues of structural engineering** 9<sup>th</sup> semester, School of Civil Engineering, University of Thessaly, Volos, Greece, 2000-2001, 2002 – 2002, 2002-2003, 2003-2004

#### - Finite Elements I

7<sup>th</sup> semester, School of Civil Engineering, University of Thessaly, Volos, Greece, 2000-2001-2002,2002-2003, 2003-2004

#### - Finite Elements II

8<sup>th</sup> semester, School of Civil Engineering, University of Thessaly, Volos, Greece, 2000-2001-2002,2002-2003, 2003-2004

## - Finite Elements

\_

7<sup>th</sup> semester, School of Civil Engineering, University of Thessaly, Volos, Greece, 2004-2005,2005-2006.

#### Structural Analysis I and II

4<sup>th</sup> and 5<sup>th</sup> semester, School of Civil Engineering, National Technical University of Athens, Greece, ,2006-today.

- Special Issues of structural analysis using Fininte Elements

9<sup>th</sup> Semester, School of Civil Engineering, National Technical University of Athens, Greece, 2009-today.

- **Fininte Element Analysis of Structures** 8th semester, School of Civil Engineering, National Technical University of Athens, Greece, 2015-2016-today.
- Structural Engineeing I 1th semester, School of Architecture, National Technical University of Athens, Greece, 2013-2015.
- Non-linear Fininte Element Analysis Post-graduate course, School of Civil Engineering, National Technical University of Athens, Greece, 2009-today.
- Stochastic Finite Element Analysis
  Post-graduate course, School of Civil Engineering, National Technical University of Athens, Greece, 2014-today.

#### - Finite Elements

Technical School of training Engineering Army officers (STEAMX), Athens, Greece, 2013-2015.

#### - Probabilistic and reliability analysis of structures

Superior pedagogic school of Techncial Education (ASPAITE), Athens, Greece, 2015-2016.

## **RESEARCH PROJECTS**

- 1 «Vulnerability of buried pipelines under seismic loading», European Union, environment, 1993.
- 2 «Prediction and measurement of residual stresses», Joint Recsearch Center, EU, Petten, The Netherlands, 1993.
- 3 «NW-IALAD, Integrity assessment of Large Concrete Dams», EU Research Network 2002-2004.
- 4 «AsProGe»', Earthquake protection of Egnatia highway bridges, Greek Ministry of Education, General Secretariat of Research and Technology (GGET), 2003-2006
- 5 «PITHAGORAS» Numerical solutions for coupled soil-structure interaction problems with large scale finite element models, Greek Ministry of Education, General Secretariat of Research and Technology (GGET)-2007.
- 6 «MRECT» Multi-scale reinforcement of semi-crystalline thermoplastic sheets and honeycombs, FP7-NMP-2009-2.5-1, EU-COLLABORATIVE PROJECT, 04/2010.
- 7 «ADERS», Collaborative PEOPLE Marie Curie Project, 2011 -2014).
- 8 «Development of spectral galerkin stochastic finite elements » PEBE (2009), National Technical University of Athens (Coordinator).
- 9 «RASOR» Vulnerability and Risk ASsessment for the seismic prOtection of industRial facilities, THALES (2012-2015), GGET (Coordinator)
- 10 «MASTER», Mastering the computational challenges of numerical modelling and optimum design of CNT reinforced Composites, ERC Advanced Grant ERC-2011-ADG\_20110209.

## **PROFESSIONAL ACTIVITIES**

Consultancy and design of Bridges and Buildings privately and in collaboration with the following companies:

D. Bairaktaris & Co, 1991 – 1996.

DENCO Consultant Engineers L.t.d 1997-1998.

O.T.M L.t.d., 1997-2000.

My professional activities involve the analysis and design of a large number of reinforced concrete buildings as well as a large number of reinforced concrete and prestressed High-way Bridges in Greece.

