# CURRICULUM VITAE

# PANOS DAKOULAS

Ph.D., M.Sc., P.E. Professor Director of Soil Mechanics Laboratory

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Ph.D., M.Sc., P.E. Professor Director of Soil Mechanics Laboratory Visiting Professor, ETH Zürich

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## PERSONAL

Date of Birth:1957Citizenship:Greek, USAFamily Status:Married, two children

## **EDUCATION**

**1982-1985: Ph.D.** in Civil Engineering (Geotechnical Earthquake Engineering) Rensselaer Polytechnic Institute, Troy, New York. Thesis: "Contributions to Seismic Analysis of Earth Dams and Embankments."

**1980-1982: M. Sc.** in Civil Engineering (*Geotechnical Engineering*) Rensselaer Polytechnic Institute, Troy, New York. Thesis: "*Effect of Fabric on the Deformation Mechanism of Granular Soil.*"

**1975-1980: Diploma** in Civil Engineering (5-year course) National Technical University of Athens, Athens, Greece Thesis: *'Design of Highway Intersections.''* 

### ACADEMIC EXPERIENCE

**2013-Present**: Professor, Civil Engineering Dept., University of Thessaly, Greece.

**2006-2013**: Associate Professor, Civil Engineering Dept., University of Thessaly, Greece.

**2000-2006**: Assistant Professor, Civil Engineering Dept., University of Thessaly, Greece.

**1993-2000:** Associate Professor, Civil Engineering Dept., Rice University, Houston, Texas, USA.

**1987-1993:** Assistant Professor, Civil Engineering Department, Rice University, Houston, Texas. Developed a new Soil Mechanics research facility at Rice University for advanced monotonic and cyclic soil testing, using computer-automated state-of-the-art equipment.

**1985-1987:** Research Associate, Civil Engineering Department, Rensselaer Polytechnic Institute, Troy, New York. In charge of a major project for the seismic response and liquefaction potential evaluation of a 50 km long dyke system protecting the oil wells and three towns along the coast of Maracaibo Lake, Venezuela.

**1986-1987:** In charge of the Earthquake Engineering and Cyclic Loading Soils Laboratory at RPI. (This laboratory is the core geotechnical facility for the National Center for Earthquake Engineering Research). Participated in several experimental projects related to monotonic and cyclic behavior of soil, with particular emphasis on the liquefaction of sands, in collaboration with Prof. R. Dobry.

**1983-1985:** Research Assistant, Civil Engineering Dept., RPI, Troy, NY. (under supervision of Prof. G. Gazetas).

**1981-1983:** Teaching Assistant, Civil Engineering Dept., RPI, Troy, NY.

# POSITIONS IN THE DEPARTMENT OF CIVIL ENGINEERING

**2020-present:** Vice-Chair of the Department of Civil Engineering

**2018-present:** Visiting Professor, Department of Civil Engineering, ETH Zurich

**2016-2017:** Director of the Graduate Studies Program "Analysis and Design of Energy Infrastructure Systems"

**2012-2016:** Director of the Graduate Studies Program "Analysis and Design of Civil Engineering Systems"

**2008-2010:** Vice-Chair of the Department of Civil Engineering

**2007-present:** Director of the Geotechnical Engineering laboratory

**2004-2010:** Deputy Director of the Graduate Studies Program "Applied Mechanics and Systems Modelling and Simulation"

**2016-present:** Chair of the Accreditation Committee **2016-present:** Chair of the Doctoral Program Committee

#### **AREA OF SPECIALIZATION**

Geotechnical Earthquake Engineering, Soil Dynamics, seismic analysis and design of dams (earth, rockfill, concrete), seismic behavior of retaining walls and waterfront structures, experimental behavior of soils under monotonic and cyclic loading, liquefaction, constitutive modeling of soils under monotonic and cyclic loading, dynamic soil-structure interaction, seismic behavior of burried pipelines, computational geotechnical engineering.

## HONORS

### 1999 Hsieh Award

This international award is awarded by the Institution of Civil Engineers (ICE), UK, for the best journal paper on the area of Structural and Soil Dynamics among all journal papers of ICE within a year. The article that received the award is entitled : "Insight into Dynamic Earth and Water Pressures against Caisson Quay Walls", Geotechnique, ICE, 58(2), 95-111 (by P. Dakoulas & G. Gazetas).

### 1995 S. Prakash Research Award.

This is an international award that is given to a researcher under 40 years old, who has made throughout out his career substantial contributions in the field of Geotechnical Earthquake Engineering and Soil Dynamics. The winner is selected by a international committee of experts in this field.

#### ASCE Student Chapter Award, March 1999

Department of Civil Engineering, Rice University, Houston, Texas

#### Thomas Archibald Bedford Prize.

Rensselaer Polytechnic Institute, for "high scholastic ability and substantial contribution in his field", May 1983.

#### Scholarship Recipient.

National Technical University of Athens, Greece, 1975-1980.

#### **RESEARCH TOPICS AND GRANTS**

Experimental Investigation and Constitutive Modeling of Saturated Sands Subjected to Monotonic and Cyclic Loading. (PI). Sponsor: *National Science Foundation*, Funds: \$ 58,761

Experimental Investigation of Marine Clay and Modeling of Offshore (PI). Foundations (Phase I). Sponsor: *Texas Advanced Technology Program*, Funds: \$ 58,919

Experimental Investigation of Marine Clay and Modeling of Offshore (PI). Foundations (Phase II).

Sponsor: Texas Advanced Technology Program, Funds: \$ 80,000

Experimental Investigation and Constitutive Modeling of Saturated Sands (PI). Subjected to Monotonic and Cyclic Loading (Extension). Sponsor: *National Science Foundation*, Funds: \$ 6,000

Fellowship for Graduate Student: Response of earth, rockfill, concrete-faced-rockfill dams to P, S and Rayleigh waves using a Mixed Boundary Element - Finite Element Formulation. (PI). Sponsor: U.S. Committee on Large Dams, Funds \$10,000.

Prediction of the Seismic Response of Ririe Dam Using Simplified Nonlinear Shear Beam Models. (PI). Sponsor: *Waterways Experiment Station, Corps of Engineers, U.S. Army,* Funds: \$ 6,000.

