

CURRICULUM VITAE
of
George Mylonakis, Ph.D., P.E.

Associate Professor of Civil Engineering
University of Patras, GR-26500, Greece

Office Address	Home Address
Department of Civil Engineering University of Patras Geotechnical Laboratory Rion 26500, Greece Phone: (+30) 2610-996542; Fax: 996576 E-mail: mylo@upatras.gr	1 Psaron Street Arahovitica, Rion 26500, Greece Phone: (+30) 2610-931692 Cell: (+30) 697-3801972

1. PERSONAL INFORMATION

Languages: English (fluent), French (fluent), Greek (native)

Citizenship: Dual (Greek, U.S.)

2. EDUCATION

1995: Doctorate in Civil/Geotechnical Engineering, *State University of New York at Buffalo*

Ph.D. Dissertation: “Contributions to Static and Seismic Analysis of Piles and Pile-Supported Bridge Piers”

Research Advisor: Professor George Gazetas

1993: Diploma (5-year program) in Civil/ Structural Engineering, *National Technical University (NTU) Athens, Greece*

Diploma Thesis: “Local Variability of Strong Earthquake Motion and its Effects on the Seismic Response of Extended Structures”

Research Advisors: Professors Dimitri Papastamatiou and Yannis Psycharis

3. HONORS

3.1 Awards

- Shamsher Prakash International Research Award, Prakash Foundation, 2002 (youngest recipient in the history of the Award)
- Nomination by the Japanese Geotechnical Society for 2001 JGS Research Award
- Performance Excellence Award, City University of New York, 1999 (first recipient)
- Various scholastic and athletic awards (1979 – 1993)

3.2 Various Distinctions related to Recognition of Scientific Work

- Editorial Board Member, Journal of Earthquake & Structures, 2009-
- Editorial Board Member, Journal of Geotechnical & Geoenvironmental Engineering, ASCE, 2004-2009
- Guest Editor, Soil Dynamics & Earthquake Engineering, Special Issue on Urban Risk Assessment and Mitigation, Volume 28, Issues 10-11, October-November 2008
- Visiting Professor, Civil Engineering Department, UCLA, March-June 2010
- Visiting Fellow, Civil Engineering Department, University of Bristol, 2009-
- Elected Member, Soil Dynamics National Committee, ASCE, 2001 – present
- Member, Ad hoc National Soil Dynamics Awards Committee, ASCE, 2006
- Member, Ad hoc Geotechnical Committee for revision of NYC Seismic Code, 2001
- Elected Member, Geotechnical Committee, ASCE, Met Section, 1999-2001
- Referee for 28 International Journals, Reviewer for 13 National and International Conferences, External Reader of 7 Doctoral Dissertations, 2 Proposal Review Committees
- Member of Organizing/Scientific Committee or Reporter in 13 International Conferences (Chairman in 9 Sessions, Reporter or Co-Reporter in 3 Sessions)
- Member, 2 International Committees on Earthquake Engineering Research
- Member, 2 Committees (1 National, 1 International) for revision of seismic regulations
- Over 45 invited lectures in Universities and Research Institutions around the world
- Over 30 oral presentations in International and National Conferences
- Over 700 citations in Referred Journals, Conferences, Dissertations and Reports
- Citations in undergraduate textbooks, engineering manuals and seismic regulations in Italy, India, Greece and the U.S.

4. RESEARCH INTERESTS

Soil Mechanics and Dynamics

Static and Dynamic Soil-Structure Interaction (emphasis on pile foundations)

Earthquake Engineering

Geomechanics

Foundation Engineering

Wave Propagation

Geophysics

5. SCIENTIFIC COMMITTEES

5.1. International Scientific Committees

- Invited Participant, ATC-83 Scientific Committee for the Development of Regulations for Seismic Soil-Structure Interaction, 2010-2011
- Member, Scientific Committee, International Conference on Earthquakes and Structures (ICEAS011), 2001
- Member, Scientific Committee, 13th Conference of the International Association for Computer Methods and Advances in Geomechanics (13th IACMAG), Melbourne Australia, May 9-13, 2011
- Member, Scientific Committee, 5th International Conference on Earthquake Geotechnical Engineering (5ICEGE), Santiago, Chile, January 10-13, 2011
- Member of Organizing Committee, 5th International Conference on recent advances in geotechnical earthquake and soil dynamics, San Diego (5ICAGEESD) , scheduled for May 24-29, 2010
- Member, International Advisory Committee, 12th Conference of the International Association for Computer Methods and Advances in Geomechanics (IACMAG), GOA-India, 1-6 October 2008
- Member, Organizing Committee, 6th International Conference on Case Histories in Geotechnical Engineering, Washington D.C., August 10-11 2008
- Member, Scientific Committee, 4th International Conference on Earthquake Geotechnical Engineering, Thessalonica, Greece, June 25-28, 2007
- Member, Organizing Committee, 2nd Japan – Greece Workshop on Seismic Design, Observation and Retrofit of Foundations, Tokyo, April 3-4, 2007
- Member, International Committee on Bridge Seismic Design, Assessment and Maintenance (TG-11), 2006 –
- Member, Scientific Committee, 1st Greece-Japan Workshop on Seismic Response of Deep Foundations, Athens, Oct 11-12, 2005
- Member, Organizing Committee, Fifth International Conference on Case Histories in Geotechnical Engineering, New York, April 13-17, 2004
- Member, Ad Hoc Geotechnical Committee for the Revision of Liquefaction Provisions of the NYC Seismic Code, 2001 - 2004
- Member of Organizing Committee, Tenth International Conference on Soil Dynamics & Earthquake Engineering, Philadelphia, Oct. 7-10, 2001

5.2 Chairman/Reporter in Conferences Sessions

- Chairman, Session, 21st European Regional Earthquake Engineering Seminar on Seismic Assessment and Retrofit of Bridges (*21EREES*), Istanbul, June 17, 2010
- General Reporter, 5th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, May 26, 2010
- Chairman, Session of 12th Conference of the International Association for Computer

Methods and Advances in Geomechanics (12th IACMAG), GOA-India, 1-6 October 2008

- General Reporter, 6th International Conference on Case Studies in Geotechnical Engineering, Washington, August 2008
- Chairman, Sessions on Near-Field Effects, 4th Geotechnical Earthquake Engineering and Structural Dynamics Conference (GEESD IV), Sacramento, CA, May 19, 2008
- Chairman, Session of 4th International Conference (4ICEGE) on Soil Structure Interaction, Thessalonica, July 26, 2007
- Chairman, Session of 2nd Japan – Greece Workshop on Seismic Design, Observation and Retrofit of Foundations, Tokyo, April 3-4, 2007
- Chairman, Special Session on Bridge Design, 1st European Conference on Earthquake Engineering and Seismology, Geneva, September 2006
- Chairman, Special Session on Non-Uniform Seismic Excitation, 8th National Conference on Earthquake Engineering, San Francisco, April 20, 2006
- Chairman, Special Session on Soil Dynamics, Geo Trans2004 Conference, Los Angeles, July 25-30, 2004
- Co-Chairman, Special Session on Bridge Engineering, 7th U.S. National Conference on Earthquake Engineering (7NCEE), Boston, July 21-25, 2002
- Chairman, Special Session on Soil-Structure Interaction, Tenth International Conference on Soil Dynamics & Earthquake Engineering, Philadelphia, Oct. 9, 2001
- Co-Reporter, 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, March 26-31, 2001

5.3 Greek National Committees

- Member, National Committee for the revision of the National Seismic Code, Ministry of Public Works, 8/2006 –
- Member, National Committee on Engineering Seismology and Aseismic Structures, Ministry of Public Works, 4/2006 –

6. STUDENT FELLOWSHIPS & SCHOLARSHIPS

- Summer Fellowship, “Prenormative Research for EC8”, European Union/ Geodynamique & Structure, Paris, France, 1994
- Graduate Scholarship, State University of New York at Buffalo, 1993-1995