# **PUBLCATIONS**

#### PUBLCATIONS IN INTERNATIONAL JOURNALS WITH REFEREES

- 1 M. Papadrakakis and V. Papadopoulos, A computationally efficient method for the limit analysis of space frames, *Journal of Computational Mechanics*, 16(2), 132-141, 1995.
- 2 M. Papadrakakis, V. Papadopoulos and N. Lagaros, Structural reliability Analysis of elastoplastic structures using neural networks and Monte Carlo simulation, *Computer Methods in Applied Mechanics and Engineering*, 136, 145-163,1996.
- 3 M. Papadrakakis, V. Papadopoulos, Robust and efficient solution techniques for the stochastic finite element analysis of space frames, *Computer Methods in Applied Mechanics and Engineering*, 134, 325-340, 1996.
- 4 V. Papadopoulos and M. Papadrakakis, Stochastic finite element-based reliability analysis of space frames, *Probabilistic Engineering Mechanics*, 13 (1), 53 65, 1998.
- 5 V. Papadopoulos and M. Papadrakakis, Finite element Analysis of cylindrical panels with random initial imperfections, *Journal of Engineering Mechanics* 130, (8), 867-876, 2004.
- 6 V. Papadopoulos and M. Papadrakakis, The effect of material and thickness imperfections on the buckling load of shells with random initial imperfections, *Computer Methods in Applied Mechanics and Engineering*, 194, (12-16), 1405-1426, 2005.
- 7 V. Papadopoulos, G. Deodatis and M. Papadrakakis, Flexibility-based upper bounds on the response variability of simple beams, *Computer Methods in Applied Mechanics and Engineering*, 194, (12-16), 1385-1404, 2005.
- 8 V. Papadopoulos and G. Deodatis, Response variability of stochastic frame structures using evolutionary field theory, *Computer Methods in Applied Mechanics and Engineering*, 195 (9-12), 1050-1074, 2006.
- 9 V. Papadopoulos, M. Papadrakakis and G. Deodatis, Analysis of mean response and response variability of stochastic finite element systems *Computer Methods in Applied Mechanics and Engineering*, 195 (41-43), pp. 5454-5471, 2006.
- 10 N. Lagaros and V. Papadopoulos, Optimum design of shell structures with random geometric, material and thickness imperfections, *International Journal of Solids and Structures*, 43 (22-23), 6948-6964, 2006.
- 11 V. Papadopoulos and P. Inglessis, The effect of imperfect boundary conditions on the buckling analysis of cylindrical shells with random geometric material and thickness imperfections, *International Journal of Solids and Structures*, 44 (18-19), 6299-6317, 2007.

- 12 M. Papadrakakis, V. Papadopoulos, N. Lagaros, J. Oliver, A. E. Huespe, and P. Sánchez, Vulnerability Analysis of Large Concrete Dams using the Continuum Strong Discontinuity Approach and Neural Networks, *Structural Safety*, 30 (3), 217-235, 2008.
- 13 I.F. Moschonas, A.J. Kappos, P. Panetsos, V. Papadopoulos, T. Makarios and P. Thanopoulos, Seismic fragility curves for greek bridges: methodology and case studies, *Bulletin of Earthquake Engineering*, 7(2), 439-468, 2009.
- 14 V. Papadopoulos, D.C Charmpis, and M. Papadrakakis, A computationally efficient method for the buckling analysis of shells with stochastic imperfections, *Computational Mechanics*, 43 (5), 687-700, 2009.
- 15 V. Papadopoulos, G. Stefanou and M. Papadrakakis, Buckling analysis of imperfect shells with stochastic non-Gaussian material and thickness properties, *International Journal of Solids and Structures*, 46(14-15), 2800-2808, 2009.
- 16 V. Papadopoulos and N. Lagaros, Vulnerability-based robust design optimization of imperfect shell structures, *Structural Safety*, 31(6), 475-482, 2009.
- 17 D. Schillinger and V. Papadopoulos, Accurate Estimation of Evolutionary Power Spectra for Strongly Narrow-Band Random Fields, *Computer Methods in Applied Mechanics and Engineering*, 199 (17-20), 947-960, 2010.
- 18 D. Schillinger, V. Papadopoulos, M. Papadrakakis and M. Bishoff, Buckling Analysis of Imperfect I-Section Beam-Columns with Stochastic Shell Finite Elements, *Computational Mechanics*, 46](3), 495-510, 2010.
- 19 V. Papadopoulos, G. Stefanou and M. Papadrakakis, Buckling load variability of cylindrical shells with stochastic imperfections, *International Journal for Reliability and Safety*, 5 (2), 191-208, 2011.
- 20 V. Papadopoulos and O. Kokkinos, Variability response functions for stochastic systems under dynamic excitations, *Probabilistic Engineering Mechanics*, 28, pp. 176-184, (2012).
- 21 V. Papadopoulos, D. Giovanis and N. Lagaros and M. Papadrakakis, Accelerated subset simulation for reliability analysis using neural networks, *Computer Methods in Appied. Mechanics and Engineering*, 223-224, pp. 70-80 (2012).
- 22 D. Savvas, V. Papadopoulos and M. Papadrakakis, The effect of interfacial shear strength on damping behavior of carbon nanotube reinforced composites, International Journal of Solids and Structures, 49(26), 3823-3937, 2012.
- V. Papadopoulos, G. Soimiris and M. Papadrakakis, Buckling analysis of Isection portal frames with stochastic imperfections, *Engineering Structures*, 47, pp. 54-66 2013.
- 24 V. Papadopoulos and N. Lagaros, Performance-Based Optimum Design of Structures with Vulnerability Objectives, *International Journal for Reliability and Safety*, 7 (1), pp. 75-94, 2013.