Modeling the Surface and Interior Structure of Cometary Nuclei Using a Multidisciplinary Approach. (Co-PI with O'Dell, R. and Pharr, G.). Sponsor: *National Aeronautics and Space Administration*, Funds \$ 62,123,

Deformation-Based Seismic Analysis And Design Of Waterfront Retaining Structures, (PI). Sponsor: National Science Foundation, Funds: \$ 122,108

Deformation-Based Seismic Analysis And Design Of Waterfront Retaining Structures, Research Collaboration Visit to Japan. (PI). Sponsor: *National Science Foundation*, Funds: \$ 7,157

Seismic Analysis and Design of Geotechnical Structures on Liquefiable Soils, (PI).

Sponsor: Organization for Seismic Design and Protection, Greece, Funds: €30000

Seismic Analysis and Design of Flexible Retaining Walls in Liquefiable Soils, Sponsor: *General Secretariat of Science and Technology, Ministry of Development, Greece,* Funds: € 28000. (PI: G. Gazetas, NTUA).

Concrete slab performance during reservoir impoundment of Messochora CFR Dam, (PI). Sponsor: *Public Power Corporation, Greece,* Funds: € 12000

Advanced Simulation of the Seismic Behavior of Tavropos Arch Dam: nonlinear 3D Dam-Canyon-Water interaction and thermomechanical effects, (PI). Sponsor: *Public Power Corporation, Greece,* Funds: € 20000

Numerical Simulation of the Construction and Loading of Rockfill Dams, Heracleitos II program for doctoral research of E Stavrotheodorou, Funds: € 45000 GIPIPE: Safety of Steel Buried Pipelines underground induced deformations. PI: S. A. Karamanos, University and Industry Consortium Funds: € 1640674

Evaluation of the irrigation system of the Islands of Corfu and Paxi: Stage of Construction, Co-PI with A. Loukas (PI), Funds: € 15000

Mitigation of seismic liquefaction in the foundation soil of existing structures via pore fluid enrichment with environmentally safe nano-particles, Ministry of Education, Program Thalis, Funds: € 600.000. (PI: A. Papadimitriou; Univ. of Thessaly team leader: P. Dakoulas).

Contemporary Evaluation Methodology of Seismic Vulnerability and Upgrade of Port Facilities, Ministry of Education, Program Thalis, Funds: € 600.000, (PI: G. Gazetas, Univ. of Thessaly team leader: P. Dakoulas).

Numerical and experimental modelling of global buckling of underground pipelines due to high pressure and temperature, Ministry of Education, Funds: € 40,600, (PI: P. Dakoulas).

# **COURSES TAUGHT**

#### **Rice University**

CIVI 470: Basic Soil Mechanics (lectures and laboratory). NSCI 101: Natural Science. CIVI 570: Foundation Engineering (Graduate). CIVI 571: Soil Dynamics (Graduate).

#### University of Thessaly

Soil Mechanics I Soil Mechanics II Soil Dynamics I Soil Dynamics II Dams and Embankments (Geotechnical Structures) Advanced Soil Mechanics (Graduate) Hydroelectric Dams (Graduate)

### MEMBERSHIP

American Society of Civil Engineers International Society of Soil Mechanics and Foundation Engineering Earthquake Engineering Research Institute Registered Professional Engineer in the State of Texas Registered Professional Engineer, Greece and the European Union. International Committee on Large Dams Greek Committee on Large Dams Technical Chamber of Greece Sigma Xi, The Scientific Research Society

# NATIONAL COMMITTEES AND PROFESSIONAL SERVICE IN USA & GREECE

# Important activities

- 1996-2000: Chairman of the National Earthquake Engineering and Soil Dynamics Committee, of the American Society of Civil Engineers, USA. The committee consists of 30 members.
- Member of the Organizing Committee of a Specialty Conference of ASCE, on Geotechnical Earthquake Engineering and Soil Dynamics in Seattle, Washington, (August 1998). The committee consists of 6 members. This is an important international conference that is organized every 10 years.
- 1993-1998: Editorial Board Member, Journal of Geotechnical and Geoenvironmental Engineering of the American Society of Civil Engineers.
- 1992-1996: Chairman of the National Earthquake Engineering and Soil Dynamics Committee of the American Society of Civil Engineers, USA. The committee consists of 30 members.
- Reviewer for the following scientific Journals:

Journal of Geotechnical and Geoenvironmental Engineering Geotechnique Journal of Engineering Mechanics Journal of Applied Mathematics International Journal of Earthquake Engineering and Structural Dynamics Journal of Soil Dynamics and Earthquake Engineering Geotechnical Testing Journal Journal of Infrastructure Systems Bulletin of the Seismological Society of America International Journal of Numerical and Analytical Methods in Geomechanics EERI Earthquake Spectra Computers and Geotechnics International Journal of Numerical Methods in Geomechanics Engineering and Computational Mechanics Journal of Pipeline Systems – Engineering and Practice Bulletin of European Earthquake Engineering Technika Chronika, Greece Journal of Environmental and Civil Engineering Earthquake Engineering and Engineering Vibration Structure and Infrastructure Engineering Journal of Hydrodynamics Structure and Infrastructure Engineering Journal of Pipeline Systems and Engineering practice, ASCE

- National Science Foundation Review Panel member for the review of research proposals in the *Geomechanics and Geotechnical Systems Program*, Washington, D.C., USA, 2002.
- National Science Foundation Review Panel member for the review of research proposals in the *Earthquake Hazard Mitigation Program*, Washington, D.C., USA, 2000.
- National Science Foundation Review Panel member for the review of research proposals in the *Earthquake Hazard Mitigation Program*, Washington, D.C., USA, 1997.
- National Science Foundation Review Panel member for the review of research proposals in the Division of *Structures, Geomechanics, and Building Systems*, Washington, D.C., USA, 1991.
- Reviewer for the Civil Engineering Research Foundation (CERF) of the American Society of Civil Engineers, USA, 1997.
- Member of the Committee ETC-12 (ISSMGE) for the assessment and application of Euricode-8.
- Member of the Scientific Committee of the 1<sup>st</sup> Greece-Japan Workshop on the Seismic Design, Observation and Retrofit of Foundations, Athens, October 2005.
- Member of the Scientific Committee of the Fourth International Conference on Earthquake Geotechnical Engineering, Thessaloniki, Greece, June 2007.
- Member of the Scientific Committee of the 2<sup>nd</sup> Japan-Greece Workshop on the Seismic Design, Observation and Retrofit of Foundations, Tokyo, April 2007.
- Member of the Organizing Committee and the Scientific Committee of the 1<sup>st</sup> Greek Conference on Large Dams, Larissa, November, 2008.

