

CURRICULUM VITAE
Panagiotis K. KOLIOPULOS, B.Eng., Ph.D.
Professor of Structural Mechanics
TECHNOLOGICAL EDUCATIONAL INSTITUTE OF CENTRAL MACEDONIA - SERRES
Department of Civil Engineering – Surveying & Geomatics Engineering

Education

- 1977-1983 Civil Engineering Dept., Democritus University, GR.
1983-1987 Ph.D. in Random Vibrations, University College London, U.K.

Memberships

- Technical Chamber of Greece
- American Society of Civil Engineers
- Greek Association of Theoretical and Applied Mechanics
- Greek Association of Computational Mechanics

Academic - Professional Experience

➤ ***Civil Engineering. Department, University College London*** (1983-1987,1989–1993)

- Co-investigator of one and Principal investigator of two research projects (all three funded by the British Science and Engineering Research Council), regarding the development of suitable mathematical models and software codes for the statistical prediction of the response of linear and non-linear offshore structures (9/1983-7/1987, 5/1989-3/1990, 4/1990-3/1992).
- Principal investigator of a research project (funded by the British SERC) regarding the improvement of the analysis and design of earthquake resistant structures (4/1992-6/1993)
- Teaching assistant of “Structural Dynamics” and “Elastic Stability” courses (1984-1986).

➤ ***Freelance Consulting Engineer***

- *STAND Engineering Consultants*, Athens (1993-94): Mathematical modeling and implementation of Space-Frame and Finite-Element codes (SOFISTIK) for the analysis and design of various engineering projects.
- *Institute of Mechanics of Materials and Geostucture*, Athens (1993-94): Scientific advisor on BRITE/EURAM projects.
- *Regional Authority of Southern Aegean*, Syros (1994-95): Scientific and technical advisor of the regional General Secretary, regarding the 2nd Community Support Framework.
- *European Commission, DG III / F 7*, (1994-97): Member of the review team regarding three Esprit projects (EP-9230, EP-20408, EP-20587). Evaluator of Esprit '95 proposals in Domain 8 - Integration in Manufacturing, (evaluation period 25.9.95 - 6.10.95)

➤ ***Institute of Engineering Seismology & Earthquake Engineering, Thessaloniki, Greece***
(10/1995 - 3/1998)

- Coordination of research projects regarding: (a) the implementation of energy methods for the assessment of the damage potential of the seismic action for both linear and nonlinear structural systems and (b) the determination of site amplification functions and the implementation of stochastic simulation models.
- Participation in a number of seismic-risk studies concerning regional general hospitals and earth dams in North Greece.
- Coordination of the advanced study course “SERINA” on seismic risk, under the DG XII “Environment” program (21-27 September 1997).

➤ ***Technological Educational Institute of Central Macedonia at Serres.*** (10/1995 – present)

- Adjunct Professor of Structural Mechanics, (10/1995 - 3/1998).
 - Professor of Structural Mechanics, (3/1998 - present).
- **Open University, Greece** (1998 - 2014)
- Developer of teaching material regarding the MSc course on “Earthquake Engineering” and co-author of the textbook *Stochastic Structural Dynamics* (in Greek).
 - Adjunct Professor of Structural Dynamics, in the MSc course on “Earthquake Engineering” (SMA-50)
- **Publications – Citations – International Journals Reviewer**
- The published work includes 1 PhD Dissertation, 4 books, 41 publications in International Journals and Conference Proceedings as well as 8 Technical Reports. Out of these, 24 publications have received more than 250 citations (https://www.researchgate.net/profile/Panagiotis_Koliopoulos).
- Reviewer of the following international scientific journals: Engineering Structures, Soil Dynamics and Earthquake Engineering καί Engineering Mechanics.