- 25 Vryzides, I., Stefanou, G., Papadopoulos V., "Stochastic stability analysis of steel tubes with random initial imperfections, *Finite Elements in Analysis and Design*, 77, pp. 31-39, 2013
- 26 Savvas, D. and Papadopoulos V., "Nonlinear multiscale homogenization of carbon nanotube reinforced composites with interfacial slippage, J. Multiscale Computational Engineering, 12 (4), pp. 271-289, 2014.
- 27 Stavroulakis, G., Giovanis, D.G., Papadrakakis, M., Papadopoulos, V. "A new perspective on the solution of uncertainty quantification and reliability analysis of large-scale problems", Computer Methods in Applied Mechanics and Engineering, 276, pp. 627-658 2014.
- 28 Giovanis, D., Papadopoulos V., Stavroulakis, George, "An Adaptive spectral Galerkin stochastic finite element method using variability response functions", International Journal of Numerical Methods in Engineering, 104(3), pp185–208, 2015, 2015.
- 29 Giovanis, D., Papadopoulos V., "Spectral representation-based neural network assisted stochastic structural mechanics", Engineering Structures, 84, pp. 382-394 2015.
- 30 Papadopoulos, V., Kokkinos, O., "Transient response of stochastic finite element systems using Dynamic Variability Response Functions", Structural Safety, 52 (PA), pp. 100-112, 2015.
- 31 Papadopoulos, V., Tavlaki, M., "The impact of interfacial properties on the macroscopic performance of carbon nanotube composites. A FE2-based multiscale study", Composite Structures, 136, pp. 582-682, 2016.
- 32 M. Fragiadakis, Giovanis, D., Papadopoulos, "Epistemic uncertainty assessment using Incremental Dynamic Analysis and Neural Networks", Bulletin of Earthquake Engineering, 14(2), pp. 529-547, 2016.
- 33 Kokkinos, O., Papadopoulos, V., "Robust design with Variability Response Functions; an alternative approach", Structural Safety, 59, pp. 1-8, 2016.
- 34 Papadopoulos, V., Kalogeris, I., "A Galerkin-based formulation of the probability density evolution method for general stochastic finite element systems", Computational Mechanics, 57, pp. 701-716, 2016.
- 35 Savvas, D., Stefanou, G., Papadopoulos, V., Papadrakakis, M., "Effect of waviness and orientation of carbon nanotubes on random apparent material properties and RVE size of CNT reinforced composites", Composite Structures, (accepted for publication).
- 36 Papadopoulos, V., Seventekidis, I., "Stochastic Multiscale modeling of Graphene reinforced composites", Composite Structures (submitted).
- 37 Papadopoulos, V., Kalogeris, I., "Limit analysis of stochastic structures in the framework of the Probability Density Evolution Method", Structural Safety (submitted).
- 38 Giovanis G, Stavroulakis, I, Papadopoulos, Papadrakakis, M., "Domain decomposition solution schemes for SSFEM in GPU architectures", International Journal for Numerical Methods and Engineering, (submitted).

- 39 Giovanis G, Papadimitriou, I, Papadopoulos, V., Straub, D., "Enhanced Bayesian updating with subset simulation using artificial neural networks", Computer Methods in Applied Mechanics and Engineering, (to be submitted).
- 40 K.M Fajardo V. Papadopoulos, Halldorsson, B. and A. Papageorgiou, "Earthquake response of liquid storage tanks, accounting for rocking excitation, caused by basin induced surface waves", Earthquake Engineering and Structural Dynamics (to be submitted).