- Member of the Scientific Committee of the 3<sup>rd</sup> Greek Conference on Earthquake Engineering and Technical Seismology, Athens, November 2008.
- Member of the Scientific Committee of the 3<sup>rd</sup> Greece-Japan Workshop on the Seismic Design, Observation and Retrofit of Foundations, Santorini, Oct 2009.
- Member of the Organizing Committee and the Scientific Committee of the 6<sup>th</sup> Greek Conference on Geotechnical and Geo-Environmental Engineering, Volos, October, 2010.
- Member of the Scientific Committee of the Fifth International Conference on Earthquake Geotechnical Engineering, Santiago, Chile, January 2011.
- Member of the Scientific Committee of the 4<sup>rd</sup> Japan- Greece Workshop on the Seismic Design, Observation and Retrofit of Foundations, Kobe, Japan, 2001.
- Member of the Public Works Council of the Prefecture of Thessaly
- Member of the committee for the Verification and Reliability of Computers Codes for Static and Dynamic Analysis, Ministry of Public Works, Greece
- Member of the Committee on Computational Aspects of Analysis and Design of Dams, International Committee on Large Dams (ICOLD)
- Member of the Scientific Committee of the 11<sup>th</sup> ICOLD Numerical Benchmark Workshop, Valencia, Spain 2011.
- Member of the Scientific Committee of the 12<sup>th</sup> ICOLD Numerical Benchmark Workshop, Gratz, Austria 2013.
- Member of the Scientific Committee of the 2<sup>nd</sup> Greek Conference on Dams, Athens, 2013
- Member of the Scientific Committee of the 7<sup>th</sup> Greek Conference on Geomechnics, Athens, 2014
- Member of the Scientific Committee of the 13<sup>th</sup> ICOLD Numerical Benchmark Workshop, Lausanne, Switzerland 2015.
- Member of the Scientific Committee of the 1st International Conference on Natural Hazards & Infrastructure, 28-30 June, 2016, Chania, Greece
- Member of the Scientific Committee of the 14<sup>th</sup> ICOLD Numerical Benchmark Workshop, Stockholm, Sweden 2017.

- Member of the Scientific Committee of the 3<sup>rd</sup> Greek Conference on Dams, Athens, 2017
- Member of the Scientific Committee of the 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, 18-21 June 2018

# PUBLICATIONS

# Book Editor:

- 1. "Ground Failures under Seismic Conditions", (1994), Prakash, S. and Dakoulas, P., American Society of Civil Engineers, New York, pp 260.
- 2. "Geotechnical Earthquake Engineering and Soil Dynamics III", (1998), Dakoulas, P., Yegian, M. and Holtz, R., American Society of Civil Engineers, New York, pp. 1582.

# Chapters in Books:

- 1. Bouckovalas, G. and Dakoulas, P., *'Liquefaction performance of shallow foundations in presence of a soil crust"*, Invited Theme Lecture, 4th International Conference on Earthquake Geotechnical Engineering, Thessaloniki, June 2007, Greece, 245-276.
  - 2. Dakoulas, P. (2013), "Seismic behavior of concrete face rockfill dams", Twentieth Anniversary Volume, Department of Civil Engineering, University of Thessaly, Volos, Greece.
  - 3. Karamanos SA, Gresnicht AM, Dijkstra G, Vazouras, P. Dakoulas P et al. (2020) *Geohazards and Pipelines*, State-of-the-art design using experimental, numerical and analytical methodologies, Springer (in press).

## Journal Papers:

- 1. Dakoulas, P. and Gazetas, G. (1985), "A Class of Inhomogeneous Shear Beam Models for Seismic Analysis of Earth Dams and Embankments", Journal of Soil Dynamics and Earthquake Engineering, Vol. 4, pp. 166-182.
- 2. Dakoulas, P. and Gazetas, G. (1986), "Seismic Shear Vibration of Embankment Dams in Semi-Cylindrical Valleys", Journal of Earthquake Engineering and Structural Dynamics, Vol. 14, No. 1, pp. 19-40.
- 3. Dakoulas, P. and Gazetas, G. (1986), "Seismic Shear Strains and Seismic Coefficients in Earth Dams and Embankments", Journal of Soil Dynamics and Earthquake Engineering, Vol. 5, No. 2, pp. 75-83.

- 4. Dakoulas, P. and Gazetas, G. (1987), "Vibration Characteristics of Dams in Narrow Canyons", Journal of Geotechnical Engineering, ASCE, Vol. 113, No 8, pp. 899-904.
- Dakoulas, P. (1990), "Nonlinear Response of Dams Founded on Alluvial Deposits in Narrow Canyons", Journal of Soil Dynamics and Earthquake Engineering, Vol. 9, No. 4, pp. 301-312.
- 6. Gazetas, G., Dakoulas, P. and Papageorgiou, A. (1990), "Local-Soil and Source-Mechanism Effects in the 1986 Kalamata (Greece) Earthquake", Journal of Earthquake Engineering and Structural Dynamics, Vol. 19, pp. 431-456.
- 7. Gazetas, G. and Dakoulas, P. (1992), "Seismic Analysis and Design of Rockfill Dams: State of the Art", Journal of Soil Dynamics and Earthquake Engineering, Vol. 11, No. 1, pp. 27-61.
- 8. Dakoulas, P. and Hashmi, H. (1992), 'Wave Passage Effects on the Response of Earth Dams", Journal of Soils and Foundations, Vol. 32, No. 2, pp. 97-110.
- 9. Dakoulas, P. and Sun, Y. (1992), *'Fine Ottawa Sand: Experimental Behavior And Theoretical Predictions"*, Journal of Geotechnical Engineering, ASCE, Vol. 118, No. 12, pp. 1096-1923.
- Dakoulas, P. (1993), "Response of Earth Dams in Semi-Cylindrical Valleys Subjected to Oblique SH Waves", Journal of Engineering Mechanics, ASCE, Vol. 119, No. 1, pp. 74-90.
- 11. Yu, S. and Dakoulas, P. (1993), "General Stress-Dependent Elastic Moduli for Cross-Anisotropic Soils", Journal of Geotechnical Engineering, ASCE, Vol. 119, No. 10, 1568-1586.
- 12. Dakoulas, P. (1993), "Earth Dam Canyon Interaction Effects For Obliquely Incident SH Waves", Journal of Geotechnical Engineering, ASCE, Vol. 119, No. 11, 1696-1716.
- 13. Dakoulas, P., and C. Hsu (1993), "Lateral Response of Dams in Semi-Elliptical Rigid Canyons", Journal of Soil Dynamics and Earthquake Engineering, Vol. 12, 8, pp. 497-507.
- 14. Dakoulas, P. and Yu, S. (1995), "Stress-Dependency of Elastic Moduli for Cross-Anisotropic Soils", Geotechnique, Vol. 45, 2, pp. 325-332.
- 15. Dakoulas, P., and Hsu (1995), "Response of Earth Dams in Semi-Elliptical Canyons to Oblique SH Waves", Journal of Engineering Mechanics, ASCE, Vol. 120, 3, pp. 379-391.
- 16. Abouseeda, H. and Dakoulas, P. (1996), "Response of Earth Dams Subjected to P and SV Waves Using a Coupled Finite Element - Boundary Element Formulation",

Journal of Earthq. Engineering and Struct. Dynamics, Vol. 25, 11, pp 1177-1194.

