

CURRICULUM VITAE ^[2019]

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EDUCATION

1989-91 Ph. D. diploma in Geotechnical Engineering awarded by the Aristotle University of Thessaloniki

1986-87 D.E.A. in Soil Mechanics and Structures awarded by the Ecole Centrale des Arts et Manufactures de Paris

1980-86 Diploma of Civil Engineering awarded by the Aristotle University of Thessaloniki, (top 3%)

LANGUAGES: Greek, French, English

DOMAIN OF INTEREST & SPECIALISATION

- Analysis and design of infrastructures involving Geotechnical Engineering and soil-structure interaction projects (tunnels, foundations, retaining structures, rock-fill dams, embankments, slope stability, reinforced embankments etc.)
- Checker, Reviewer and Consultant in projects mentioned above.
- Numerical modelling and simulation including 3D non-linear multi-stage analysis associated with complex constitutive laws
- Reviewer in more than 15 journals (Geotechnique, IJNAMG, ASCE, Computers and Geotechnics, Soils and Foundations, etc)
- Author of four books relative to Geotechnical Engineering and Numerical Analysis (in Greek)
- Member of National and International Committees in relation with the above topics

WEBSITES

- ecomom.users.uth.gr

PUBLICATIONS

Books

Comodromos E. M. (2019) "*Foundations – Retaining Structures*" 2nd edition, ISBN 978-960-461-952-8, Ed. KLEIDARITHOS, Athens p. 943.

Comodromos E. M. (2011) "*Foundations – Retaining Structures*", ISBN 978-960-481-506-9, Ed. KLEIDARITHOS, Athens p. 576.

Comodromos E. M. (2009) "*Deep Foundations – Retaining Structures*", ISBN 978-960-461-306-9, Ed. KLEIDARITHOS, Athens p. 812.

Comodromos E. M. (2008) "Computational Methods in Geotechnics: *Soil-Structure Interaction* ", ISBN 978-960-461-201-7, Ed. KLEIDARITHOS, Athens p. 412.

Comodromos E. M. (2001) "Computational Methods in Geotechnics: *Linear – Non linear Analysis*", ISBN 960-431-696-6, Ed. ZITIS, Thessaloniki p. 210.

Comodromos E. M. (2009) "*The contribution of numerical analysis to the response prediction of pile foundations* ", In *Linear and non linear numerical analysis of foundations* (ed. J. Bull), ISBN: 978-0-415-42050, New York: E&FN SPON, pp. 37-84

Thesis

Comodromos, E. (1987) "*Modélisation du comportement du Béton Armé*", Διατριβή για την απόκτηση του D.E.A. "Mécanique des Sols-Structures" της Ecole Centrale de Paris.

Comodromos, E. (1991) "*Contribution to the analysis of excavations using the Finite Element Method* ", Ph.D. Dissertation, Section of Geotechnical Engineering, Civil Engineering Dept. A.U.Th.