#### PUBLICATIONS IN INTERNATIONAL CONFERENCE PROCEEDINGS

- J. Milios, V. Papadopoulos and G.C. Papanicolaou, The effect of rubber content on dynamic crack propagation in rubber toughened P.M.M.A., Advanced composites in emerging technologies COMP'90, in S.A Paipetis and T.P. Philippidis (eds.), Patras, Greece, 1990.
- 2 M. Papadrakakis and V. Papadopoulos and N. Lagaros, Reliability analysis of elastic-plastic structures using neural networks, Proc. of the fourth International Conference on Computational Plasticity, in D.R.J. Owen, E. Onate, E. Hinton (eds.), COMPLAS '95, Barcelona, Spain. 1995.
- 3 M. Papadrakakis and V. Papadopoulos, A computationally efficient method for limit elastoplastic analysis of space frames, 1st European Conference on Steel Structures, EUROSTEEL, Athens, Greece, 1995.
- 4 V. Papadopoulos and M. Papadrakakis, Efficient solution procedures for the stochastic finite analysis of space frames using the Monte Carlo Simulation, Computational Structures Technology CST'95, in B.H.V. Topping (Ed.) Developments in Computational Techniques for Structural Engineering, Civil Comp Press, 61-70,1995.
- 5 Y. Tsompanakis, V. Papadopoulos, N. Lagaros and M. Papadrakakis, Reliability analysis of structures under seismic loading. Proceedings of World Congress on Computational Mechanics WCCM-V, July 7-12, Vienna, Austria, 2002.
- 6 V. Papadopoulos, M. Papadrakakis and G. Stefanou, Stochastic Finite Element Analysis of Imperfect cylindrical panels. Proceedings of World Congress on Computational Mechanics WCCM-V, July 7-12, 2002, Vienna, Austria, 2002.
- 7 V. Papadopoulos, M. Papadrakakis and G.S. Stefanou, Stochastic finite element analysis of imperfect cylindrical shells with random initial imperfections, 4<sup>th</sup> Int. Conf. on Computational Stochastic Mechanics CSM-4, Corfu, Greece June 9-12, 2002.
- 8 V. Papadopoulos and M. Papadrakakis, Non-linear stochastic finite element analysis of shells with random imperfections, 7<sup>TH</sup> National Congress on Mechanics HSTAM-2004, June 24-26, Chania, Crete, Greece, 2004.
- 9 V. Papadopoulos, G. Deodatis and M. Papadrakakis, Bounds on response variability of simple beams using a flexibility-based formulation, 9<sup>th</sup> ASCE Specialty Conference on Probabilistic Mechanics and Structural Reliability PMC2004, July 25-28, Albuquerque, USA, 2004.
- 10 V. Papadopoulos and M. Papadrakakkis, Non-linear stochastic finite element analysis of shells with non-homogeneous random imperfections, 7<sup>TH</sup>

International Conference on Computational Structures Technology CST 2004, 7-9 September, Lisbon, Portugal, 2004.

- 11 M. Papadrakakis, V. Plevris, N.D. Lagaros and V. Papadopoulos, Robust design optimization of 3D truss structures using evolutionary computation, Proceedings of 6<sup>th</sup> World Congress on Computational Mechanics WCCM in conjunction with APCOM'04, Beijing, China, Sept., 5-10, 2004.
- 12 V. Papadopoulos and G. Deodatis, Response variability of stochastic statically indeterminate frame structures based on closed-form expressions of the variability response function, Ninth International Conference on Structural Safety and Reliability – ICOSSAR'05, Rome, Italy, June 19-23, 2005.
- 13 M. Papadrakakis, V. Papadopoulos, D. Charbis, Random eigenvalue analysis of uncertain systems, 6<sup>th</sup> European Conference on Computational Mechanics ECCM, Lisbon, 5-9 September, 2006.
- 14 V. Papadopoulos, P. Inglessis and M. Papadrakakis, Buckling analysis of shells with random boundary imperfections, 1st South-East European Conference on Computational Mechanics SEECCM, Kragujevac, June 28-30, 2006.
- 15 G. Deodatis, M. Miranda, V. Papadopoulos and M. Papadrakakis, A methodology for systematically studying the effect of system uncertainty on system response, 15<sup>th</sup> US National Conference on Theoretical and applied Mechanics USCCTAM 06, 25-30 June, University of Colorado at Boulder, 2006.
- 16 V. Papadopoulos, G. Stefanou and M. Papadrakakis, The effect of Non Gaussian material and Thickness Variability on the buckling load of imperfect cylindrical shells, COMPDYN, ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Rethymno, June 13-16, 2007.
- 17 M. Papadrakakis, V. Papadopoulos, M. Kokolαkis and S. Kostantis, Seismic vulnerability analysis of bridges with random material properties, COMDYN, ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Rethymno, June 13-16, 2007.
- 18 V. Papadopoulos, M. Papadrakakis and G. Deodatis, Closed form expressions for the mean and mean square response of linear stochastic finite element systems, 8TH National Congress on Mechanics HSTAM, Patras, July 9-14, 2007.
- 19 V. Papadopoulos, D. Charbis and M. Papadrakakis, A computationally efficient method for the buckling analysis of shells with random imperfections, 9TH US National Conference on Computational Mechanics USNCCCM9, San Francisco, July 23-26, 2007.
- 20 V. Papadopoulos, N.D. Lagaros and M. Papadrakakis, Robust Design of Shells with Stochastic Properties, 8th WCCM and 5th ECCOMAS, Venice, Italy, June 30 July 4, 2008 (**Keynote**).
- V. Papadopoulos, G. Stefanou, M. Papadrakakis, Stochastic stability analysis of shells with non-Gaussian geometric, material and thickness imperfections, 8th WCCM and 5th ECCOMAS, Venice, Italy, June 30 July 4, 2008.