- 17. Dakoulas, P. and Abouseeda, H. (1997), "Response of Earth Dams to Rayleigh Waves Using a Coupled Finite Element Boundary Element Method", Journal of Engineering Mechanics, ASCE, Vol. 123, No. 12, 1311-1320.
- 18. Abouseeda, H. and Dakoulas, P. (1998), "Nonlinear Earth Dam Foundation Interaction Using a BE-FE Method", Journal of Earthquake Engineering and Structural Dynamics, Vol. 27(12), 917-936.
- 19. Dakoulas, P. and Gazetas, G. (2005), "Seismic Effective Stress Analysis of Caisson Quay Walls: Application to Kobe", Journal of Soils and Foundations, 45(4), 133-147.
- 20. Dakoulas, P. and Gazetas, G. (2008), "Insight into Dynamic Earth and Water Pressures against Caisson Quay Walls", Geotechnique, ICE, 58(2), 95-111.
- 21. Dakoulas, P., Thanopoulos, Y., and Anastassopoulos, K. (2008), "Nonlinear 3D simulation of CFR dam construction and reservoir filling", International Journal of Hydropower and Dams, Issue 2, 95-101.
- 22. Vazouras, P., Karamanos, S. and Dakoulas, P., (2010), "Finite element analysis of buried steel pipelines under strike-slip fault displacements", Journal of Soil Dynamics and Earthquake Engineering, 30, 1361-1376.
- 23. Dakoulas, P. (2011), "Nonlinear seismic response of tall concrete faced rockfill dams in narrow canyons" Journal of Soil Dynamics and Earthquake Engineering, 34, 11-24.
- 24. Dakoulas, P. (2011), "Longitudinal vibrations of tall concrete faced rockfill dams in narrow canyons", Journal of Soil Dynamics and Earthquake Engineering, 41, 44-58.
- 25. Vazouras, P., Karamanos, S. A., and Dakoulas, P., (2012) "Mechanical Behavior of Buried Steel Pipes Crossing Active Strike-Slip Faults", Journal of Soil Dynamics and Earthquake Engineering, 41, 164-180.
- 26. Vazouras, P., Dakoulas, P., and Karamanos, S. A. (2015) "Soil-Structure Interaction Effects of Steel Pipelines Crossing Active Seismic Faults", Journal of Soil Dynamics and Earthquake Engineering, 72, 45-65.
- Sarvanis, G., Karamanos, S.A., Vazouras, P., Mecozzi E., Lucci A. and Dakoulas P., (2017) "Permanent Ground-Induced Actions in Buried Pipelines: Numerical Modeling and Experimental Verification", Journal of Earthquake Engineering and Structural Dynamics 47 (4),966-987.

- 28. Dakoulas, P, Vazouras, P, Kallioglou, P, Gazetas, G (2018), "Effective stress seismic analysis of gravity multi-block quay wall", Journal of Soil Dynamics and Earthquake Engineering, 118, 378-393.
- 29. Alamanis, A, Dakoulas P (2019), Simulation of random fields of soil properties by the local average subdivision method and engineering applications, Energy systems, Springer, https://doi.org/10.1007/s12667-019-00362-y.
- 30. Alamanis, N., Dakoulas P., (2019), Simulation of random fields of soil properties by the local average subdivision method and engineering applications, International Journal of Energy Systems, Springer, <u>https://doi.org/10.1007/-s12667-019-00362-y</u>.
- 31. Vazouras, P, Tsatsis, A, Dakoulas, P (2020), "Thermal upheaval buckling of buried pipelines: experimental behavior and numerical modelling", Journal of Pipeline Systems Engineering and Practice, ASCE, 2021, 12(1): 04020057, DOI: 10.1061/(ASCE)PS.1949-1204.0000507.
- 32. Dakoulas, P., Stavrotheodorou, E. (2020), "Analysis of concrete faced rockfill dams using Lade's model and gradient plasticity" (under revision).
- 33. Stavrotheodorou, E. and Dakoulas P. (2020), "Effect of height and rockfill stiffness on the performance of concrete face rockfill dams" (under revision).

## **Conference papers:**

- Dobry, R., Mohamad, R., Dakoulas, P., and Gazetas, G. (1984), "Liquefaction Evaluation of Earth Dams - A New Approach", Proceedings of the 8th World Conference on Earthquake Engineering, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, Vol. 3, pp. 333-348.
- 2. Mohamad, R., Dakoulas, P., Gazetas, G. and Dobry R. (1985), *'Liquefaction Flow Failure Evaluation of Earth Dams''*, Proceedings of the XI International Conference Soil Mechanics and Foundation Engineering, San Francisco, pp. 1865-1868.
- 3. Dakoulas, P. and Gazetas, G. (1985), "Nonlinear Seismic Response of Embankment Dams", Proceedings of the 2nd International Conference on Soil Dynamics and Earthquake Engineering, June/July, Springer-Verlag, Vol. 5, pp. 29-44.
- 4. Gazetas, G., Dakoulas, P. and Dennehy, K. (1990), "*Empirical Seismic Method for Waterfront Anchored Sheetpile Walls*", Proceedings of the Conference on Design and Performance of Earth Retaining Structures, ASCE, Ithaca N.Y., June, pp. 232-250. (Refereed Publication).
- 5. Gazetas, G. and Dakoulas, P. (1991), "State of the Art: Aspects of Seismic Analysis and Design of Rockfill Dams", (Keynote Address) Second

International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, March, Vol. 2, pp. 1851-1888.