7. EXISTING & RECENT RESEARCH PROJECTS (PI or Co-PI)

7.1 FUNDED PROPOSALS

1. European Union (SERIES – FP7): Experimental Investigation of Dynamic Behaviour of

- Cantilever Retaining Walls, Member of Research Team comprised of investigators from Universities of Bristol and Napoli-Federico II, 2009 –2010 (PI for U-Patras)
2. European Union (MEEES - Erasmus Mundus): European Masters in Earthquake Engineering, Co-Pi (PI for U-Patras: Professor Stavros Anagnostopoulos), 2009–2012
 3. Italian Government/ European Union (RELUIS). Kinematic Response of Pile Foundations, Consultant, €5000 (PI for U-Patras)
 4. E-Defense, Japan: Acquisition of a Lamina Box for Shaking Table Testing, €50,000 (estimated), 2008
 5. General Secretariat for Research & Technology, Greece: “Performance-Based Seismic Design: Dynamic-Soil-Structure Interaction, Seismic Isolation, and Retrofit, 2006-2008, €48,000 (PI for U-Patras)
 6. National Fellowship Foundation (IKYDA). “Development of EU-wide regulations for Seismic Soil-Structure Interaction”, PI, €5,000 January 2007-December 2008
 7. University of Patras (Constantine Caratheodory Program): “Inelastic Seismic SSI Effects on Bridge Structures, €24,500 (December 2004 – June 2008), PI.
 8. Greek Government (Archimedes I). “Development of Engineering Provisions for SSI effects”, €49,000, (2004 – 2007), Co-PI
 9. MCEER (NSF): “Integrated Research and Education on Engineering Effects of Blasts and other man-made hazards”, \$85,000, PI, (October 2002 - September 2004)
 10. Great Cities Universities Transportation Initiative: “Maintenance and Management of Transit Infrastructure”, \$135,539 (as Co-PI with Professor Neville Parker), (February 2002 –December 2002)
 11. NSF: “Investigation of the Role of Soil on the Collapse of 18 Piers of Hanshin Expressway in the Kobe Earthquake”, National Science Foundation, \$77,007, PI, (June 2000 - May 2002)
 12. MCEER (NSF): “Geotechnical Seismic Effects in Downtown Manhattan”, National Science Foundation, Multidisciplinary Center for Earthquake Engineering Research, \$10,600, PI, (November 1999 - January 2001)
 13. DOD: “Development of a Laboratory for Dynamic Testing of Structures and Materials at the City College of New York”, Army Research Office, \$120,401, (as Co-PI with Prof. A.K. Agrawal), (September 1999, August 2001)
 14. CUNY Collaborative Research Program: “Development of Geographic Information Systems for Earthquake Loss Estimation”, PI, \$36,000 (September 1998 - August 2001) (first recipient in CE department)
 15. “Acquisition of a Cyclic Triaxial Device for Dynamic Soil Testing”, GRTI Proposal, City College of New York, PI, \$82,000, (November 2000 - October 2001)
 16. “Development of Seismic Research Facilities in Structural Engineering”, GRTI Proposal, City College of New York, \$192,000 (as Co-PI with Profs. A.K. Agrawal, M. Ghosn, and R. Salzar), (November 1999 - October 2001)

17. PSC-CUNY: “Development of a Deterministic and Probabilistic Liquefaction Criterion”, PI, \$8,400, Επιστημονικός Υπεύθυνος (Ιούλιος 2001- Ιούνιος 2002)
18. PSC-CUNY: “Investigation of SSI effects on the collapse of the Higashi-Nada Bridge during the Kobe earthquake”, \$8,222, PI, (July 1999 - June 2001)
19. PSC-CUNY: “Development of Engineering Methods for the Inelastic Dynamic Analysis of Pile Foundations, \$5,876, PI, (July 1998-June 1999)

8. ACADEMIC EXPERIENCE

Visiting Professor, UCLA, March 2010 – June 2010 and September 2010 –

Visiting Scholar, University of Bristol, April 2009 –

Associate Professor, University of Patras, Greece, June 2004 – present (Tenure: Dec 2007)

Adjunct Associate Professor, Hellenic Open University, Post-Graduate Course: Earthquake Engineering and Seismic-Resistant Structures (SMA51 Engineering Seismology and Soil Dynamics), October 2006 – present

Associate Professor, City College of CUNY, Dec 2001– August 2004 (Tenure: Aug 2001)

Assistant Professor, City College of CUNY, Sept. 1997– Nov. 2001

Post-Doctoral Scientist, State University of New York at Buffalo, Jan 1996-Aug 1997

Research Assistant, State University of New York at Buffalo, Sept. 1993 - Dec. 1995

Research Scientist, Prenormative Research for EC-8, Geodynamique et Structure, Paris, France, 1994

9. COURSES TAUGHT

9.1 University of California, Los Angeles (*instructor evaluation for Spring 2010: 8.2/10*)

- CEE101: Statics [Undergraduate, scheduled for Fall 2010]
- CEE298: Soil-Structure Interaction [Post-Graduate, Spring 2010]

9.2 Hellenic Open University (**part time appointment**)

- Engineering Seismology & Soil Dynamics [Post-Graduate 2006-2010]

9.3 University of Patras

- Advanced Soil Mechanics [Post-Graduate 2004-2009]
- Numerical Methods in Geotechnical Engineering [Post-Graduate 2004-2008]
- Deep Foundations and Retaining Structures [Post-Graduate 2005-2009]
- Static and Dynamic Soil Structure Interaction [Post-Graduate 2006-2008]
- Soil Dynamics & Seismic Design of Foundations [Post-Graduate 2006-2008]

- Geotechnical Lab [Undergraduate 2004-2008]
- Introduction to Computational Geotechnical Engineering [Undergraduate 2005-2009]

9.4 City College of CUNY (*average instructor evaluation 4.3/5 – among the highest in the Institution*)

- CE231: Introduction to Structural Mechanics [Undergraduate 2004]
- CE 345: Soil Mechanics – with Lab [Undergraduate 1997-2004]
- CE 440: Structural Analysis with Finite Elements [Undergraduate 2000-2001]
- CE 590: Foundation Engineering [Undergraduate / Graduate 1998-1999, 2001-2002]
- CE 5792: Advanced Soil Mechanics [Graduate 1999, 2001, 2003]
- CE 5756: Earthquake Engineering [Graduate 1998-2000, 2002-2003]
- CE 5730: Structural Dynamics [Graduate 2002, 2004]

10. STUDENT MENTORING

10.1 Ph.D. Program

1. **Vassil Simeonov** (Co-Advisor with Professor A.M. Reinhorn), Ph.D. Program , SUNY-Buffalo, Dissertation Title: “3-D Non-Linear Analysis Procedures for Bridge Structures”, 1996-1997
2. **Costis Syngros**, CUNY, Dissertation Title: “Non-Linear Seismic Response of Pile-Supported Structure Evaluated Through Case Histories”, 2000-2004
3. **Panos Papastylianou**, University of Patras, Dissertation Title: “Seismic Isolation of Pile-Supported Bridge Piers with EPS Geofom” 2004-2010
4. **Panos Kloukinas**, University of Patras, Dissertation Title: “Inelastic and Plastic Analysis of Retaining Structures for Gravitational and Seismic Loading” 2006 –
5. **Christos Giarlelis**, University of Patras, Dissertation Title: “Performance-Based Design Procedures for Buildings including SSI effects”, 2007 –
6. **Constantine Elezoglou**, University of Patras, Dissertation Title: “Inelastic Analysis of Spread Footings for Gravitational and Seismic Loading”, 2008 –
7. **Constantine Thomas**, University of Patras, Dissertation Title: “Dynamics of Granular Media by the Distinct Element Method”, 2008 –
8. **George Anoyiatis**, University of Patras, Dissertation Title: “Analytical Theories for Pile-Soil Interaction”, 2009 –
9. **Haralambos Paraschakis**, University of Patras, Dissertation Title: “Stress Wave Propagation in Inhomogeneous Soil Media”, 2010 –
10. **Luis Alberto Padron Hernandez**, University of Las Palmas de Gran Canaria (Co-Advisor with Professors Orlando Maseo and Demetris Beskos), 2007-2008
11. **Andreas Maravas**, (Co-Advisor with Professor Demetri Karabalis) University of Patras, 2008 –
12. **Stefano Renzi**, Ph.D. Program of the University of Florence, 2006-2009 (as visiting researcher in University of Patras)