- 22 G. Stefanou, V. Papadopoulos and N. Lagaros, Enhanced hybrid simulation of non-homogeneous non-Γaussian stochastic fields, 8th WCCM and 5th ECCOMAS, Venice, Italy, June 30 – July 4, 2008.
- 23 G. Stefanou, V. Papadopoulos and M. Papadrakakis, Stochastic Finite Element Stability Analysis of Shells with Non-Gaussian Material and Thickness Properties, Computational Structures Technology Conference, CST-2009, Athens, Greece, Sept.2-5, 2008.
- 24 D. Schillinger, V. Papadopoulos and M. Papadrakakis, Evolutionary power spectrum estimation of strongly narrow-band random fields, COMPDYN, Rhodos, Greece, June 22-24, 2009.
- 25 V. Papadopoulos, M. Papadrakakis and D. Schillinger, Stochastic FEM Based Buckling Analysis of I-Beams with Random Imperfections, SEECCM 2009, Rhodos, Greece, June 22-24, 2009.
- 26 D. Giovanis, V. Papadopoulos N. Lagaros and M. Papadrakakis, Neural Network based Subset Simulation for Reliability analysis, SEECCM 2009, Rhodos, Greece, September 15-17, 2009.
- 27 D. Giovanis, V. Papadopoulos N. Lagaros and M. Papadrakakis, Structural Reliability Analysis using Subset Simulation and Neural Networks, ICOSSAR 2009, Osaka, Japan, June 15-17, 2009.
- G. Stefanou, V. Papadopoulos, N.D. Lagaros and M. Papadrakakis, A novel hybrid method for the simulation of non-homogeneous non-Gaussian stochastic processes and fields, Proc. of the 10th International Conference on Structural Safety and Reliability (ICOSSAR 2009), Osaka, Japan, 13-17 September 2009.
- 29 V. Papadopoulos, O. Kokkinos and M. Papadrakakis, "Variability response functions for stochastic dynamic systems", 10th World Congress on Computational Mechanics, WCCM 10, 19-23 July, Sydney, Australia, 2010.
- 30 V. Papadopoulos, O. Kokkinos and M. Papadrakakis, "Response variability of stochastic systems under dynamic excitations", 6th Computational Stochastic Mechanics Conference CSM-2010, Rhodes, Greece, 2010.
- 31 O. Kokkinos and V. Papadopoulos, Dynamic response of single degree of freedom oscillators with stochastic material properties, 7TH GRACM International Congress on Computational Mechanics, Athens, June 30 - July 2, 2011.
- 32 V. Papadopoulos and O. Kokkinos, Mean and variability response functions for stochastic systems under dynamic excitation, COMDYN, Corfu, Greece, 2011.
- 33 A. Christofi and V. Papadopoulos, Performance based earthquake design of structures using vulnerability criteria, COMDYN, Corfu, Greece, 2011.
- 34 V. Papadopoulos, D. Giovanis, N. Lagaros and M. Papadrakakis, Reliability analysis using Subset Simulation and Neural Networks, 7TH GRACM International Congress on Computational Mechanics, Athens, June 30 - July 2, 2011.