Journals

- J.1 **Comodromos, E., Pitilakis, K., Hatzigogos, T.** (1992) "Procédure Numérique pour la Simulation des Excavations des Sols Elastoplastiques", *Revue Française de Géotechnique*, No 58, pp. 51-66.
- J.2 **Comodromos, E., Hatzigogos, T., Pitilakis, K.** (1993) "Multi-stage Finite Element Algorithm for Simulating Excavations in Elastoplastic Soils", *Computer & Structures*, Vol. 46, No 2, pp. 289-298.
- J.3 **Comodromos, E., Anagnostopoulos Ch. and Georgiadis M.** (2003) "Numerical Assessment of Axial Pile Group Response Based on Load Test", *Computers & Geotechnics*, Vol. 30, No. 6, pp. 505-515.
- J.4 **Comodromos, E.** (2003) "Response prediction of horizontally loaded pile groups", *Geotechnical Engineering Journal*, Vol. 34, No. 2, pp. 123-133.
- J.5 **Comodromos, E.M.** (2004) "*Numerical Analysis of Pile Group Fixed with Rigid Cap under Axial Loading*", *Tech. Chron. Sci. J. TCG, Vol I*, pp. 57-68.
- j.6 **Comodromos, E.** (2004) "Response Evaluation of Axially Loaded Fixed-Head Pile Groups using 3D Nonlinear Analysis", *Soils and Foundations*, Vol. 44, No. 2, pp 31-39.
- j.7 **Comodromos, E. and Pitilakis K.** (2005) "Response Evaluation of Horizontally Loaded Fixed-Head Pile Groups using 3-D Nonlinear Analysis", *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. 29, No. 6, pp 597-625.
- j.8 **Comodromos E. and Bareka S.** (2005) 'Response Prediction for Axially Loaded Fixed Head Pile Groups', *Journal of the Mechanical Behavior of Materials*, Vol. 16, No 1-2, pp 27-34.
- j.9 **Comodromos E. M. and Bareka S.** (2005) 'Evaluation of Negative Skin Friction Effects in Pile Foundations Using 3D Nonlinear Analysis', *Computers & Geotechnics*, Vol. 32, No. 3, pp 210-221.
- j.10 **Comodromos E.** (2007) Comment on 'Influence of the vertical load on the lateral response of piles in sand', *Computers & Geotechnics*, Vol. 34, No. 6, pp 539-539.
- j.11 **Comodromos E. M. and Bareka S.V.** (2009) "Response evaluation of axially loaded fixed-head pile groups in clayey soils", *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. 33, No. 17, pp. 1839-1865.
- j.12 **Comodromos E. M., Papadopoulou M.C. and Rentzeperis I.K.** (2009) 'The effect of cracking on the response of pile test under horizontal loading', *J Geotech Geoenviron Engrg, ASCE*, Vol. 135, No. 9, pp 1275-1284.
- j.13 **Comodromos E. M., Papadopoulou M.C. and Rentzeperis I.K.** (2009) 'Pile foundation analysis and design using experimental data and 3-D numerical analysis', *Computers & Geotechnics*, Vol. 36, No. 5, pp 819-836. **Outstanding Paper Award 2015.**

- j.14 Papadopoulou M.C., **Comodromos E. M.** (2010) 'On the response prediction of horizontally loaded fixed-head pile groups in sands', *Computers & Geotechnics*, Vol. 37, No. 7-8, pp 930-941
- j.15 **Comodromos E.M.** and Papadopoulou M.C. (2012) "Response evaluation of horizontally loaded pile groups in clayey soils", *Geotechnique*, Vol. 62, No. 4, pp 329-39.
- j.16 **Comodromos E.M.** and Papadopoulou M.C. (2013) "Explicit extension of the p-y method to pile groups in cohesive soils", *Computers & Geotechnics*, Vol. 47, pp 28-41.
- j.17 **Comodromos E.M.** (2013) "Discussion of "A simplified nonlinear approach for single pile settlement analysis", *Canadian Geotechnical Journal*, Vol. 50, No. 1 pp. 121
- j.18 **Comodromos E.M.**, Papadopoulou M.C. and Konstantinidis G.K. (2013) "Effects from diaphragm wall installation to surrounding soil and adjacent buildings", *Computers & Geotechnics*, Vol. 53, pp 106- 121.
- j.19 Papadopoulou M.C., **Comodromos E. M.** (2014) "Explicit extension of the p-y method to pile groups in sandy soils", *Acta Geotechnica*, Vol. 9 (3), pp. 485-497.
- j.20 **Comodromos E.M.**, Papadopoulou M.C. and Konstantinidis G.K. (2014) "Numerical assessment of subsidence and adjacent buildings movements induced by TBM-EPB tunneling", *J Geotech Geoenviron Engrg*, ASCE Vol. 140, No. 11, pp 1275-1284.
- j.21 **Comodromos E.M.**, Papadopoulou M.C. and Laloui L. (2016) "Contribution to the design methodologies of piled raft foundations under combined loadings", *Canadian Geotechnical Journal*. doi: 10.1139/cgj-2015-0251.
- j.22 Zormpa TE, **Comodromos EM** (2018) "Numerical Evaluation of Pile Response Under Combined Lateral and Axial Loading", *Geotechnical and Geological Engineering*, Vol. 36 pp 793-811 doi: DOI 10.1007/s10706-017-0354-1. [αναφ. Scopus: 1]
- J.23 **Comodromos EM**, Papadopoulou MC and Georgiadis K (2018) "Design procedure for the modelling of jet-grout column slabs supporting deep excavations", *Computers & Geotechnics*, Vol. 100, pp 110-120. doi.org/10.1016/j.compgeo.2018.04.008
- j.24 Sheil BB, McCabe BA, **Comodromos EM** and Lehane BM (2019) "Pile groups under axial loading: an overview of simplified nonlinear prediction models", *Geotechnique*, Vol. 69, No. 7, pp. 565-579 10.1680/jgeot.17.r.040. [αναφ. Scopus: 1]
- j.25 Georgiadis K, Skordas D, Kamas I and **Comodromos E** (2019) "Heating and cooling induced stresses and displacements in heat exchanger piles in sand", *Renewable Energy*, 10.1016/j.renene.2018.11.078 (in press)