13. **Francesco Leuzzi**, Ph.D. Program of the University of Turin, 2007-2009 (as visiting researcher in University of Patras)
14. **Rafaele di Laora**, Ph.D. Program of the University of Napoli, 2009 (as visiting researcher in University of Patras)

10.2 MSc. Program

15. **Maria Stavreli**, University of Patras, (thesis title to be decided), 2010 –
16. **Xenia Karatzia**, University of Patras, Thesis Title: “Dynamics of Pile Foundations with EPS Geofam”, 2010 –
17. **Aggelos Dimitrakoulos**, University of Patras, Thesis Title: “Linear and Nonlinear Analysis of Retaining Structures by Gravitational and Earthquake Loading”, 2009 –
18. **Nikos Mastoropoulos**, University of Patras, Thesis Title: “Numerical analysis of SASW Geophysical testing”, 2009 –
19. **Petros Katsoulas**, Hellenic Open University, Thesis Title “Rigid Block Sliding under Near-Fault Earthquake Motions”, September 2010
20. **Maria Panagiotopoulou**, University of Patras, Thesis Title: “Evaluation of Seismic Response of Ohba-Ohashi considering SSI effects: Structural Aspects”, February 2010
21. **Haralambos Paraschakis**, Hellenic Open University, Thesis Title “Seismic Response of Inhomogeneous Soil Profiles”, September 2009
22. **Helen Sakellaraki**, (Co-Advisor with Professor Demetri Karabalis) University of Patras, Thesis Title: “Evaluation of Seismic Response of Ohba-Ohashi considering SSI effects”, February 2009
23. **George Anoyatis**, University of Patras, Thesis Title: “Tajimi Solutions for Static and Dynamic Response of Pile Foundations”, February 2009
24. **Vicky Efthymiadou** University of Patras/MEEES, European School for Advanced Studies in Reduction of Seismic Risk, Thesis Title: “Geotechnical Effects of the June 8 Achaia-Elia Earthquake”, November 2008
25. **Constantine Elezoglou**, University of Patras, Thesis Title: “Limit Stress Analysis for Seismic Bearing Capacity of Surface Footings”, February 2008
26. **Constantine Thomas**, University of Patras, Thesis Title: “Investigation of Wave Dispersion in Resonant Column Tests with the Distinct Element Method” February 2008
27. **Caleb Wong Sin Yong**, University of Patras/MEEES, European School for Advances Studies in Reduction of Seismic Risk, Thesis Title: “Efficiency Factors of Large Pile Groups using Programs DYNA4 and DAPGROUP”, 2007 – 2008
28. **Huang Xiaoyun**, University of Patras/MEEES, European School for Advances Studies in Reduction of Seismic Risk, Thesis Title: “Construction Error Effects on Pile Group Behavior”, 2007 – 2008
29. **Irene Gavala**, U-Patras / MEEES Program, Thesis Title: “Numerical Evaluation of Soil - Structure Interaction in a Multi – Storey building during the 14/8/2003 Lefkada, Greece, earthquake”, 2007

30. **Constantine Demartinos**, U-Patras, Thesis Title: “Numerical Simulation of the Seismic Behavior of Obha Ohashi, Bridge ”, 2007 (Co-Advisor with Professor Demetri Karabalis)
31. **Despina Lekka**, U-Patras, Thesis Title: “The Role of SSI in Seismic Behavior of 2 Buildings during the 2003 Lefkada Earthquake”, 2007 (Co-Advisor with Professor Demetri Karabalis)
32. **Panos Kloukinas**, U-Patras, Thesis Title: “Stress Plasticity Solutions for Static and Seismic Analysis of Gravity Walls”, 2006
33. **Andreas Maravas**, U-Patras, Thesis Title: “Soil – Structure Interaction of Bridge Piers on Footings and Piles”, 2006 (co Advisor)
34. **Kathleen Schulze**, MS program, CUNY , Thesis Title: “Vibrational Characteristics of Inhomogeneous Soil Deposits: Analytical Solutions”, 2004
35. **Ilitsa Voyagaki**, MS program, CUNY, Thesis Title: “Destructiveness of near-field earthquake pulses. Applications in the 1999 Athens Earthquake”, 2003
36. **Mahmoud El Moraly**, MS program, Project Title: “Seismic tunnel bending at interfaces of different ground materials”, 2002
37. **Kiang-Siang Chau**, MS program (part-time student), Project Title: “Characterization of the 1999 Chi-Chi Earthquake Records using Spectral Methods”, 2002
38. **Dimitri Roumbas**, MS program, CUNY, Thesis Title: “Dynamic Response of Single Piles and Pile-Supported Bridge Bents in Inhomogeneous Soil”, 2000
39. **Sabina Sahnaz**, MS program, CUNY, Project Title: “Advances in Soil Testing at CCNY Soil Mechanics Laboratory”, 2000
40. **Stephen Tawiah**, AMP Graduate scholar, CUNY, Project Title: “Seismic Pile Bending at Deep Soil Layer Interfaces”, 2000

10.3 Undergraduate Program (selected list)

41. **Vassiliki Micha**, Diploma Thesis, U-Patras, Title: “Rayleigh Techniques in Vibrational Analysis of Inhomogeneous Soil Deposits”, 2008
42. **Panagaki Stamatia**, Diploma Thesis, U-Patras, Title: “Coulomb’s Memoir on Statics: Analysis, Historical Review”, 2009
43. **Giorgos Bokias**, Diploma Thesis, U-Patras, Title: “Seismic Response of Inhomogeneous Soil Layers”, 2008
44. **Charis Kandarakis**, Diploma Thesis, U-Patras, Title: “Numerical Analysis of Seismic Response of Flexible Retaining Walls”, 2005
45. **Alkisti Zina**, Diploma Thesis, U-Patras, Title: “Energy Solutions for Lateral Pile Stiffness in Inhomogeneous Soil”, 2005
46. **Miltos Langousis**, Diploma Thesis, U-Patras, Title: “Elastodynamic Response of Rigid and Flexible Retaining Walls”, 2005

47. **Andre Chauncey**, AMP undergraduate assistant, CCNY, 1998, Project Title: “Seismic design procedures for spread footings” (appeared as MCEER report)
48. **Myriam Vargas** AMP undergraduate assistant, CCNY, 2002, Project Title: “Dynamic Analysis of Pile Foundations”
49. **Walter Fish** undergraduate Research Assistant, CUNY, 1999-2000, Project Title: “GIS-based earthquake loss estimation studies for Manhattan region”
50. **Paul Spiteri** undergraduate Research Assistant, CUNY, 1999-2000, Project Title: “GIS-based earthquake loss estimation studies for Manhattan region”
51. **Sarah S. Johnson** undergraduate student, CUNY, 1998, Project Title: Applications of Blasting in Civil Engineering
52. **Nikos Gerolimos** (co-advisor with Professor George Gazetas), Project Title: “Characteristics of Pile Supported Pier’s Natural Period and Damping ”, National Technical University of Athens, 1996-1997

11. LECTURES/PRESENTATIONS

11.1 Invited Lectures

1. “Developments on Dynamic Analysis of Retaining Structures in Light of Experimental Data”, University of California, San Diego, scheduled for October 26, 2010
2. “Kinematic Bending of Pile Foundations: Theory, Experiment & Design Methods”, *Invited Presentation*, PEER_NEES Annual Summit, San Francisco, scheduled for October 9, 2010
3. “The Great M8.8 Chile Earthquake of February 27, 2010: Overview & Performance of Bridge Structures”, Universita di Napoli Federico II, Naples, June 30, 2010
4. “The Great M8.8 Chile Earthquake of February 27, 2010: Overview & Performance of Bridge Structures”, *Invited Lecture*, 21st European Regional Earthquake Engineering Seminar on Seismic Assessment and Retrofit of Bridges (*21EREES*), Istanbul, June 17, 2010
5. The M8.8 Maule Earthquake, Chile, Feb 27, 2010: Seismological, Geological, Site and Engineering Effects on Ports: *Invited Special Presentation (GEER)*, 5th International Conference on Recent Advances in Geotechnical Engineering and Soil Dynamics, San Diego, May 26, 2010
6. Incorporating Kinematic Pile Bending into Seismic Codes: Experience from a European National Project, *Invited Special Presentation (OSP)*, 5th International Conference on Recent Advances in Geotechnical Engineering and Soil Dynamics, San Diego, May 26, 2010
7. “Analysis of Dynamic Response of Retaining Walls: Theory versus Experiment”, Civil Engineering Department Seminar, UCLA, Los Angeles, schedule for May 11, 2010
8. “New Developments on Dynamic Analysis of Retaining Structures in Light of Experimental Data”, *Invited Special Presentation*, Workshop on Recent Advances in Geotechnical Earthquake Engineering, Saitama University, February 10, 2010
9. “The Experience of L’Aquila”, *Invited Lecture*, 1st Greek Conference on Natural Disasters: the first hours after major earthquakes, Patras, December 10, 2009 (in Greek)