- 35 V. Papadopoulos, Soimoiris, G, M. Papadrakakis and D. Schillinger, Stochastic FEM Based Buckling Analysis of I-Beams and Shells with Random Imperfections, Third International Symposium on Computational Mechanics ISCM III, Taipei, Taiwan, 2011.
- 36 D. Giovanis, V. Papadopoulos, N.D. Lagaros, M.Papadrakakis, "Accelerated Subset Simulation with neural networks for reliability analysis", 10th Aniversario posgrado ingeneria estractural in Univesridad Autonoma Metropolitana (UAM) in Mexico city, Mexico, 29 November, 2011.
- 37 Stefanou, G.; Papadopoulos, V.; Papadrakakis, M Buckling load and displacement variability of cylindrical shell with stochastic material and geometric properties, ECCOMAS 2012, Wien, Vienna, Austria, 2012
- 38 V. Papadopoulos, D. Savas, M. Papadrakakis "The effect of random CNT waviness on the mechanical properties of CNT-RCs", September 9-13, ECCOMAS 2012, Wien, Austria, 2012.
- 39 Soimoiris, G, V. Papadopoulos, M. Papadrakakis "I-section steel frames with random imperfections", September 9-13, ECCOMAS 2012, Wien, Austria, 2012.
- 40 Stefanou G., Vryzidis I., Papadopoulos V. "Buckling analysis of steel tubes with random geometric imperfections", COMPDYN 2013, Kos island, 12-14 June, Greece, 2013.
- 41 Papadopoulos V., Kokkinos O., Papadrakakis M. "Stochastic dynamic response of structures", COMPDYN 2013, Kos island, 12-14 June, Greece, 2013.
- 42 Vathi M., Soimoiris G., Karamanos S., Papadopoulos V., "A stochastic approach for assessing imperfection sensitivity of liquid storage tanks", COMPDYN 2013, Kos island, 12-14 June, Greece, 2013.
- 43 Papadopoulos V., "Characterization of carbon nanotube reinforced thermoplastics using hierarchical multiscale", **Semi plenary lecture**, HSTAM 2013, Crete island, Greece.
- 44 Papadopoulos V., Savvas D., "Multiscale modeling of damping in carbon nanotube reinforced composites", HSTAM 2013, Crete island, Greece.
- 45 Papadopoulos V., Savvas D., "Viscoplastic multiscale modeling of carbon nanotube reinforced composites", IUTAM 2013, Crete island, Greece.
- 46 Giovanis D., Papadopoulos V., "A variability response functions-based adaptive spectral stochastic finite element method", IUTAM 2013, Crete island, Greece.
- 47 Stavroulakis, G. Giovanis D., Papadrakakis, M., Papadopoulos V., "Monte Carlo simulation vs. polynomial chaos in structural analysis: a numerical performance study", IUTAM 2013, Crete island, Greece.
- 48 Tavlaki, M., Papadopoulos V., "Multiscale material non-linear analysis of carbon nanotube reinforced composites in the framework of a FE<sup>2</sup> approach", IUTAM 2013, Crete island, Greece, 2013.

- 49 Soimoiris, G., Papadopoulos V., Papadrakakis, M., "Multiscale modeling of carbon nanotube reinforced composites with geometric nonlinearities", IUTAM 2013, Crete island, Greece, 2013.
- 50 Kokkinos, O., Papadopoulos V., "Dynamic response variability of general fesystems", IUTAM 2013, Crete island, Greece, 2013.
- 51 Giovanis D., Papadopoulos V., "Stochastic finite element analysis using Monte Carlo simulation and neural networks", ICOSSAR 2013, New York, USA, 2013.
- 52 Stefanou, G., Vryzides, I., Papadopoulos V., Papadrakakis, M., "Stability analysis of cylindrical shells with stochastic imperfections", ICOSSAR 2013, NY, USA, 2013.
- 53 Stavroulakis, G., Giovanis, D. Papadrakakis, M., Papadopoulos, V., "Solution of Large-Scale Problems in Structural Analysis: Monte Carlo Simulation vs. Spectral Stochastic Finite Element Method" 13th US Conference on Computational Mechanics USNCCM 2013, 26-30 July, San Diego, USA, 2013.
- 54 Stavroulakis, G., Giovanis, D. Papadrakakis, M., Papadopoulos, V., "Assessing the numerical efficiency of Monte Carlo and Spectral Stochastic FEM in structural problems", 11th World Congress on Computational Mechanics, WCCM 11, 20-25 July, Barcelona, Spain, 2014.
- 55 Papadopoulos, V., Stavroulakis, G., Giovanis, D. Papadrakakis, M., "An adaptive polynomial chaos expansion for accelerating the solution of Spectral Stochastic FEM problems", 11th World Congress on Computational Mechanics, WCCM 11, 20-25 July, Barcelona, Spain, 2014.
- 56 Papadopoulos, V., Soimoiris, Papadrakakis, M., "FE<sup>2</sup> multiscale approach of geometrically nonlinear carbon nanotube reinforced composites" 11th World Congress on Computational Mechanics, WCCM 11, 20-25 July, Barcelona, Spain, 2014.
- 57 Papadopoulos, V., Tavlaki, M., "Multiscale modelling of carbon nanotube reinforced composites in the framework of a nested solution scheme" 11th World Congress on Computational Mechanics, WCCM 11, 20-25 July, Barcelona, Spain, 2014.
- 58 Papadopoulos, V., Stavroulakis, G., Giovanis, D. Papadrakakis, M "Monte Carlo simulation vs Spectral Galerkin method: a numerical performance study, 1<sup>st</sup> Panamerican Congress on Computational Mechanics, PANACM 2015, Buenos Aires, Argentina, 27-29 April 2015.
- 59 Giovanis, D. Papadopoulos, V., "Neural network-based reliability analysis using subset simulation: application in random fields", 1<sup>st</sup> Panamerican Congress on Computational Mechanics, PANACM 2015, Buenos Aires, Argentina, 27-29 April 2015.
- 60 Giovanis, D. Papadopoulos, V., Stavroulakis, G., "Sparse polynomial chaos representation using variability response functions", Symposium on Reliability of Engineering Systems, SRES 2015, Hangzhou China, 15-17 October 2015.
- 61 Papadopoulos, V., Kalogeris, Y., "A StreamlineUpwind/Petrov-Galerkin solution of the Probability Density Evolution Method for static systems",