PUBLICATIONS

A. THESES - BOOKS

1. **Koliopoulos P.K.** (1987). *Prediction Methods for Non-Gaussian Response in Linear Structural Dynamics based on a Separability Assumption*. Ph.D. Thesis, University College London.
2. Manolis G.D. & **Koliopoulos P.K.** (2001). *Stochastic Structural Dynamics in Earthquake Engineering*. WIT Press, Southampton, UK (ISBN: 1-85312-851-1).
3. Manolis G.D. & **Koliopoulos P.K.** (2003). *Stochastic Structural Dynamics*, (in Greek) Open University Press, Patras (ISBN: 960-538-236-9)
4. **Koliopoulos P.K.** & Manolis G.D. (2005). *Structural Dynamics with Applications*, (in Greek), Giourdas Press, (ISBN: 960-387-374-8)
5. Panagiotopoulos C.G & **Koliopoulos P.K.** (2007). *A Primer in Structural Dynamics*, (in Greek), Sofia Press, (ISBN: 978-960-6706-04-2).

B. JOURNALS

1. **Koliopoulos P.K.** (1988). Quasi-static and Dynamic Response Statistics of Linear SDOF Systems under Morison-type Wave Force. *Engineering Structures*, **10**, 24-36.
2. **Koliopoulos P.K.** (1990). Application of the Separability Assumption on the Statistics of Linear SDOF Systems under Square-Gaussian Excitation. *Applied Mathematical Modelling*, **14**, 184-198.
3. **Koliopoulos P.K.**, Bishop S.R. & Stefanou G.D. (1992). Effect of Variation of Input Band-width on the Response of Hardening Duffing Oscillator. *Computational Mechanics*, **9**, 405-415.
4. Stefanou G.D, Moosavi E., Bishop S.R. & **Koliopoulos P.K.** (1992). Dynamic Analysis Approach of Nonlinear Structures by Minimising the Total Potential Dynamic Work. *Computers & Structures*, **44**, 1197-1203.
5. **Koliopoulos P.K.** & Langley R.S. (1993). Improved Stability Analysis of the Response of a Duffing Oscillator under Filtered White Noise. *International Journal of Nonlinear Mechanics*, **28**, 145-155.
6. **Koliopoulos P.K.**, Bishop S.R. & Stefanou G.D. (1993). Response Amplitude Probability Functions of a Hardening Duffing Oscillator subjected to Filtered White Noise. *Computer Methods in Applied Mechanics & Engineering*, **105**, 143-150.
7. **Koliopoulos P.K.** & Bishop S.R. (1993). Quasi-Harmonic Analysis of the Behaviour of a Hardening Duffing Oscillator subjected to Filtered White Noise. *Nonlinear Dynamics*, **4**, 279-288.
8. Stefanou G.D, **Koliopoulos P.K.** & Nichol E.A. (1993). Effects of stress rates on the strength and deformation of concrete at ambient and elevated temperatures, *Engineering Fracture Mechanics*, **45**, 265-276
9. **Koliopoulos P.K.**, Nichol E.A. & Stefanou G.D. (1993). Some Aspects of the Statistics of a Bilinear Hysteretic Structure under Non-white Random Excitation. *Computer Methods in Applied Mechanics and Engineering*, **110**, 57-61.
10. Stefanou G.D, Moosavi E., Bishop S.R. & **Koliopoulos P.K.** (1993). Conjugate Gradients Method for calculating the Response of Large Cable Nets to Static Loads. *Computers & Structures*, **49**, 843-848.
11. **Koliopoulos P.K.**, Nichol E.A. & Stefanou G.D. (1994). Comparative Performance of Equivalent Linearisation Techniques for Inelastic Seismic Design. *Engineering Structures*, **16**, 5-10.
12. **Koliopoulos P.K.** & Chandler A.M. (1995). Stochastic Linearisation of Inelastic Seismic Torsional Response: Formulation and Case Studies. *Engineering Structures*, **17**, 494-504.
13. **Koliopoulos P.K.**, Margaris B.N. & Klimis N.S., (1998). Duration and Energy Characteristics of Greek Strong Motion Records. *Journal of Earthquake Engineering*, **2**, 391-417
14. Klimis N.S., Margaris B.N. & **Koliopoulos P.K.**, (1999). Site Dependent Amplification Functions and response Spectra in Greece. *Journal of Earthquake Engineering*, **3**, 237-270
15. Koutrakis S.I., **Koliopoulos P.K.**, Karakaisis G.F, Margaris B.N and Hatzidimitriou P.M., (2002). Seismic Hazard in Greece based on Different Strong Ground Motion Parameters. *Journal of Earthquake Engineering*, **6**, 75-109.
16. **Koliopoulos P.K.**, (2014). Damage potential prediction of Greek earthquakes based on spectral sustainability measures derived from 3-D displacement response spectra: Part – I. *The Open Construction and Building Technology Journal*, Bentham Science Publishers Ltd., **8**, 34-45.