Conferences

- c.1 **Comodromos, E., Hatzigogos, T., Pitilakis, K.** (1990) "Finite Element Excavation in Elastoplastic Soils", In *Proc. 2nd Eur. Spec. Conf. Numer. Meth. Geotech. Eng.*, Santander, Spain, pp. 573-584.
- c.2 **Comodromos, E.**(1991) "A Finite Element Algorithm for Simulating Excavations in Elastoplastic Soils", *5th Young Geotech. Eng. Confer.*, Grenoble, France, Εκπροσώπηση της Ελληνικής Εταιρείας Εδαφομηχανικής και Θεμελιώσεων.
- c.3 **Comodromos, E., Hatzigogos, T., Pitilakis, K.** (1992) "Finite Element Algorithm for Simulating Problems with Variable Domain and Boundaries", In *Proc. 1st National Congress on Computational Mechanics*, GRACH, Athens, Greece, pp. 274-281.
- c.4 **Comodromos, E., Hatzigogos, T., Pitilakis, K.** (1992)"Finite Element Algorithm for Analyzing Geotechnical Problems with Variable Domain and Boundaries", In *Proc. NUMOG IV, 4th Inter. Symp. Numer. Mod. Geomechanics*, Swansea, U. K., pp. 577-587.
- c.5 **Comodromos E., Didaskalou G.** (1992) "Procedure for determining the parameters of the Cone Cap model ", *2nd Hellenic Conference on Geotechnical & Geoenvironmental Engineering*, Thessaloniki, 59-66.