- 6. Dakoulas, P. and Sun, Y. (1991), "Behavior of Fine Sand Under Cyclic Rotation of Principal Stresses Using the Hollow Cylinder Apparatus", Proceedings of the Second International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, March 11-15, Vol. 1, pp. 535-542.
- 7. Dakoulas, P. and Hashmi, H. (1991), "Response of Earth Dams in Canyons Subjected to Asynchronous Base Excitation", Second International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, March 11-15, Vol. 2, pp. 1105-1112.
- 8. Gazetas, G. and Dakoulas, P. (1991), "Seismic Design Chart for Anchored Bulkheads", Proceedings of the Second International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, March 11-15, Vol. 1, pp. 667-673.
- 9. Dakoulas, P. (1991), "Stability of Slopes and Earth Dams Under Earthquakes: Concluding Remarks", Proceedings of the Second International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, March 11-15, Vol. 3, pp. 2157.
- 10. Gazetas, G. and Dakoulas, P. (1991), "Seismic Design Chart for Anchored Bulkheads", Proceedings of the 3rd Japan-U.S. Workshop on Earthquake Resistant Design of Lifeline Facilities and Countermeasures for Liquefaction, Seattle, Washington, pp. 332-352.
- 11. Sun, Y. and Dakoulas, P. (1991), "Effects of Cyclic Rotation of Principal Stresses on the Response of Fine Sand", Third East Asia-Pacific Conference on Structural Engineering and Construction, New Technologies and Developments, Shanghai, China, April 23-26.
- 12. Sun, Y. and Dakoulas, P. (1991), 'Pore Water Pressure Response of Fine Sand Under Cyclic Rotation of Principal Stresses", Science, Engineering and Technology Conference, CPPT Symposium, Houston, Texas, April.
- 13. Abouseeda, H. and Dakoulas, P. (1995), "Response of Earth Dams Subjected to Obliquely Incident P and SV Waves", Third International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, April 2-7, 1995, Vol. 1, pp. 503-510.
- 14. Seco e Pinto, Dakoulas, P., L. Harder, H. Watanabe, and A. Chugh, (1995) "Stability of Slopes and Earth Dams under Earthquakes", Third International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, April 2-7, 1995, Vol. 3, pp. 323-332.

- 15. Yegian, M., Gazetas, G., Dakoulas, P., Makris, N., and Ghahraman, V. (1995) "The Northridge Earthquake of 1994: Ground Motions and Damage", Third International Conference on Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Missouri, April 2-7, 1995, Vol. 3, pp. 151-157.
- 16. Abouseeda and P. Dakoulas (1996), "Nonlinear dynamic earth dam foundation interaction", Proceedings of the Eleventh World Conf. on Earthq. Engineering, Acapulco, Mexico, 1996.
- 17. Dakoulas, P., and Eltaher, A,(1998), "Nonlinear Dynamic Earth Dam Foundation Interaction Using An Effective Stress Coupled Be-Fe Method", Proceedings of the Geotechnical Earthquake Engineering and Soil Dynamics, Seattle, Wa, Geo-Institute, American Society of Civil Engineers, New York, 866-877 (Refereed Publication).
- Gazetas, G. and Dakoulas, P. (1998), "Seismic Re-evaluation of the Tagus Bridge (Lisbon): Response of Main Caisson", Proceedings of the XI European Conference on Earthquake Engineering, Sept. 1998, Paris, France.
- 19. Dakoulas, P. (2001), "Nonlinear Dynamic Earth Dam Foundation Interaction Using An Effective Stress Analysis", 4th Conference of Geotechnical Engineering, Athens, May, 2001.
- Dakoulas, P. (2003), "Seismic Analysis of Gravity Quay Walls", Proceedings of Intern. Workshop on Prediction and Simulation in Geomechanics, 14-15 October 2003, Athens, Greece.
- 21. Dakoulas, P. and Gazetas, G. (2004), "Effective Stress Analysis of Gravity Quay Walls", 11<sup>th</sup> International Conference on Soil Dynamics & Earthquake Engineering (SDEE/ICEGE), San Francisco, Jan. 2004.
- 22. Gazetas, G., Anastasopoulos, J. and Dakoulas, P (2005), Failure of Harbor Quaywalls in the Lefkada 2003 Earthquake, ICSMGE, Osaka, Japan.
- 23. Kalyvas, G and Dakoulas, P (2005), Nonlinear dynamic soil-structure interaction, 5th Greek Conference in Geotechnical Engineering, Xanthi, Vol. 2 , 215 222.
- 24. Dakoulas, P, Vazouras, P., and Kalyvas, G. (2005), Nonlinear dynamic soilstructure interaction in soil containing a liquefiable layer, 5th Greek Conference in Geotechnical Engineering, Xanthi, Vol. 2, 369 - 376.
- 25. Dakoulas, P. and Yu, S (2005), Elasto-plastic constitutive model for anisotropic clay, 5th Greek Conference in Geotechnical Engineering, Xanthi, Vol. 1, 167-174.

- 26. Gazetas G, Dakoulas, P. and Anastasop;oulos, J. (2005), Failure of the quay walls during the Lefkada 14-8-2003 Earthquake, 5th Greek Conference in Geotechnical Engineering, Xanthi, Vol. 2, 159 166.
- 27. Dakoulas, P. and Gazetas G (2005), "Dynamic Earth and Water Pressures at the Foundation and Backfill of Caisson Quay Walls", Proceedings of the 1<sup>st</sup> Greece-Japan Workshop on the Seismic Design, Observation and Retrofit of Foundations, Athens, October 2005, 165-183 (invited paper).
- 28. Dakoulas, P., Kalyvas, G and Vazouras P., (2007), Effect Of A Liquefiable Soil Layer On Soil-Structure Interaction And Building Damage,4th International Conference on Earthquake Geotechnical Engineering, Thessaloniki, June 2007, Greece.
- 29. Dakoulas, P (2007), "Effect of excess pore water pressure buildup on building damage", 2<sup>nd</sup> Japan-Greece Workshop on Seismic Design, Observation and Retrofit of Foundations, Tokyo, April 2007, 453-466.
- 30. Dakoulas, P., Vazouras, P, and Karamanos, S (2008), «Stress state and limit strength of underground steel pipelines in active faults», 3<sup>rd</sup> Greek Conference on Earthquake Engineering and Technical Seismology, Athens, November 2008.
- 31. Dakoulas, P. and Evangelou, V. (2008), "Seismic Performance of a CFR Dam Using an Advanced Nonlinear 3D Numerical Analysis", 14<sup>th</sup> World Conference on Earthquake Engineering, Beijing, China, October 2008.
- 32. Dakoulas, P. (2008), "Nonlinear 3D simulation of the phased construction, reservoir impoundment and seismic loading of a CFR Dam", 3<sup>rd</sup> Greek Conference on Earthquake Engineering and Technical Seismology, Athens, November 2008.
- Dakoulas, P., Thanopoulos, Y. and Anastassopoulos, K. (2008), "Nonlinear 3D simulation of the phased construction and reservoir impoundment of a Messochora Dam", 1<sup>st</sup> Greek Conference on Large Dams, TEE, Larissa, 2008, 315-327.
- 34. Dakoulas, P. and Evangelou, V. (2008), «Nonlinear 3D simulation of the seismic behavior of a CFR Dam», 1<sup>st</sup> Greek Conference on Large Dams, TEE, 328-340.
- 35. Dakoulas, P. (2009), "Nonlinear 3D simulation of the phased construction, reservoir impoundment and seismic loading of a CFR Dam", Conference on Water Resources Management, Volos, 2009.
- 36. Vazouras, P, Dakoulas, P., and Karamanos, S (2009), "Finite element analysis of buried pipelines under seismic-fault displacement", COMPUDYN 2009,

Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Rhodes, Greece, June 2009.