10. "Recent Developments on Dynamic Analysis of Retaining Walls", *Invited Presentation*, Earthquake Engineering by the Beach, Capri, July 3, 2009
11. "Developments on Soil-Structure Interaction: Theory and Case Histories", *Keynote Lecture*, ANIDIS 2009, Bologna, July 1, 2009
12. "New Methods for Assessing Gravitational and Earthquake Induced Lateral Pressures on Retaining Walls", University of Turin, Italy, May 20, 2009
13. "The M6.3 L'Aquila, Italy, Earthquake of April 6 2009: Reconnaissance and Preliminary Findings", Hellenic Geotechnical Society, Athens, May 19 2009
14. "The M6.3 L'Aquila Italy, Earthquake of April 6 2009: Reconnaissance and Preliminary Findings", Aristotle University of Thessalonica, May 14 2009
15. "The M6.3 L'Aquila, Italy, Earthquake of April 6 2009: Reconnaissance and Preliminary Findings", ITSAK, Thessalonica, May 13 2009
16. "New Methods for Assessing Gravitational and Earthquake Induced Lateral Pressures on Retaining Walls", Hellenic Geotechnical Society, Athens, April 13, 2009
17. "Recent Developments on Dynamic Analysis of Retaining Structures by Wave Methods", University of Bristol, July 25 2008
18. "Seismic Engineering International Conference commemorating the 1908 Messina and Reggio Calabria Earthquake", Panel Lecture on Reconnaissance and Preliminary Findings from the June 8, 2008, Achaia-Elia, Greece, Earthquake, MERCEA08, Sicily, July 11 2008
19. "Seismic Engineering International Conference commemorating the 1908 Messina and Reggio Calabria Earthquake", Panel Lecture on Earthquake Response of Retaining Walls, MERCEA08, Sicily, July 11, 2008
20. "The Role of Soil in the Collapse of Hanshin Expressway in the Kobe, Japan, Earthquake", Best-Patras Workshop, Patras, April 14, 2008
21. "Recent Advances on Soil-Structure Interaction", University of Catania, Italy, 1-7 November 2007
22. "Seismic Isolation of Structures on Pile Foundations via EPS Geofoam", Symposium of the Pan-Hellenic Association of EPS Producer, Thessalonica, October 3, 2007
23. "The Collapse of Fukae (Hanshin Expressway) bridge, Kobe, 1995: The Role of Soil and Soil-Structure Interaction", Politecnico di Milano, Milan, May 10, 2007
24. "Developments in Seismic Soil-Structure Interaction: Theory & Case Studies", Università di Firenze, Florence, May 8-9, 2007 (2 lectures)
25. "Seismic Isolation of Structures on Pile Foundations via EPS Geofoam", Symposium of the Hellenic Association of EPS Producers, Athens, November 9, 2006 (in Greek)
26. Dynamic Soil-Pile Interaction: Theory, Applications, Cases Histories. University of Benevento, Italy, May 14, 2006
27. Seismic Soil-Structure Interaction: Lessons Learned from the Ohba-Ohashi and Hanshin Expressway Case Histories, University of Volos, December 13, 2005
28. "Ohba-Ohashi Pile Supported Bridge Experiment Revisited: Paradoxes and New Interpretations", 1st Greece-Japan Workshop on Seismic Analysis and Design of Foundations, October 12, 2005
29. "Seismic Response of Bridge Piers on Pile Foundations", Omilos Inc., Athens, Greece, April 1st, 2005 (in Greek)

30. Seismic Response of Pile-Supported Structures: Analysis, Case Histories. Institute for Engineering Seismology and Earthquake-Resistant Structures, Thessalonica, January 19 2005 (in Greek)
31. “The Collapse of Fukae (Hanshin Expressway) bridge, Kobe, 1995: The Role of Seismic Soil-Structure Interaction”, Invited seminar, ASCE Student Chapter, The City College of New York, April 20, 2004
32. “The Collapse of Fukae (Hanshin Expressway) bridge, Kobe, 1995: The Role of Soil and Soil-Structure Interaction”, Invited Special Presentation, 5th International Conference on Case Histories in Geotechnical Engineering, New York, April 16, 2004
33. “Soil-Structure Interaction: Beneficial or Detrimental?”, Columbia University, New York, November 13, 2003
34. “New Model for Seismic Pile Bending at Soil-Layer Interfaces”, Workshop on Seismic Response of Pile Foundations with Emphasis on Liquefaction, Tokyo Institute of Technology, October 23, 2002
35. Recent Developments on the Dynamic Analysis of Surface and Deep Foundations”, University of Patras, Greece, June 19, 2002 (in Greek)
36. “Site and SSI effects in Seismic Codes: A recent evaluation”, Seminar on Geotechnical Earthquake Engineering organized by ASCE MET Section, May 14, 2002
37. “Evaluation of site factors for Seismic Bridge Design in the NYC Area”, Stevens Institute of Technology, Feb 13, 2002
38. “Soil-Structure Interaction: Beneficial or Detrimental”, American Society of Civil Engineers, MET Section, New York, Dec. 13, 2001
39. “Dynamic Response of Foundations: Analysis and Design Aspects”, State-of-the-Art Presentation, 10th International Conf. on Soil Dynamics & Earthquake Engineering, Philadelphia, Oct. 9, 2001
40. “Recent Developments in Seismic Soil-Structure Interaction Analysis of Pile-Supported Structures”, Invited Talk, Shimizu Corporation, Tokyo, Japan, November 22, 2000
41. “Recent Developments in Seismic Soil-Structure Interaction Analysis of Pile-Supported Structures”, Invited Talk, Railway Technical Institute, Tokyo, Japan, November 21, 2000
42. “Seismic Soil-Structure Interaction: Beneficial or Detrimental?”, Invited Speaker, Drexel University, Philadelphia, March 31, 2000
43. “Seismic Analysis of Pile-Supported Bridges”, Department of Civil Engineering, Cooper Union, New York, April 28, 1998
44. “Soil-Pile-Bridge Seismic Interaction. Kinematic and Inertial Effects”, Invited Speaker, Earthquake Engineering Seminar, Department of Civil Engineering, State University of New York at Buffalo, February 13, 1998
45. “The Seismicity of Greece and the Issue of Seismic Protection”, Invited Speaker, Pan. Thermiani Inc., New York, November 15, 1997. (in Greek)

46. "Soil-Structure Interaction in Bridge Structures: Kinematic and Inertial Effects", Inv. Speaker, Dept. of Civil Engineering, University of Minnesota, Minneapolis, May 12, 1997
47. "Soil-Pile-Bridge Seismic Interaction. Kinematic and Inertial Effects", Invited Speaker, Department of Civil Engineering, City College of New York, April 17, 1997