- c.6 **Comodromos E., Hatzigogos T., Pitilakis K.** (1992) "F.E. Algorithm for simulating excavations in elastoplastic soils", *2nd Hellenic Conference on Geotechnical & Geoenvironmental Engineering*, Thessaloniki, 515-522.
- c.7 **Comodromos, E.** (1993) "Numerical Method of Tunneling in Hard Soils-Soft Rocks", *Int. Symp. on Hard Soils-Soft Rocks*, Athens, pp. 1993-1400.
- c.8 **Kappos, A., Doudoumis, I., Pitilakis, K. and Comodromos, E.** (1994) "Proposals for the improvement of the New Aseismic Code – Part A 'Response and design of a structure under seismic action", 11th Hellenic Conference on Concrete, Corfu.
- c.9 **Comodromos, E.** (1994) "Finite element analyses of a tied-back retaining walls", *2nd Inter. Confer. Computational Structures Technology*, Vol. I, Athens, pp. 275-283.
- c.10 **Ignatakis C., Stylianidis K., Asmeniadis N., Naskos N., Comodromos E.** (1996) "Rehabilitation of a building complex of Macedonian-Thrakis Bank", Hellenic Conference on Concrete, Cyprus.
- c.11 **Comodromos E., Naskos N., Proutsali S.** (1997) "Foundation Reinforcement of Structures by Micropiles", *3^o Hellenic Conference on Geotechnical & Geoenvironmental Engineering*, Patras, pp. 335-342.
- c.12 **Κωμοδρόμος Α., Τσότσος Σ., Χατζηγώγος Θ.** (1997) "Σχεδιασμός μη Συνεχούς Πασσαλοδιαφράγματος για τη Σταθεροποίηση Κατολίσθησης", *3^o Πανελλήνιο Συνέδριο Γεωτεχνικής Μηχανικής*, Πάτρα, σελ. 245-352.
- c.13 **Κωμοδρόμος Α.** (1997) "Πολυσταδιακή Ανάλυση Πεπερασμένων Στοιχείων για την Διαστασιολόγηση Σύνθετου Έργου Αντιστήριξης ", *3^o Πανελλήνιο Συνέδριο Γεωτεχνικής Μηχανικής*, Πάτρα, σελ. 281-288.
- c.14 **Comodromos, E. and Naskos, N.** (1999) "Stabilization of a building in a landslide area with an anchored capped pile structure", *Cost C7 Workshop on Soil Structure-Interaction*, Θεσσαλονίκη, pp 129-143.
- c.15 **Comodromos E., Klimis N., Anastasiadis A., Anastasopoulos K.** (2001) " Multi-stage Non-Linear Analysis Simulating the Construction and the Impoundment of Papadias Dam", *4th Hellenic Conference on Geotechnical & Geoenvironmental Engineering*, Athens, Vol. II, pp. 505-512.
- c.16 **Comodromos E., Bousgolitis C.** (2001) " Application of Shaft for the Foundation of Bridges: Analysis - Design of Temporary Retaining Structures and Foundation Response", *4th Hellenic Conference on Geotechnical & Geoenvironmental Engineering*, Athens, Vol. I, pp. 307-314.
- c.17 **Comodromos E., Bousgolitis C.** (2001) " Analysis and Design of a Twin Tunnel with a Significant Interaction Between the two Branches", *4th Hellenic Conference on Geotechnical & Geoenvironmental Engineering*, Athens, Vol. I, pp. 529-536.
- c.18 **Klimis, N., Anastasiadis, A., Comodromos, E and Lekidis, V.** (2001) "Influence of construction geomaterials and seismic input motion on an earth dam response ", *2nd Hellenic Conference on Aseismic Mechanics and Seismology*, Thessaloniki, Vol. B, pp. 173-182.
- c.19 **Comodromos, E.** (2002) "Numerical Simulation of Shallow Tunnels with Inadequate Application of Primary Support Measures ", *2nd Conf. On Soil-Structure Interaction in Urban Civ. Engin.*, Zurich, pp. 241-248.
- c.20 **Klimis, N., Anastasiadis, A., Comodromos, E and Lekidis, V.** (2001) "Influence of construction geomaterials and seismic input motion on an earth dam response ", *2nd Hellenic Conference on Aseismic Mechanics and Seismology*, Thessaloniki, Vol. B, pp. 173-182.
- c.21 **Comodromos, E. and Bareka, S.** (2005) "Response Prediction of Pile Groups in Clays using 3D Nonlinear Analysis", *16th International Conference on Soil Mechanics and Geotechnical Engineering*, Osaka, Japan, pp. 2095-2098