- 37. Dakoulas, P. (2009), "Lateral and longitudinal vibrations of concrete face rockfill dams", Proceedings of the **3**<sup>rd</sup> Greece–Japan Workshop: Seismic Design, Observation, and Retrofit of Foundations, 22-23 September 2009, Santorini, Greece, 470-485.
- 38. Dakoulas, P (2010), "Effect of Rockfill Stiffness on the Behavior of Concrete Face Rockfill Dams", 6° Greek Conference on Geotechnical and Geoenvironmental Engineering, TEE, Volos, Greece, Oct. 2010.
- 39. Dakoulas, P (2010), "Effect of Longitudinal Vibrations on the Behavior of Concrete Face Rockfill Dams", 6° Greek Conference on Geotechnical and Geo-environmental Engineering, TEE, Volos, Greece, Oct. 2010.
- 40. Vazouras, P, Dakoulas, P., and Karamanos, S (2010), "Behavior of Buried Steel Pipelines Passing Through Active Tectonic Faults", 6° Greek Conference on Geotechnical and Geo-environmental Engineering, TEE, Volos, Greece, Oct. 2010.
- Luna, R., Perlea, M., Dakoulas, P., Kung, G.T.S., Zheng, W., El Shamy, U., Cetin, O., Barani, S. (2010), General Report: (a) Liaquefaction and seismically induced settlement, ground failures, and seismic studies on recent earthquakes (b) Stability and displacement performance of slopes. Landfills, and earth dams under earthquakes, 5<sup>th</sup> Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, 2010.
- 42. Panetsos P., Ntotsios E., Papadioti D.C., Papadimitriou C., Dakoulas P. (2010), "Health Monitoring of Metsovo Bridge Using Ambient Vibrations", 5<sup>th</sup> European Workshop on Structural Health Monitoring, Sorento, Naples, Italy, June 2010
- 43. Vazouras, P., Karamanos, S. & Dakoulas, P. (2011), "Mechanical Behavior of Buried Steel Pipelines Crossing Strike-Slipseismic Faults", 30th International Conference on Offshore Mechanics and Arctic Engineering, June 19-24, 2011, Rotterdam, The Netherlands
- 44. Vazouras, P., Dakoulas P. & Karamanos, S. (2011), "A Strain-Hardening Soil Constitutive Model for Pipe-Soil Interaction Problems Mechanics", Computational Methods in Structural Dynamics & Earthquake Engineering, May 25-28, 2011, Corfu, Greece
- 45. Vazouras, P., Karamanos, S. & Dakoulas, P. (2011), "Seismic Performance of Buried Steel Pipelines Crossing Strike-Slipseismic Faults", 4<sup>nd</sup> Japan-Greece Workshop on Seismic Design, Observation and Retrofit of Foundations, Kyoto, May 2011.

- 46. Dakoulas, P. (2011), "Nonlinear seismic response of concrete face rockfill dams in narrow canyons", 11th Benchmark Workshop on Numerical Analysis of Dams. International Committee on Large Dams, Valencia, Spain, Sept. 2011.
- 47. Dakoulas, P. (2011), "Effect of longitudinal vibrations on the behavior of concrete face rockfill dams", 11th Benchmark Workshop on Numerical Analysis of Dams. International Committee on Large Dams, Valencia, Spain, Sept. 2011.
- 48. Vazouras, P., Karamanos, S. & Dakoulas, P. (2011), "Seismic Performance of Buried Steel Pipelines Subjected to Seismic Fault Movement", XV European Conf. on Soil Mechanics & Geotechnical Engineering, ERTC-12 Workshop on Evaluation of EC8, September 2011, Athens, Greece.
- 49. Vazouras, P., Karamanos, S. & Dakoulas, P. (2011), "Numerical Simulation of Buried Steel Pipelines under Strike-Slip Fault Displacements", International Conference on Pipeline Engineering and Construction, ASCE, Seattle, WA, July 2011.
- 50. Dakoulas, P., and Thanopoulos, Y. (2011), "Nonlinear 3D simulation of CFR dam construction and reservoir filling", International Journal of Hydropower and Dams, Hydro 2011 Conference, Prague, Czech Republic, 17-19 Oct.
- 51. Vazouras, P., Karamanos, S. A., and Dakoulas, P. (2012), "Numerical Simulation of Buried Steel Pipelines Subjected to Seismic-Fault-Induced Deformations", ISOPE, International Conference of Offshore and Polar Engineering, Rhodos, Greece, June 2012.
- 52. Vazouras, P., Karamanos, S. A., and Dakoulas, P. (2012), "Performance of Buried Steel Pipelines Subjected to Seismic-Fault-Induced Deformations", 2<sup>nd</sup> International Conference Performance-Based Design in Earthquake Geotechnical Engineering, May 28-30, 2012, Taormina, Italy.
- 53. Stavrotheodorou, E. and Dakoulas, P. (2012), "Behavior of very tall concrete faced rockfill dams during impoundment, International Journal of Hydropower and Dams: Hydro 2012 Conference, 29-31 Oct., Bilbao, Spain.
- 54. Dakoulas, P., Thanopoulos, Y., Anastassopoulos, C. and Demou, C. (2013), "Seismic Performance and Safety Evaluation of Tavropos Arch Dam", 9<sup>th</sup> ICOLD European Club Symposium, 10-12 April, Venice, Italy.
- 55. Dakoulas, P. (2013), "Seismic Analysis of an Arch Dam Considering Concrete Heat Generation Damage Effects", 12th Benchmark Workshop on Numerical Analysis of Dams. International Committee on Large Dams, Graz, Austria, Oct. 2013.