11.2 Conference Presentations

48. "Seismic Response of Ohba Ohashi Bridge: Paradoxes & New Interpretations", *COMPDYN 2009*, Rhodes, June 23, 2009
49. "Response of Sliding Structures to Near-Fault Pulses: Closed-Form Solutions", *14 World Conference on Earthquake Engineering*, Beijing, October 12-17, Beijing, 2008
50. "Role of Soil on Pile Radiation Damping for SSI applications", *12th IACMAG*, Goa, India, October 2, 2008
51. "Wave Dispersion Studies in Dry Granular Materials by the Distinct Element Method", *6th GRACM International Congress on Computational Mechanics*, Thessaloniki, 21 June, 2008
52. "Rigid Blocks under Near-Fault Earthquake Pulses", *GEESD IV*, Sacramento, May 19, 2008
53. "Strain Transfer as Fundamental Concept for Seismic Design of Pile Foundations", *XIV European Conference on Soil Mechanics and Geotechnical Engineering*. Madrid, September 25, 2007
54. "Seismic Bearing Capacity and Earth Pressures by Stress Limit Analysis", *8HSTAM Conference*, Patras, July 14, 2007
55. "Dynamic Characteristics of Simple Structures on Piles and Footings", *4ICEGE*, Salonica, June 26, 2007
56. "Seismic Earth Pressures on Gravity Walls by Stress Limit Analysis", *4ICEGE*, Salonica, June 27, 2007
57. "Elastodynamic SSI for Bridge Piers on Piles and Footings", *1st International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, *COMPDYN2007*, Rethymno, 15 June 2007
58. "An Alternative to the Mononobe-Okabe Equations for Seismic Earth Pressures", *2nd Greece-Japan Workshop on Seismic Analysis and Design of Foundations*, Tokyo, April 4, 2007
59. "Seismic Soil-Structure Interaction: Analytical Findings & Numerical Analysis", *2nd Greece-Japan Workshop on Seismic Analysis and Design of Foundations*, Tokyo, April 3, 2007

60. "Performance of a 3-Storey RC Structure on Soft Soil in the M6.4 Lefkada, 2003, Greece, Earthquake", *1st First European Conference on Earthquake Engineering and Seismology*, Geneva, September 7, 2006
61. "A Replacement to the Mononobe-Okabe Equations for Seismic Earth Pressures", *1st First European Conference on Earthquake Engineering and Seismology*, Geneva, September 6, 2006
62. "Ohba-Ohashi Pile Supported Bridge Experiment Revisited: Paradoxes and New Interpretations", *1st Greece-Japan Workshop on Seismic Analysis and Design of Foundations*, October 12, 2005
63. "Influence of Soil Heterogeneity on Dynamic Response of Deep Foundations", *GRACM 2005*, Cyprus, July 1st 2005
64. "Seismic Response of Pile-Supported Bridges: Case Studies", *Geotrans2004*, Los Angeles, July 30 2004
65. "The Collapse of Fukae (Hanshin Expressway) Bridge, Kobe 1995: Contribution of Soil-Structure Interaction, Reconstruction and Isolation", *Concrete Structures in Seismic Regions: FIB 2003 Symposium*, Athens, May 8 2003
66. "A Model for Seismic Pile Bending at Soil-Layer Interfaces", *Workshop on Seismic Response of Pile Foundations with Emphasis on Liquefaction*, Tokyo, October 23, 2002
67. "The Role of Soil in the Collapse of 18 Piers of Hanshin Expressway in the Kobe Earthquake", *Proc. U.S.-Japan Joint Workshop and Fourth Grantee meeting, U.S.-Japan Cooperative Research in Urban Earthquake Disaster Mitigation*, Kyoto, 21 October, 2002
68. "Damage Potential of the 1999 Athens, Greece, Accelerograms", *7th U.S. National Conference on Earthquake Engineering*, Boston MA, July 25, 2002
69. "Simplified Model for Seismic Pile Bending at Soil-Layer Interfaces", *7th U.S. National Conference on Earthquake Engineering*, Boston MA, July 24, 2002
70. "EC-8 provisions for Pile Foundations", *Year 2002 International Conference and Exposition, Deep Foundations Institute*, Nice, June 5, 2002
71. "Design Methods for Earthquake-Induced Pile Bending", *Year 2002 International Conference and Exposition, Deep Foundations Institute*, Nice, June 4, 2002
72. "Simplified Modeling of Response of Bridges on Soft Soil to Non-Uniform Seismic Excitation", *First SEI Bridge Conference*, ASCE, New York, October 29, 2001
73. "The Role of Soil in the Collapse of 18 Piers of Hanshin Expressway in the Kobe Earthquake", *Proc. U.S.-Japan Joint Workshop and Third Grantee meeting, U.S.-Japan Cooperative Research in Urban Earthquake Disaster Mitigation*, University of Washington, Seattle, 15-16 August 2001
74. "The Role of Soil on the Collapse of 18 Piers of Hanshin Expressway in the Kobe Earthquake", *12th World Conference on Earthquake Engineering*, Auckland, New Zealand, February 3, 2000

75. "Simple Model for Response of Bridges to Non-Uniform Seismic Excitation", *8th Canadian Conference on Earthquake Engineering*, June 13-16, Vancouver, B.C., Canada, June 15, 1999
76. "Wave Interference Models as a Simple Approach to Dynamic Pile-Soil-Pile Interaction", *6th US Conference on Earthquake Engineering*, Seattle, June 3, 1998
77. "Northridge SR14 / I-5 Study: Structural Implications", *Annual meeting of the National Center for Earthquake Engineering Research*, Buffalo NY, November 20, 1996
78. "Static and Seismic Analysis of Piles and Pile-Supported Bridge Piers", *Structural, Geotechnical, and Earthquake Engineering Seminar*, Department of Civil Engineering, State University of New York at Buffalo, January 19, 1996

12 ACADEMIC SERVICE

12.1 University of Patras

- Member, Graduate Committee, Department of Civil Engineering, 2008 –
- Member, Curriculum Committee, Department of Civil Engineering, 2008 –
- Member, Civil Engineering Building Committee, 2006 –
- Member, Faculty Search Committee for 1 Adjunct Professor Position in Geology, CE Department, 2004 – 2008
- Member, Faculty Search Committee for 1 Assistant Researcher Position in Soil Dynamics, ITSAK, 2005

12.2 City College of New York, (CUNY)

- Elected Member, Executive Committee of Civil Engineering Department, 2001– 2004
- Director, Soil Mechanics Laboratory, 1997– 2004
- Graduate Advisor, Civil Engineering Department, 1998– 2004
- Web Master, Civil Engineering Department, 1998–2003
- Member, University Graduate Council, 1999–2004
- Member, Faculty Search Committee, 1999
- President, Faculty Search Committee (2 lines), 2002
- Member, Curriculum Committee, CE Department, 2000–2004
- Member, Computer Committee, CE Department, 2001– 2004

13. REVIEWER

13.1 Editorial Activities

- Editorial Board Member, *Journal of Earthquake and Structures*, 2009-
- Editorial Board Member, *Journal of Geotechnical and Geoenvironmental Engineering (JGGE)*, ASCE, 2004-2009
- Guest Editor, *Soil Dynamics & Earthquake Engineering*, 2006-2008

13.2 Research Proposals

- Panel Reviewer, PEBE Proposals, NTU, 2008, 2010 (two times)
- Panel Reviewer, National Science Foundation of Cyprus, Athens, December 2005
- Panel Reviewer, NSF, U.S.- Japan Collaborative Research Panel, Washington, February 13, 2001
- Proposal Reviewer, U.S. National Science Foundation, 2000

13.3 External Reader (8 Dissertations)

- Uniresidad Las Palmas de Gran Canaria (External Examiner), 2008
- National Technical University, Athens, Greece, (External Examiner), 2007, 2010 (2 times)
- Aristotle University of Thessaloniki, Greece, (External Examiner), 2007
- University of British Columbia, Vancouver, (External Examiner), 2006
- State University of New York at Buffalo (External Examiner), 2002
- University of Auckland, New Zealand (External Examiner), 2000, 2008 (2 times)

13.4 International Journals (28 in total; more than 100 reviewed articles)

- Advanced Concrete Technology, JCI 2010 –
- Nonlinear Dynamics, 2009 –
- Control Health Monitoring 2008 –
- Bulletin of the New Zealand Society in Earthquake Engineering, 2008 –
- Canadian Geotechnical Journal, 2008 –
- Advances in Engineering Software, 2008 –
- Advances in Structural Engineering, 2007 –
- Bulletin of Earthquake Engineering, 2007 –
- Earthquake Engineering & Structural Dynamics, 2007 –
- ICE Geotechnical Engineering, 2007 –
- Journal of Earthquake Engineering, 2007 –
- ISET Journal of Earthquake Technology, 2007 –
- Computers & Geotechnics, 2006 –
- Engineering Structures, 2006 –
- Journal of Hydrology, 2006 –
- Earthquake Spectra, 2006 –
- International Journal of Geo-Engineering Case Histories, 2004 –
- Computational Mechanics, 2004 –
- Engineering Geology, 2004 –
- Journal of Zhejiang University Science, 2003 –
- Soil Dynamics and Earthquake Engineering, 2002 –