ymposium on Reliability of Engineering Systems, SRES 2015, Hangzhou China, 15-17 October 2015.

- 62 Giovanis, D., Papaioannou, I., Papadopoulos, V., Straub. D., "StraubBayesian updating with subset simulation and neural networks", 8th International Congress on Computational Mechanics GRACM, Volos, 12-15 July 2, 2015.
- 63 K.C. Meza Fajardo, V. Papadopoulos, A. Papageorgiou, "Earthquake response of liquid storage tanks, accounting for rocking excitation, caused by basin induced surface waves", COMPDYN 2015, Crete island, 25-27 May, Greece, 2015.
- 64 M. Fragiadakis, D. Giovanis, V. Papadopoulos, "Quick seismic reliability assessment of liquid storage tanks using neural networks", COMPDYN 2015, Crete island, 25-27 May, Greece, 2015.
- 65 E. Skoulikari, V. Papadopoulos, N. Lagaros "Assessment of optimum strengthening design of a reinforced concrete building with vulnerability criteria", COMPDYN 2015, Crete island, 25-27 May, Greece, 2015.
- 66 Papadopoulos, V., Kalogeris, "Galerkin-based probability density evolution formulation for static problems, UNCECOMP 2015, Crete island, 25-27 May, Greece, 2015.
- 67 O. Kokkinos, V. Papadopoulos, "Stochastic optimization with variability response functions", UNCECOMP 2015, Crete island, 25-27 May, Greece, 2015.
- 68 V. Papadopoulos, M. Tavlaki, "Influence of the interface on the macroscopic behavior of carbon-nanotube reinforced composites using a multiscale technique", UNCECOMP 2015, Crete island, 25-27 May, Greece, 2015.
- 69 Giovanis, D., Papaioannou, I., Papadopoulos, V., Straub. D., "Neural networkbased bayesian updating with subset simulation", UNCECOMP 2015, Crete island, 25-27 May, Greece, 2015.
- 70 Stavroulakis, G., Giovanis, D., Papadopoulos, V., Papadrakakis, M., "Accelerating the solution of stochastic soil-structure interaction problems with domain decomposition methods", UNCECOMP 2015, Crete island, 25-27 May, Greece, 2015.
- 71 Papadopoulos V., Seventekidis D., "Stochastic Multiscale modeling of graphene reinforced composites", 11th HSTAM International Congress on Mechanics HSTAM 2016, Athens, 27-30 May, Greece 2016.
- 72 Fasoulakis, Z., Raftoyiannis1, Avraam, T., Papadopoulos, V., "Stability investigation of single bolted members from cold formed angle sections with random imperfections", 11th HSTAM International Congress on Mechanics HSTAM 2016, Athens, 27-30 May, Greece 2016.
- 73 V. Papadopoulos, M. Tavlaki, Odysseas Kokkinos, "Multiscale optimization of a carbon nanotube/polymer structure Vissarion Papadopoulos, ECCOMAS 2016 Congress, Crete island, 5-10 June, 2016.

- 74 Papadopoulos, V., Kalogeris, I, "Probability density evolution method for buckling analysis of stochastic systems", ECCOMAS 2016 Congress, Crete island, 5-10 June, 2016.
- 75 Stavroulakis, G., Giovanis, D., Papadopoulos, V., Papadrakakis, M., "Parallel and scalable solution schemes for metaheuristic optimization algorithms considering uncertainties, in the context of structural analysis", ECCOMAS 2016 Congress, Crete island, 5-10 June, 2016.
- 76 Dimitrios Savvas, George Stefanou, Vissarion Papadopoulos, Manolis Papadrakakis "Determination of rve size for random cnt reinforced composites", ECCOMAS 2016 Congress, Crete island, 5-10 June, 2016.