C. DISCUSSIONS IN JOURNALS

1. **Koliopoulos P.K.** (1991). Stochastic Response to Nonlinear Wave Loading: Fourth-moment Analysis. *Journal of Engineering Mechanics Division, ASCE*, **117**, 1424-1426.
2. **Koliopoulos P.K.** (1991). Stress Response of Offshore Structures by Equivalent Polynomial Expansion Techniques. *International Journal of Offshore & Polar Engineering*, **1**, 246.

D. CONFERENCE PROCEEDINGS

1. **Koliopoulos P.K.** & Yarimer E. (1990). Prediction of Dynamical Response Statistics for Multi-degree of Freedom Fixed Structure under Non-Gaussian Random Loading, *Proc. 1st European Offshore Mechanics Symposium*, 20-22 August 1990, Trondheim. The International Society of Offshore & Polar Engineers, **1**, 121-133.
2. **Koliopoulos P.K.**, Bishop S.R. & Stefanou G.D. (1991). Response Statistics of Nonlinear Systems under Variations of Excitation Bandwidth. *Computational Stochastic Mechanics* (eds. P.D.Spanos & C.A.Brebbia), Elsevier, New York, **1**, 335-348.
3. **Koliopoulos P.K.** & Bishop S.R. (1991). Sensitivity of Multiple Responses in Nonlinear Systems subjected to Random Excitation. *Computational Mechanics '91*, (eds. S.N.Atluri, D.E.Beskos, R.Jones & G.Yagawa), ICES publications, Atlanta, **1**, 529-532.
4. Stefanou G.D., Moosavi E., Bishop S.R. & **Koliopoulos P.K.** (1991). Dynamic Analysis Approach of Nonlinear Structures by Minimising the Total Potential Dynamic Work. *11th International Conference of Structural Mechanics in Reactor Technology*, 18-23 August 1991, Tokyo, **1**, 91-96.
5. **Koliopoulos P.K.**, Nichol E.A. & Stefanou G.D. (1992). Comparative Performance of Equivalent Linearisation Techniques for Inelastic Seismic Design. (in Greek). *1st Greek Conference on Earthquake Engineering & Technical Seismology*, 6-8 May 1992, Athens, **1**, 403-417.
6. **Koliopoulos P.K.**, Bishop S.R. & Stefanou G.D. (1992). Response Amplitude Probability Functions of a Hardening Duffing Oscillator subjected to Filtered White Noise. *Proc. 3rd National Congress on Mechanics*, 27-29 June 1992, Athens, **1**, 707-714.
7. **Koliopoulos P.K.**, Nichol E.A. & Stefanou G.D. (1992). Response Statistics of a Bilinear Hysteretic Structure under Non-white Random Excitation. *Proc. 1st National Congress on Computational Mechanics*, 3-4 September 1992, Athens. University of Patras Press, **1**, 376-382.