- Journal of Structural Engineering, ASCE 2002 –
- International Journal for Numerical and Analytical Methods in Geomechanics, 2002 –
- Journal of Sound and Vibration, 2002 –
- Journal of Bridge Engineering, ASCE, 2001 –
- Geotechnique, 2001 –
- Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 1998 –
- Journal of Engineering Mechanics, ASCE, 1998 –

13.5 National & International Conferences

- 5th International Conference on Earthquake Geotechnical Engineering (5ICEGE), Santiago, Chile, January 10-13, 2011
- 35th Annual Conference on Deep Foundations, DFI, Hollywood California, October 12-15, 2010
- 5th Greek National Conference on Geotechnical Engineering, Volos, scheduled for October 2010
- 12th International Congress of the Geological Society of Greece, Patras, May 2010
- 5th International Conference on Recent Advances in Geotechnical Earthquake and Soil Dynamics, San Diego, May 24-29, 2010
- International Workshop on Soil-Foundation-Structure Interaction, Auckland, New Zealand, 26-27 November 2009
- 12th Conference of the International Association for Computer Methods and Advances in Geomechanics (12th IACMAG), GOA-India, 1-6 October 2008
- Geotechnical Earthquake Engineering and Structural Dynamics IV (GEESD IV), Sacramento, May 18–22, 2008 (Lead Reviewer)
- 6th International on Case Histories in Geotechnical Engineering, Washington D.C., August 2008
- 4th International Conference on Recent Advances in Geotechnical Earthquake and Soil Dynamics, Thessalonica, June 25-28 2007
- 11th International Conference on Soil Dynamics and Earthquake Engineering, Berkeley, January 23-27, 2004
- 1st International Conference in Bridge Engineering, ASCE, New York, October 29, 2002
- 10th International Conference in Soil Dynamics and Earthquake Engineering, Philadelphia, October 7-10, 2001
- 4th International Conference in Recent Advances on Geotechnical Earthquake Engineering, San Diego, March 26-31, 2001

13.6 Research Reports

- National Secretariat for Research and Development, Greece, 2004 –
- Multidisciplinary Center for Earthquake Engineering (MCEER) Research, 2001
- National Center for Earthquake Engineering (NCEER) Research, 1996–1997

13.7 Publishers

- John Wiley & Sons, 2001 (“Soil Mechanics and Foundations”, M. Budhu, 2nd edition)

13.8 Student Scholarships

- American Society of Kastorians, 1999-2003

13.9 Professional License

- Member of Examination Committee, National Chamber of Greece, March 17, 2008

14. LAB EXPERIENCE

Director, Soil Mechanics Laboratory, CUNY (1997-2004)

15. DEVELOPMENT OF MAJOR COMPUTER CODES (selected list)

DAP: (Dynamic Analysis of Piles), 1995. The computer code analyses the static and dynamic response of single piles and pile groups in multi-layer viscoelastic soil. Vertical, horizontal, and moment dynamic loadings are considered. Shear force, axial force, and bending moment diagrams along the piles are calculated for: (i) loads transmitted through the cap, and (ii) additional loads along the piles due to the vibrations of the neighboring piles.

SPIAB: (Soil-Pile Interaction Analysis for Bridges), 1994-1995. The program analyses the seismic response of bridge piers supported on pile foundations in multi-layer viscoelastic soil. The seismic analysis incorporates both the kinematic and inertial interaction in the frequency and time domains, with the excitation specified at the surface of the “rock” outcrop.

IDARC-BRIDGE: (Inelastic Damage Analysis of Reinforced Concrete Structures & Bridges), 1997 (co-developer). The computer platform analyzes the static and dynamic response of bridges and their foundations in three dimensions. The platform offers computational tools for analysis and design by integrating modules for non-linear dynamic damage analysis and push over analysis developed especially for bridge structures.

IDAP: (Dynamic Analysis of Pile in Non-Linear Soil), under development, 2004. The computer code analyses the static and dynamic response of piles and pile groups in

non-linear multi-layer soil. The calculations are performed exclusively in the time domain considering the non-linear behavior of the pile, the pile-soil interface, and the near-field soil. The code incorporates all capabilities of DAP.

16. PROFESSIONAL EXPERIENCE (Selected List)

16.1 Professional Affiliations

Seismological Society of America, 2006 –
 Greek Society for Computational Mechanics, 2004 –
 American Society of Civil Engineers, 1996 –
 Earthquake Engineering Research Institute, 1996 –
 International Society for Soil Mechanics and Foundation Engineering, 1996 –
 Japanese Geotechnical Society, 1998 –
 New Zealand Society for Earthquake Engineering, 1999 –
 Greek Society of Civil Engineers, 1995 –
 Hellenic Company of Earthquake Engineering (ETAM), 1995 –
 Technical Chamber of Greece, 1993 –

16.2 Professional License

Professional Engineer, Technical Chamber of Greece, June 1993 (License recognized by the 16 countries of the European Union)

16.3 Professional Projects

- **Brunsbüttel Nuclear Reactor Building, Germany (1993-1995)**
 Member of the consulting team for the analysis of: (i) dynamic response of the 230-pile group and embedded foundation in soft organic clay; (ii) seismic analysis of pile distress
- **Tagus River Bridge, Lisbon, Portugal (1994)**
 Member of the analysis team for: (i) the ground motion study; (ii) the seismic response of the seven foundations of this 2,100 m (6,885 ft) suspension bridge undergoing and upgrading for carrying a railway deck. Of particular interest is the response of the colossal caisson [90m in height, 24 by 41 m in plan] of one of the two major piers, founded through 54 m of soft soil deposit
- **Madison Avenue Bridge, New York (1997)**
 Member of the analysis team for: (i) the seismic response of the five foundations of the bridge, and (ii) for the seismic retrofit of the 108 wooden-pile foundation of the center pier.
- **Slattery, Inc., New York (1999)**

Laboratory investigation of soil properties for an excavation project on clay in Upper Manhattan

- **Slattery, Inc., New York (2000)**
Laboratory investigation of soil properties for an excavation project on clay in Midtown Manhattan
- **World Trade Center, New York (2001)**
Participation in the Emergency Response Team formed by Mueser Rutledge Consulting Engineers for monitoring and analyzing the movement of the 70ft-deep slurry wall surrounding the foundation of the collapsed towers
- **New York City Transit (2001-2004)**
Consulting services for various projects in New York Metropolitan Area, including 2nd Avenue Tunnel
- **Amfissa Municipality, Greece (2005-2006)**
Consultant on seismic loads, rehabilitation of a 19th century monumental structure built over the ancient walls of the City.
- **Technical Chamber of Greece (2005-2006)**
Investigation of a failure of a 5-m tall retaining structure in Akrata Municipality, Greece
- **Ring Highway of Topolitsa (2006)**
Pile foundation design for a bridge structure in Topolitsa, Greece.
- **AKAMAS Corp. (2005-2006)**
Stability evaluation and mitigation measures for gravitational and seismic action of a 65m-tall slope in a major highway in the city of Patras, Greece.
- **AKAMAS Corp. (2006)**
Settlement evaluation and mitigation measures for gravitational and seismic action of a highway bridge on soft soil in the city of Patras, Greece.
- **Hellenic Arms Industry – E.B.O. (2007)**
Seismic response evaluation of an industrial building, considering SSI under gravitational, earthquake and tectonic loads, Aegion, Achaia, Greece
- **Support of Deep Excavation Olympion Hospital, Patras (2008)**
Stability design using piles and active anchors of a 12m deep excavation (60m by 20m in plan) on marl at the base of a hill.
- **Messologi Hospital, Greece (2008-2009)**
Performance evaluation against settlement of a single-storey hospital building on soft soil
- **Reconstruction of Mitropoulos Historic Mansion in Galaxidi (2008-2009)**