- c.22 **Comodromos E.,** Bareka S. (2006) " Development of negative friction in pile groups: Effects on piles constituting the group", *5^o Hellenic Conference on Geotechnical & Geoenviromental Engineering Xanthi*, Vol I, pp. 223-230.
- c.23 **Comodromos E.,** Klimis N., Anastasiadis A., Anastasopoulos (2006) " Response prediction of a rock fill dam during construction and the impoundment of the reservoir", *5^o Hellenic Conference on Geotechnical & Geoenviromental Engineering Xanthi*, Vol III, pp. 335-342.
- c.24 **Comodromos E.,** Giannagoyiorgos A., Papadopoulou M. (2006) "Design of retaining structures for the stabilization of the landslide area upwards the railway station of Platamonas", *5^o Hellenic Conference on Geotechnical & Geoenviromental Engineering Xanthi*, Vol II, pp. 547-554.
- c.25 **Comodromos E.,** Anagnostou Σ., Papadopoulou M. (2006) " Analysis and design of retaining structures for the construction of the pumping station of the Combined Cycle Power Plant", *5^o Hellenic Conference on Geotechnical & Geoenviromental Engineering Xanthi*, Vol I, pp. 555-562.
- c.26 Bareka S., Lazoudi P., **Comodromos E** (2006) " Response evaluation of pile groups based on rock", *5^o Hellenic Conference on Geotechnical & Geoenviromental Engineering Xanthi*, Vol III, pp. 261-268.
- c.27 Klimis, N., Anastasiadis, A., Makra, K., Margaris, B., Papaioannou, C., **Comodromos, E.,** Siahou, S. (2006) " Dynamic Analysis and Seismic Response of a High Earth fill Dam", *5^o Hellenic Conference on Geotechnical & Geoenviromental Engineering Xanthi*, Vol. III, pp. 261-268.
- c.28 Sarigiannis, D., Tsotsos S., Hatzigogos T., **Comodromos E.** (2006) "Criteria for diagrams of maximum resistance of fully grouted anchors ", *5^o Hellenic Conference on Geotechnical & Geoenviromental Engineering Xanthi*, Vol III, pp. 85-92.
- c.29 Klimis, N., Argyriadi, D., Demosthenous, E., **Comodromos, E.,** Efremidis, C. and Kyriakidis K. (2007) "Reinforcement and prodection of a rock-cliff: Methodological approach, analysis and design", *4th Int. Conf. on Earthquake Geotechnical Engineering, Thessaloniki*, pap. No. 1739 (pp. 15).
- c.30 **Comodromos, E.** and Bareka, S. (2008) "Effects of pile-to-pile interaction on piled raft foundations", *BGA International Conference on Foundations ICOF 2008*, pp. 463-474.
- c.31 **Comodromos E.,** Anastasopoulos K., Klimis N., Papadopoulou M., Koukaliaroglou K. (2008) " Response prediction of a rock-fill dam during construction and the impoundment of the reservoir: Effects from the variation of rock stiffness ", *1st Hellenic Conference on Large Dams, Larissa*.
- c.32 **Comodromos, E.,** Papadopoulou M, Bareka S., I.(2009) "Piled raft foundations: Load distribution and interaction effects", *ISSMGE • TC 18 International Conference on Deep Foundations - CPRF and Energy Piles, Frankfurt*.
- c.33 **Comodromos, E.,** Papadopoulou M, Rentzeperis, I.(2009) "Experimental and numerical evaluation of the effect of pile cracking to the performance-based design concept", *International Conference on Performance-Based Design in Earthquake Geotechnical Engineering, Tokyo*, pp. 643-650.
- c.34 **Comodromos, E.,** Papadopoulou M, Rentzeperis, I.(2009) "Degradation of pile foundations' response due to cracking: Advanced and simplified numerical approach", *Earthquake Geotechnical Engineering Satellite Conference, 17th ISSMGE, Alexandria*.
- c.35 **Comodromos E.,** Rentzeperis I. and Papadopoulou M. (2009) "Experimental and numerical analysis of the post-cracking response of a reinforced concrete pile", *16th Conference on Concrete, Paphos, Cyprus*.