8. **Koliopoulos P.K.** (1994). Response of Inelastic Assymmetric Structure under Random Seismic Action. (in Greek). *11th Greek Conference in Concrete Technology*, 18-20 May 1994, Corfu, **2**, 317-331.
9. **Koliopoulos P.K.** (1996). Stochastic Analysis of Hysteretic Oscillator under Biaxial Seismic Action. (in Greek). *12th Greek Conference in Concrete Technology*, 29-30 October 1996, Lemesos, Cyprus, **3**, 29-39.
10. **Koliopoulos P.K.**, Margaris B.N. & Klimis N.S., (1997). Spectral and Energy Strong Motion Characteristics in Greece. *IASPEI 29th General Assembly, Thessaloniki, 18-28 August 1997*, Poster session S-4, Abstract No 2153, p.38.
11. Klimis N.S., **Koliopoulos P.K.** & Margaris B.N., (1997). Site Amplification for Various Soil Conditions in Greece. *IASPEI 29th General Assembly, Thessaloniki, 18-28 August 1997*, Oral presentation in Workshop W7, Abstract No 2159, p.324.
12. Klimis N.S., Margaris B.N. & **Koliopoulos P.K.**, (1998). Response Spectra Estimation according to EC8 and N.E.H.R.P. Soil Classification Provisions: A Comparison Study based on Hellenic Data. *11th European Conference on Earthquake Engineering*, 6-11 September 1998, Paris, CD ROM Proceedings, Balkema.
13. **Koliopoulos P.K.**, Margaris B.N. & Klimis N.S., (1998). Inelastic Strength and Hysteretic Energy Demand Spectra of Recent Greek Earthquakes. *11th European Conference on Earthquake Engineering*, 6-11 September 1998, Paris, CD ROM Proceedings, Balkema.
14. Koutrakis S., Margaris, B.N., **Koliopoulos P.K.** & Karakaisis G., (1999). New Trends in Seismic Hazard Evaluation in Greece. *IUGG 99*, 19-20 July 1999, Birmingham, CD ROM Proceedings.
15. **Koliopoulos P.K.** and Margaris B.N., (2001). The 1999 Athens (Greece) Earthquake: Energy and Duration – Related Response Spectral Characteristics of Different Site Conditions. *4th Int. Conf. on Recent Advances in Earthquake Engineering and Soil Dynamics*, 26-31 March 2001, San Diego, California (Paper No. 10.31).
16. Margaris B.N., Ioannidou E. & **Koliopoulos P.K.**, (2001). Seismic Hazard in Greece based on Elastic Energy Spectra. *2nd Greek Conference on Earthquake Engineering*, November 2001, Thessaloniki, Vol.A', pp. 37-43 (in Greek).