## TECHNICAL REPORTS

1 V. Papadopoulos «State of the art of Dam Safety Assessment Procedures in various European Countries, Part I : Dam safety assessment procedures, Part II: Discussion», NW-IALAD project Technical Report.

M. Papadrakakis, V. Papadopoulos, E. Georgioudakis and G. Hofstetter, C. Feist, Y. Theiner, «Reliability Analysis of a Plain Concrete Beam», NW-IALAD project Technical Report.

- 3 M. Papadrakakis, V. Papadopoulos, N. Lagaros and J. Oliver, A. Huesepe, P. Sanchez, «Vulnerability Analysis of Large Concrete Dams using the Continuum Strong Discontinuity Approach and Neural Networks», NW-IALAD project Technical Report.
- 4 M. Papadrakakis, V. Papadopoulos «Dam safety and integrity Assessment: Final Report», NW-IALAD project final Technical Report.
- 5 V. Papadopoulos, «Vulnerability and seismic risk assessment of industrial installations», final Technical Report of THALES-NTUA project, 2016.

## **BOOKS**

- 1 M. Papadrakakis, G. Stefanou, V. Papadopoulos, (Eds.), "Computational Methods in Stochastic Structural Dynamics", in Computational Methods in Applied Sciences, Volume 22, Springer (2011).
- 2 M. Papadrakakis, G. Stefanou, V. Papadopoulos, (Eds.), "Computational Methods in Stochastic Structural Dynamics", in Computational Methods in Applied Sciences, Volume 26, Springer (2011).
- 3 V. Papadopoulos and D. Giovanis, "Introduction to Stochastic Finite Elements", Springer (in print).
- 4 V. Papadopoulos, «Vulnerability and Seismic Risk Assessment of industrial installations», e-Pub (in print), 2016.

## **BOOK CHAPTERS**

1 M. Papadrakakis, V. Papadopoulos and N. Lagaros, "Structural reliability analysis of elastic-plastic structures using Neural Networks and Monte Carlo simulation", in M. Papadrakakis and G. Bugeda (Eds.), Advanced Finite Element Solution Procedures, CIMNE Publications, Barcelona, Spain (1996), pp- 348-374.

- 2 Dominik Schillinger and Vissarion Papadopoulos, "The Method of Separation: A Novel Approach for Accurate Estimation of Evolutionary Power Spectra", in Computational Methods in Stochastic Dynamics, M. Papadrakakis, G. Stefanou and V. Papadopoulos (eds) in Computational Methods in Applied Sciences, series of ECCOMAS, Springer (2011)
- 3 D.N.Savvas, V.Papadopoulos and M. Papadrakakis, "Mechanical performance of CNT reinforced composites under cyclic loading", Bytes and Science, G Zavarise and D.P Boso (Eds.), CIMNE, Barcelona, Spain 2012.
- 4 Vissarion Papadopoulos and Odysseas Kokkinos, "Dynamic variability response of stochastic systems", in Computational Methods in Stochastic Dynamics, M. Papadrakakis, G. Stefanou and V. Papadopoulos (eds) in Computational Methods in Applied Sciences, series of ECCOMAS, Springer (2011)
- 5 Vissarion Papadopoulos and Michalis Fragiadakis, "Plastic Hinge and Plastic Zone Seismic Analysis of Frames", in Encyclopedia of Earthquake Engineering, Michael Beer, Ioannis A. Kougioumtzoglou, Edoardo Patelli and Siu-Kui Au (eds), Springer, 2015.

#### **CONFERENCE PROCEEDINGS**

- 1 M. Papadrakakis, M. Kojic and V. Papadopoulos (eds) Proc. Second South-East European Conference on Computational Mechanics, SEECCM 2009, Rhodes, Greece, June 22-24.
- 2 M. Papadrakakis, V.Papadopoulos, G. Stefanou (eds), Proceedings of the 1st International Conference on Uncertainty Quantification in Computational Sciences and Engineering UNCECOMP, Crete, 25-27 May, 2015.
- 3 M. Papadrakakis, V. Papadopoulos, V. Plevris and G. Stefanou (eds), Proceedings of the ECCOMAS Congress 2016, Crete, 5-10 June, 2016.

# CITATIONS

- 622 <u>Scopus</u> citations, 439 not including self-citations and h-index h=15.
- **878** <u>Google Scholar</u> citations with h-index: h=18, 535 after 2011.