Evaluation for stability and settlement of a 12m high masonry historic mansion in Galaxidi, Greece

17. SCIENTIFIC PUBLICATIONS

17.1 Dissertation, Thesis (2 in total)

- D1. **Mylonakis, G.** “Contribution to Static and Seismic Analysis of Piles and Pile-Supported Bridge Piers”, *Ph.D. Dissertation*, Department of Civil Engineering, State University of New York at Buffalo, December 1995.
- D2. **Mylonakis, G.** and Nikolaou, A. “Local Variability of Strong Earthquake Motion and its Effects on the Seismic Response of Large Structures”, *Diploma Thesis*, Department of Civil Engineering, National Technical University of Athens, March 1993 (in Greek)

17.2 Chapters in books (2 in total)

- B1. Gazetas, G. Anastasopoulos, I, Gerolymos, N., **Mylonakis, G.**, Syngros, K. “The Collapse of Hanshin Expressway (Fukae) Bridge, Kobe 1995: Soil-Foundation-Structure Interaction, Reconstruction, Seismic Isolation”, *Entwicklungen in der Bodenmechanik, Bodendynamik und Geotechnik, Frank Rackwitz*, Special Volume on the occasion of the 60th birthday of Professor S. Savidis”, Springer, Berlin, 2006, pp 93-120
- B2. **Mylonakis, G.**, Gazetas, G., Gerolymos, N. and Anastasopoulos, I. “Collapse of the 18-Pier Fukae Bridge in Kobe: The unexpectedly Detrimental Role of Soil-Structure Interaction”, *Special Volume on the occasion of the 60th birthday of Professor S. Savidis*, Athens, 2000, 14 pages

17.3 Peer-Reviewed Journal & Special Publications (41 in total)

- J1. Anoyatis G. and **Mylonakis, G.** “Dynamic Winkler Modulus for Axially Loaded Piles”, *Geotechnique*, 2010 (submitted)
- J2. Voyagaki, E., **Mylonakis, G.**, Psycharis, I.N. “Rigid Block Sliding to Acceleration Pulses”, *Earthquake Spectra*, 2010 (submitted)
- J3. Dihorou L., Moccia, F., Battacharya, S., Simonelli, A., **Mylonakis, G.**, Taylor, C. “Shaking Table Testing of Free Field Response in Layered Granular Deposits”, *Canadian Geotechnical Journal*, 2010 (submitted)
- J4. Karatzia, X., Papastylianou, P. **Mylonakis G.** “Horizontal Soil Reaction on Cylindrical Pile Segment with Soft Zone”, *Journal of Engineering Mechanics*, 2010 (submitted)
- J5. Sica, S., **Mylonakis, G.**, Simonelli, A. “Transient Kinematic Pile Bending in Two-Layer Soil”, *Soil Dynamics & Earthquake Engineering*, 2010 (submitted)
- J6. Giarlelis, C., Lekka, D., **Mylonakis, G.**, Karabalis, D. “The M6.4 Lefkada 2003, Greece, Earthquake: Response of a 3-Storey RC Structure on Soft Soil”, *Journal of Earthquake and Structures*, 2010 (submitted)

- J7. Padrón, L.A., **Mylonakis, G.** Beskos, D.E., “Simple Superposition Approach for Dynamic Analysis of Piled Embedded Footings”, *Journal of Numerical and Analytical Methods in Geomechanics*, submitted, 2010 (submitted)
- J8. Rovithis, M., Paraschakis, H., **Mylonakis, G.** “Seismic Response of Layered Inhomogeneous Soil Deposits”, *Soil Dynamics & Earthquake Engineering*, 2010 (submitted)
- J9. Voyagaki, E., **Mylonakis, G.**, Psycharis, I.N. “Dynamic Analysis of Yielding Systems by Excitation Shift”, *Journal of Engineering Mechanics*, 2010 (submitted)
- J10. Voyagaki, E., **Mylonakis, G.**, Psycharis, I.N. “A Shift Approach for the Dynamic Response of Rigid-Plastic Systems”, *Earthquake Engineering & Structural Dynamics*, 2010 (in press)
- J11. Giarlelis, Ch., and **Mylonakis, G.** “Interpretation of Dynamic Retaining Wall Model Tests in Light of Elastic and Plastic Solutions”, *Soil Dynamics & Earthquake Engineering*, 2010 (published online 9/2010)
- J12. Capua, G., Kayen, R., Kieffer, S., Button, E., Biscontin, Scasserra G., Lanzo, G., Tommasi P., Pagliaroli, A., Silvestri F., d’Onofrio A., Simonelli, A.L., Puglia, R., **Mylonakis, G.**, Athanasopoulos, G., Vlahakis, V., Stewart, J.P. “Preliminary Report on the Seismological and Geotechnical Aspects of the April 6 2009 L’ Aquila Earthquake in Central Italy”, *International Journal of Geo-Engineering Case Histories*, 2010
- J13. Margaritis, V., Athanasopoulos, G., **Mylonakis, G.**, Papaioannou, C., Klimis, N., Theodulidis, N., Savvaidis, A. Efthymiadou, V., Stewart, J.P. "M_w = 6.5, Achaia-Elia (Greece) Earthquake on 8 June 2008: Source Characteristics, Ground Motions, and Ground Failure", *Earthquake Spectra*, Vol. 26, No. 2, pp 399-424, 2010
- J14. Papargyri-Beskou, **Mylonakis, G.**, “Wave Dispersion Studies in Granular Media by Analytical and Analytical- Numerical Methods”, *Soil Dynamics & Earthquake Engineering*, Vol. 29, No. 5, 2009, pp. 883-887, 2009
- J15. Papargyri-Beskou, S., Thomas, K., **Mylonakis, G.** “Wave Dispersion in Granular Media by the Distinct Element Method”, *Soil Dynamics & Earthquake Engineering*, Vol. 29, No. 5, pp. 888-897, 2009
- J16. Padrón, L.A., **Mylonakis, G.** Beskos, D.E., “Importance of footing-soil separation on dynamic stiffness of piled embedded footings”, *Journal of Numerical and Analytical Methods in Geomechanics*, Vol. 33, pp. 1439-1448, 2009
- J17. Rovithis, M., Pitilakis, K., **Mylonakis, G.** “Seismic Analysis of coupled soil-pile-structure systems leading to the definition of a pseudo natural SSI frequency”, *Soil Dynamics & Earthquake Engineering*, Vol. 29, No. 6, pp. 1005-1015, 2009
- J18. Syngros, K, **Mylonakis, G.**, Price, T. “Axial Dynamic Pile Stiffness and Damping in Soil with Double Inhomogeneity”, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE (tentatively accepted)
- J19. **Mylonakis, G.**, Kloukinas, P., Papantonopoulos K. “An Alternative to the Mononobe-Okabe Equations for Seismic Earth Pressures”, *Soil Dynamics & Earthquake*