17. **Koliopoulos P.K.** and Kirtas E., (2002). Plastic Energy Demand of the September 1999 Athens Earthquake. *12th European Conference on Earthquake Engineering*, September 2002, London. CD ROM Proceedings (Paper No. 220).
18. Margaritis B.N. and **Koliopoulos P.K.** (2001). Rms-Acceleration Hazard Assessment in Greece. *12th European Conference on Earthquake Engineering*, September 2002, London. CD ROM Proceedings (Paper No. 364).
19. **Koliopoulos P.K.**, Panagopoulos G.K. & Mouratidis E.K., (2004). Empirical Predictions of Plastic Energy Demand of Greek Earthquakes. *11th International Conference on Soil Dynamics & Earthquake Engineering*, 7-9 January 2004, University of California, Berkeley. (Paper No. 215)

E. REPORTS

1. **Koliopoulos P.K.** & Yarimer E. (1987). *Prediction of Non-Gaussian Motion Characteristics in Linear Platform Dynamics*. SERC/MTD Report, Civil Engineering Dept., University College London.
2. **Koliopoulos P.K.** & Yarimer E. (1990). *Prediction of Multi-degree of Freedom Dynamical Response to Morison-type Non-Gaussian Random Excitation*. SERC/MTD Report, Civil Engineering Dept., University College London.
3. **Koliopoulos P.K.**, Bishop S.R., Lanley R.S. & Yarimer E. (1992). *A New Unified Approach for the Behaviour of Nonlinear Offshore Structures in Random Sea-states*. SERC/MTD Report, Civil Engineering Dept., University College London.
4. **Koliopoulos P.K.** & Chandler A.M. (1993). *Reliability in Seismic Analysis and Design of Inelastic Structures for Biaxial Loading*. SERC/MTD Report, Civil Engineering Dept., University College London.
5. "Seismicity and seismic hazard assessment in the area of Keramidi (Pieria - N. Greece)", B.C. Papazahos (Scientifically Responsible), sponsored by Pieria Prefecture, May 1996, 79 pages, (in Greek).
6. "Seismicity and seismic hazard in the site of Hospital construction near the city of Serres", B.C. Papazahos (Scientifically Responsible), sponsored by Serres Prefecture, December 1996, 60 pages, (in Greek).
7. "Seismicity study and seismic hazard assessment in the broader area of Gratini Dam (Komotini, N. Greece)", B.C. Papazahos (Scientifically Responsible), sponsored by Public Power Corporation, February 1997, 41 pages, (in Greek).
8. "Seismicity study and seismic hazard assessment in the broader area of artificial lake Profitou and Ilarionas Dam", B.C. Papazahos (Scientifically Responsible), sponsored by Public Power Corporation, May 1997, 81 pages, (in Greek).

CITATIONS (Google Scholar 13/3/2014 – 194 citations)

Cites	Authors	Title	Year	Source	GSRank
35	PK Koliopoulos, BN Margaritis	Duration and energy characteri	1998	Journal of earthquake ...	1
32	GD Manolis, PK Koliopoulos	Stochastic structural dynamics	2001		2
28	NS Klimis, BN Margaritis...	Site-dependent amplification fu	1999	Journal of Earthquake ...	3
14	PK Koliopoulos, RS Langley	Improved stability analysis of tl	1993	International journal of non-line	5
12	PK Koliopoulos	Quasi-static and dynamic resp	1988	Engineering Structures	6
11	SI Koutrakis, GP KARAKALIS	Seismic hazard in Greece bas	2002	Journal of earthquake ...	4
11	PK Koliopoulos, SR Bishop	Quasi-harmonic analysis of the	1993	Nonlinear Dynamics	7
8	PK Koliopoulos, AM Chandler	Stochastic linearization of inela	1995	Engineering structures	9
7	PK Koliopoulos, BN Margaritis	The 1999 Athens (Greece) eart	2001	Proc. 4th Conf. Geotechn. Eng	8
6	PK Koliopoulos, EA Nicholas	Comparative performance of ec	1994	Engineering Structures	11
5	SI Koutrakis, VN Margaritis, F	New trends in seismic hazard	1999	Abstracts book, IUGG XXII ...	10
5	PK Koliopoulos, SR Bishop, C	Response statistics of nonlinea	1991	Computational stochastic ...	12
4	PK Koliopoulos	Application of the separability	1990	Applied mathematical modellin	13
4	PK Koliopoulos	Prediction methods for non-Ga	1987		14
2	GD Manolis, PK Koliopoulos	Stochastic structural dynamics	2001		15
2	NS Klimis, BN Margaritis...	Response spectra estimation &	1998	European Conference on ...	16
2	GD Manolis, PK Koliopoulos	Stochastic Structural Dynamic	0	WIT Press, Southampton	17
2	PK Koliopoulos, BN Margaritis	The 1999 Athens (Greece) eart	2000	Proceedings of the 4th Internat	18
2	PK Koliopoulos, SR Bishop	Sensitivity of multiple response	1991	Computational Engineering Sc	19
1	PK Koliopoulos, E Kirtas	PLASTIC ENERGY DEMAND	2002	CD-Rom Proc. 12th Eur. Conf.	20
1	PK Koliopoulos, EA Nicholas	Some aspects of the statistics	1993	Computer methods in applied	21