- 56. Dakoulas, P., Thanopoulos, Y., Anastassopoulos, C. and Demou, C. (2013), Tavropos Arch Dam: Nonlinear seismic canyon-dam-water interaction, 2° Greek Conference on Dams, 7-8 Nov. 2013, Athens.
- 57. Stavrotheodorou, E. and Dakoulas, P. (2013), Improvement of seismic design of tall concrete faced rockfill dams, 2° Greek Conference on Dams, 7-8 Nov. 2013, Athens.
- 58. Demofonti, G., J. Ferino, S. A. Karamanos, P. Vazouras, P. Dakoulas (2013) "An integrated experimental – numerical approach to predict strain demand for buried steel pipelines in geo-hazardous areas" Rio Pipeline Conference & Exposition 2013, Brazil.
- 59. Stavrotheodorou, E. and Dakoulas, P. (2014), Effect of constitutive model on the analysis of concrete faced rockfill, 7° Greek Conference in Geomechanics, Nov. 2014, Athens.
- 60. Vazouras, P., Dakoulas, P. and Karamanos, S. A.(2014), Behavior of underground steel pipelines during seismic fault movement, 7° Greek Conference in Geomechanics, Nov. 2014, Athens.
- 61. Vazouras, P., Dakoulas P. and Karamanos S.A. (2014), Structural performance of burried steel pipelines crossing strike-slip faults, Proceedings of the 10th International Pipeline Conference IPC2014, September 29 – October 03, 2014, Calgary, Alberta, Canada
- 62. Vazouras, P., Sarvanis, G., Dakoulas P. and Karamanos S.A. (2014), Finite element models for severe ground –induced deformations, Geohazards and Pipelines, Safety of buried steel pipelines, Delft, 2014.
- 63. Vazouras, P., Sarvanis, G., Karamanos, S., Dakoulas, P. and Ferino, J. (2015) Soil – pipe interaction models for simulating the mechanical response of buried steel pipelines crossing active faults, 5<sup>th</sup> International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, 25 - 27 May 2015 Crete, Greece.
- 64. Vazouras, P., Karamanos, S., Dakoulas, P. (2015) Performance of buried pipeline bends, 5<sup>th</sup> International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, 25 27 May 2015 Crete, Greece.
- Dakoulas, P., Stavrotheodorou, E. and Giannakopoulos, A.E. (2015), Numerical analysis of concrete faced rockfill dams using gradient plasticity, 13th Benchmark Workshop on Numerical Analysis of Dams. International Committee on Large Dams, Lausanne, Switzerland, Sept. 2015.
- 66. Sarvanis, G., J. Ferino J., Karamanos S.A., Vazouras P., Dakoulas P. and Mecozzi E. (2016) Soil-Pipe Interaction Models for Simulating the Mechanical

Response of Buried Steel Pipelines Crossing Active Faults, The Twenty-sixth (2016) International Ocean and Polar Engineering Conference, Rhodes (Rodos), June 26-July 2, 2016.

- 67. Sarvanis G., Ferino J., Karamanos S.A., Vazouras P, Dakoulas, P., Mecozzi E. and Demfonti G. (2016) Soil-Pipe Interaction Models for Simulating the Mechanical Response of Buried Steel Pipelines Crossing Active Faults, 8<sup>th</sup> Symposium on large TPCs for low energy rare event detection, Paris 5th-7th of December, 2016.
- 68. Dakoulas, P. and Vazouras G., (2016), Seismic Performance Assessment of a Quay Wall, 1st International Conference on Natural Hazards & Infrastructure, 28-30 June, 2016, Chania, Greece
- 69. Sarvanis, G., Karamanos, S.A., Vazouras, P., Dakoulas P., Mecozzi E. and Lucci A. (2017, "Soil - pipe interaction models dor the simulation of burried pipeline behaviour against geohazards", Proceedings of the 36th International Conference on Ocean, Offshore and Arctic Engineering, OMAE2017, June 25-30, 2017, Trondheim, Norway
- 70. Kollatou A.M. and Dakoulas P. (2017), Simplified Seismic Analysis of an Arch-Gravity Dam: The Janneh Dam Project, 14th Benchmark Workshop on Numerical Analysis of Dams, International Committee on Large Dams, Stockholm, Sweden, Sept. 2017.
- 71. Σταυροθεοδώρου Ε. και Ντακούλας, Ρ. (2017), Αριθμητική ανάλυση φραγμάτων ΛΑΠΣ με χρήση του προσομοιώματος Lade και της βαθμίδας πλαστικότητας, 3ο Πανελλήνιο Συνέδριο Φραγμάτων και Ταμιευτήρων, 12-14 Οκτωβρίου 2017, Ζάππειο, Αθήνα.
- 72. Dakoulas, P, Kallioglou, P, Vazouras, P (2018) Effect of foundation and backfill relative density on the seismic performance of a quay wall, 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, 18-21 June, 2018.
- 73. Tsatsis, A, Vazouras, P, Dakoulas, P. (2018), Burried steel pipelines subjected to normal faulting, 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, 18-21 June, 2018.
- 74. Alamanis, N, Dakoulas, P (2018), Effect of spatial soil variability and slope inclination on permanent seismic slope displacement. 6<sup>th</sup> International Conference on Civil, Structural and Mechanical Engineering 28-29 April, Zurich, Switzerland.
- 75. Alamanis, N, Dakoulas, P (2018), Simulation of random soil properties with the Local Average Subdivision method (L.A.S) for seismic analysis of geotechnical systems, 5th International Conference on Energy, Sustainability and Climate Change, Mykonos, June 4-6, Greece.