- Engineering* Vol. 27, No. 10, pp 957-969, 2007 [Listed among the 25 most downloaded articles of the Journal for 6 consecutive months.]
- J20. **Mylonakis, G.** and Voyagaki, E. “Yielding Oscillator subjected to Simple Pulse Waveforms: Numerical Analysis & Closed-Form Solutions”, *Earthquake Engineering & Structural Dynamics*, Vol. 35, No. 12, pp. 1949-1974, 2006
- J21. **Mylonakis, G.**, Nikolaou, S., and Gazetas, G. “Footings under Dynamics Loads: Analysis and Design Issues with Emphasis on Bridge Foundations”, *Soil Dynamics and Earthquake Engineering*, Vol. 26, No. 9, pp. 824-853, 2006 [Listed among the 25 most downloaded articles of the Journal for 18 consecutive months.]
- J22. **Mylonakis, G.**, Syngros, C., Gazetas, G., Tazoh, T. “The Role of Soil in the Collapse of 18 Piers of Hanshin Expressway in the Kobe Earthquake”, *Earthquake Engineering & Structural Dynamics*, Vol. 35, No. 2, pp. 525-545, 2006
- J23. Dellate, N., Chen, S., Maini, N., Parker, N., Agrawal, A., **Mylonakis, G.**, Subramaniam, K. V., Kawaguchi, A., Bosela, P., McNeil, S., and Miller, R., “Application of Nondestructive Evaluation to Subway Tunnel Systems”, *Transportation Research Record* No. 1845, pp. 127-135, 2004
- J24. **Mylonakis, G.**, Voyagaki, E., and Price, T., “Damage Potential of the 1999 Athens, Greece, Accelerograms”, *Bulletin of Earthquake Engineering*, Vol. 1, No. 2, 205-240, 2003
- J25. **Mylonakis, G.** and Gazetas G. “Kinematic Pile Response to Vertical P-Wave Seismic Excitation”, *Journal of Geotechnical and Geoenvironmental Engineering, ASCE*, Vol. 128, No 10, pp. 860-867, 2002
- J26. **Mylonakis, G.** and Syngros, C. “Response Spectrum of Incompatible Acceleration, Velocity, and Displacement Histories”, *Earthquake Engineering & Structural Dynamics*, Vol. 31, No. 4, pp. 1025-1031, 2002
- J27. Nikolaou, A., **Mylonakis, G.**, and Edinger, P. “Evaluation of Site Factors for Seismic Bridge Design in NYC Area”, *Journal of Bridge Engineering, ASCE*, Vol. 6, No. 3, pp. 564-576, 2001
- J28. **Mylonakis, G.**, Papastamatiou D., Psycharis, J., Mahmoud, K. “Simplified Modeling of Response of Bridges on Soft Soil to Non-Uniform Seismic Excitation”, *Journal of Bridge Engineering, ASCE*, Vol. 6, No. 3, pp. 587-597, 2001
- J29. **Mylonakis, G.** “Simplified Model for Seismic Pile Bending at Soil Layer Interfaces, *Soils & Foundations*, Vol. 41, No. 4, pp. 47-58, 2001 [Nominated for the year 2001 Research Award by the Japanese Geotechnical Society.]
- J30. **Mylonakis, G.** “Elastodynamic Model for Large-Diameter End-Bearing Shafts”, *Soils & Foundations*, Vol. 41, No. 3, pp. 31-44, 2001
- J31. **Mylonakis, G.** “Winkler Modulus for Axially-Loaded Piles”, *Geotechnique*, Vol. 51, No. 5, pp. 455-461, 2001 [Included in the 2008 Diamond Jubilee Issue of Geotechnique as Contribution to Foundation Engineering.]

- J32. Nikolaou, A., **Mylonakis, G.**, Gazetas, G., and Tazoh, T. “Kinematic Pile Bending During Earthquakes: Analysis and Field Measurements”, *Geotechnique*, Vol. 51, No. 5, 425-440, 2001 [Included in the 2008 Diamond Jubilee Issue of Geotechnique as Contribution to Soil Dynamics.]
- J33. **Mylonakis, G.** and Reinhorn A.M. “Inelastic Oscillator under Triangular Ground Acceleration Pulse”, *Journal of Earthquake Engineering*, Vol. 5, No. 2, 225-251, 2001
- J34. **Mylonakis, G.** and Gazetas, G. “Seismic Soil-Structure Interaction: Beneficial or Detrimental?”, *Journal of Earthquake Engineering*, Vol. 4, No. 3., pp. 377-401, 2000
- J35. **Mylonakis, G.** “A New Analytical Model for Settlement Analysis of a Single Pile in Multi-Layered Soil”, *Soils & Foundations*, Vol. 40, No. 4, pp. 161-164, 2000
- J36. **Mylonakis, G.** and Gazetas, G. “Lateral Vibration and Internal Forces of Grouped Piles in Layered Soil”, *Journal of Geotechnical and Geoenvironmental Engineering, ASCE*, Vol. 125, No 1, pp. 16-25, 1999
- J37. **Mylonakis, G.**, Simeonov, V., Reinhorn, A., and Buckle, I. “Implications of Spatial Variation of Ground motion on the Collapse of SR14 / I5 Southbound Separation and Overhead in the Northridge Earthquake”, *Special Publication on the Seismic Response of Concrete Bridges, SP-187, ACI*, pp. 299-325, 1999
- J38. **Mylonakis, G.** and Gazetas, G. “Vertical Vibration and Distress of Piles and Pile Groups in Layered Soil”, *Soils & Foundations*, Vol. 38, No 1, pp. 1-14, 1998
- J39. **Mylonakis, G.** and Gazetas, G. “Settlement and Load-Transfer Mechanism of Piles and Pile Groups in Layered Soil”, *Geotechnique*, Vol. 48, No 1, pp. 55-72, 1998 [Included in the 2008 Diamond Jubilee Issue of Geotechnique as Contribution to Foundation Engineering.]
- J40. Gazetas, G. and **Mylonakis, G.** “Seismic Soil-Structure Interaction: New Evidence and Emerging Issues”, Emerging Issues Paper, *Geotechnical Special Publication No 75, ASCE*, pp. 1119-1174, 1998
- J41. **Mylonakis, G.**, Nikolaou, A., and Gazetas, G. “Soil-Pile-Bridge Seismic Interaction: Kinematic and Inertial Effects. Part I: Soft Soil”, *Earthquake Engineering & Structural Dynamics*, Vol. 26, No 3, pp. 337-359, 1997

17.4 Greek Special Publications (3 in total)

- GSP1. **Mylonakis, G.**, Atmatzidis, D., Foi, Anne-Marie, Kloukinas, P. “Rankine’s treatise on Lateral Earth Pressures: Translation, Comments, Examples”, *Special Publication, Bulletin of the Greek Society of Civil Engineers*, 2010 (in preparation for submission)
- GSP2. **Mylonakis, G.**, Atmatzidis, D., Panagaki, St., Kloukinas, P. “Coulomb’s Memoir on Statics and Geotechnics: Translation, Comments, Examples”, *Special Publication, Bulletin of the Greek Society of Civil Engineers*, 2010 (submitted)
- GSP3. Gazetas, G., Michaelides, O., Loukakis, K., and **Mylonakis, G.**, “The Kobe Earthquake of 1-17-1995: Review, Comparisons, Preliminary Conclusions”, *Bulletin of the Technical Chamber of Greece*, Vol. 1851, pp. 72-75, 1995

17.5 Papers in preparation (Research effort completed or nearly completed)

- UJ1. Syngros, K, **Mylonakis, G.**, Price, T. “Lateral Dynamic Pile Stiffness and Damping in Soil with Double Inhomogeneity”
- UJ2. **Mylonakis, G.**, Papantonopoulos K., Kloukinas, P. “An Alternative to the Coulomb Equation for Lateral Earth Pressures by Stress Limit analysis”
- UJ3. **Mylonakis, G.** “Design Methods for Earthquake-Induced Pile Bending”
- UJ4. **Mylonakis, G.** “Energy-Based Analysis of Axially-Loaded Piles”
- UJ5. **Mylonakis, G.** et al. “Soil-Pile-Bridge Seismic Interaction: Kinematic and Inertial Effects. Part II : Stiff Soil”
- UJ6. **Mylonakis, G.** “Echo Model for Dynamic Pile-Soil-Pile Interaction in Inhomogeneous Soil”
- UJ7. **Mylonakis, G.** et al. “Seismic Re-evaluation of a Pile-Supported Nuclear Facility”

17.6 Volumes of Conference Proceedings (85 in total)

- C1. Thomas, C., **Mylonakis, G.**, “Wave Dispersion Studies in Dry Granular Materials by the Distinct-Element Method”, 12th IACMAG, Melbourne, 2011 (abstract submitted).
- C2. Anoyatis, G., **Mylonakis, G.** “Novel Tajimi models for Static and Dynamic Pile-Soil Interaction”, EUROODYN2011 (abstract submitted)
- C3. Kountouzis, P., Stamatopoulos, C., **Mylonakis, G.**, “Evaluation of Ground motion, liquefaction Susceptibility and their consequences in Valimitika, Greece, as a result of the Aegion Earthquake of 1995”, *SICEGE, Santiago*, January 10-13, 2011, 12 pages (submitted)
- C4. Thomas, C., **Mylonakis, G.**, “3D Wave Dispersion in Dry Granular Samples by DEM”, *SICEGE, Santiago*, January 10-13, 2011, 12 pages (submitted)
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