- 76. A. Tsatsis, P. Vazouras, P. Dakoulas (2019), Experimental and numerical modelling of global buckling of underground pipelines due to high pressure and temperature, 2<sup>nd</sup> International Conference on Natural Hazards and Infrastructure, 23-26 June, Chania, Greece.
- 77. Alamanis, N, Dakoulas, P (2019), Effect of spatial variability of soil properties on the stability and permanent seismic displacements of highway slopes. Proceedings of XVII European Conference on Soil Mechanics and Geotechnical Engineering, Reykjavik, Iceland.
- 78. Siskos, I, Dakoulas, P (2019), Seismic Analysis of Hardfill Dams, 3rd International Symposium on Dams and Earthquakes, EWG, ICOLD, May 6-8, Lisbon, Portugal.
- 79. Siskos, I, Dakoulas, P (2019), Evaluation of seismic behavior of Hardfill Dams, 11<sup>th</sup> ICOLD European Club Symposium, 2-4 October, Chania, Crete, Greece.
- 80. Dakoulas P. and Gazetas G. (2019), Seismic behavior of quay walls, 8th Greek Conference on Geotechnical Engineering, November 2019, Athens.
- 81. Siskos I. and Dakoulas P. (2019), Seismic analysis of roller compacted hardfill dams, 8th Greek Conference on Geotechnical Engineering, November 2019, Athens.
- 82. Alamanis N. and Dakoulas P. (2019), Effect of the spatial variability of soil properties on the seismic behavior of slopes", 8th Greek Conference on Geotechnical Engineering, November 2019, Athens.
- 83. Giannakopoulou M., Kallioglou M., Koutsouradi, A., Dakoulas P., Threedimensional analysis of offshore wind turbine on cohesive soil, 8th Greek Conference on Geotechnical Engineering, November 2019, Athens.

### **Class Notes:**

- 1. Dakoulas, P (2004), *Soil Dynamics*, University of Thessaly, (in Greek), 650 pages.
- 2. Dakoulas, P (2005), *Advanced Soil Mechanics* (*Elasto-plastic Constitutive Models for Soils*), Notes for the Graduate Course *Advanced Soil Mechanics*, University of Thessaly, (in Greek), 400 pages.

## Other publications:

- 1. Dakoulas, P. (1982), "Effect of Fabric on the Deformational Mechanism of Granular Soil", Report and MSc. Thesis, Rensselaer Polytechnic Institute, Troy, New York, 140 pp.
- 2. Dakoulas, P. (1985), "Contributions to Seismic Analysis of Earth Dams", Report to the National Science Foundation, Rensselaer Polytechnic Institute, Troy, New York. 212 pp.
- 3. Dakoulas, P., Dobry, R., Vasquez, A., Ng, P., and Gazetas, G. (1987), "Seismic Response and Liquefaction Triggering of the Lagunillas Dyke Section", Report to INTEVEP of Venezuela, Rensselaer Polytechnic Inst., Troy, New York, 215 pp.
- 4. Succarieh, P., Dakoulas, P., Dobry, R. and Vasquez, A. (1987), "Steady-State Behavior of Leighton Buzzard Sand", Report to INTEVEP of Venezuela, Rensselaer Polytechnic Institute, Troy, New York, 25 pp.
- 5. Dakoulas, P. (1989), "Prediction of the Seismic Response of Ririe Dam Using Simplified Nonlinear Shear Beam Models", Rice Report to U.S. Army Engineer, Waterways Experiment Station, Rice University, Houston, Texas, 93 pp.
- 6. Sun, Y. and Dakoulas, P. (1991), 'Experimental Investigation for Constitutive Modeling of Cohesionless Soil under Monotonic and Cyclic Loading", Rice Report to National Science Foundation, Rice University, Houston, Texas, 198 pp.
- 7. Dakoulas, P. and Yu, S. (1991), "*Experimental Investigation of Marine Clay and Modeling of Offshore Foundations (Phase I)*", Rice Report to the Texas Advanced Technology Program, Rice University, Houston, Texas, 184 pp.
- 8. O'Dell, R., Dakoulas, P., and Pharr, G. (1991), "Modeling the Surface and Interior Structure of Comet Nuclei Using a Multidisciplinery Approach", Rice Report to NASA, Johnson Space Center, Rice University, Houston, Texas, 14 pp.
- 9. Yu, S. and Dakoulas, P. (1992), "*Experimental Investigation of Marine Clay and Modeling of Offshore Foundations (Phase II)*", Rice Report to the Texas Advanced Technology Program, Rice University, Houston, Texas, 171 pp.
- 10. Dakoulas, P., and Hsu, C.H. (1993), "Response of Earth Dams in Semi-Elliptical Flexible Canyons to Oblique SH Waves", Report, Rice University, Houston, Texas, 150 pp.
- 11. Abouseeda, H. and Dakoulas, P. (1996), "Nonlinear Seismic Response of Earth Dams Using a Coupled Boundary Element Finite Element Formulation", Rice Report, Houston, Texas, 275 pp.

- 12. Dakoulas, P. and Eltaher, A. (1998), "Hybrid FE-BE Formulation for Coupled Dynamic Poro-Elastoplastic Analysis of Soil Structure Systems", Rice Report, Houston, Texas, 262 pp.
- 13. Dakoulas, P., Bouckovalas, G., Papadimitriou A., Andianopoulos K., (2003). Aseismic design of geotechnical structures subjected to liquefaction", Research Report for OASP, University of Thessaly, Volos, Greece.
- 14. Dakoulas, P. (2003). "Verification of a constitutive model for non-cohesive soils, Research Report, University of Thessaly, Volos, Greece.
- 15. Dakoulas P. (2004), "Database of case histories of flexible retaining walls", Research Report for GGET, University of Thessaly, Volos, Greece.
- 16. Dakoulas, P., Thanopoulos Y. and Belesis A. (2004) "Ground faulting and building cracking in villages of Thessaly due to substantial lowering of the water table", University of Thessaly and Technical Chamber of Greece, Volos, Greece.
- 17. Dakoulas, P. (2006) "Analysis of case histories of flexible retaining walls for liquefiable soils and effect of the 3D geometry", Research Report for GGET, University of Thessaly, Volos, Greece.
- 18. Dakoulas, P. (2006) "Dynamic analysis and seismic design of flexible retaining walls for liquefiable (X) soils", Research Report for GGET, University of Thessaly, Volos, Greece.
- 19. Dakoulas, P. (2006) "Guidelines for seismic design of flexible retaining walls for liquefiable (X) soils", Research Report for GGET, University of Thessaly, Volos, Greece.
- 20. Dakoulas, P. (2007), «Messochora CFR Dam: Slab and Dam Performance During Reservoir Filling Based on 3D Nonlinear Analysis», Research Report for the Public Power Corporation, University of Thessaly, Volos, Greece.
- 21. Loukas, A., Dakoulas, P. and Mylopoulos, N. (2011) "Water supply systems evaluation for the Islands of Corfu and Paxi, Research Report, University of Thessaly, Volos, Greece.
- 22. Dakoulas, P. (2011), Geotechnical investigation and seismic response evaluation of the Saint Thomas district of Larissa, Research Report for the Municipality of Larissa.
- 23. Dakoulas, P. (2012), "Seismic analysis of Tavropos Arch Dam", Research Report for the Public Power Corporation, University of Thessaly, Volos, Greece, p. 161.