- c.36 **Comodromos E.**, Papadopoulou M. and Rentzeperis I. (2009) *The effect of cracking to the response of a concrete pile under horizontal loading*", 16th Conference on Concrete, Paphos, Cyprus.
- c.37 **Comodromos E.**, Papadopoulou M. (2010) " *Effect to the design of tunnels in weak formation from the use of a constitutive law with softening*", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.38 Papadopoulou M., **Comodromos E.** (2010) " *Interaction of retaining structure with adjacent multi-store building: Multi-stage numerical analysis for the design of pre-supporting measures*", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.39 **Comodromos E.**, Rentzeperis I. and Papadopoulou M. (2010) " Pile response after cracking: horizontal pile load test using fiber optics – 3D nonlinear analysis", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.40 Papadopoulou M., **Comodromos E.** (2010) " Evaluation of pile response under vertical loading: Pile load test using fiber optics – 3D nonlinear analysis", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.41 Bareka S., Papadopoulou M., **Comodromos E.** (2010) " Piled raft foundations: load distribution and interaction effects to the piles and the raft", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.42 **Comodromos E.**, Klimis N., Papadopoulou M. (2010) " Application of numerical methods and limit equilibrium approach to the de-sign of reinforced embankments: Assumptions – Results – Conclusions", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.43 Klimis N., Argiriadi Δ., Efremidis C., **Comodromos E.**, Margaris V. (2010) "Investigation of stability conditions of a step calcareous slope under static and dynamic conditions", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.44 Giannagoyiorgos A., **Comodromos E.**, Gely E. (2010) "*Methodology and analysis of rocky slopes across the Vertical axis 75 of Egnatia Odos* ", 6th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Volos.
- c.45 **Comodromos, E.M**, Papadopoulou M, Pitilakis K. (2010) "Analysis and design of piled raft foundations", Int. Geot Confer. Geotechnical Challenges in Megacities, ISSMGE, Moscow.
- c.46 **Comodromos, E.M**, Papadopoulou M., Klimis, N. (2010) "Design of reinforced embankments: limit equilibrium and numerical methods", International Conference on Geosynthetics, Brazil.
- c.47 Klimis, N., Efremidis C., Argyriadi D., **Comodromos, E.**, (2010) "Analysis and design of reinforced embankments: methodology, implementation and impact of critical parameters", International Conference on Geosynthetics, Brazil.
- c.48 **Comodromos, E.M**, Papadopoulou M, Rentzeperis, I. (2010) "Response of pile groups in clays under lateral loading based on 3-D numerical experiments", 7th European Conference on Numerical Methods in Geotechnical Engineering, Norway, pp. 661-666.
- c.49 **Comodromos, E.M**, Papadopoulou M. (2011) "Interaction of retaining structure with adjacent multi-store building: Multi-stage numerical analysis for the design of retaining and pre-supporting measures ", TC28 International Symposium - Roma2011.
- c.50 **Comodromos, E.M**, Papadopoulou M. (2011) "Numerically established post-cracking pile response under horizontal loading using 3-D nonlinear analysis ", 2nd International FLAC/DEM Symposium, Melbourne, Australia.

- c.51 **Comodromos E.M.** & Papadopoulou M. (2011) "Interaction of retaining structure with adjacent multi-store building: Multi-stage numerical analysis for the design of retaining and pre-supporting measures ", TC28 International Symposium - Roma2011.
- c.52 **Comodromos E.M.**, Papadopoulou M., Klimis N. (2012) "Variation of p-multipliers of pile groups in clayey soils", GeoCongress 2012, State of the Art and Practice in Geotechnical Engineering, Geo-Institute ,ASCE, San Francisco, California, USA.
- c.53 **Comodromos E.M.** and Papadopoulou M. (2012) "Design of pile groups under lateral loading using a new y-p-multipliers method", The 9th International Conference on Testing and Design Methods for Deep Foundations, IS- Kanazwa, Japan
- c.54 **Comodromos E.M.**, Papadopoulou M. and Konstantinidis G. (2013) "Effects from a TBM-EPB to adjacent buildings: 3D simulation of a twin tunnel", 3rd International Conference on Computational Methods in Tunnelling and Subsurface Engineering, Bochum, Germany
- c.55 **Comodromos E.M.**, Papadopoulou M. and Konstantinidis G. (2013) "Effects on adjacent buildings from diaphragm wall installation", 18th International Conference on Soil Mechanics and Geotechnical Engineering, Paris.
- c.56 Makra K., Klimis N., Anastasiadis A., **Comodromos e.** (2013) "Design of Dams under seismic action: Experience from the in Greece", 1st Hellenic Conference on Large Dams, Athens.
- c.57 **Comodromos E.M.**, Papadopoulou M., Konstantinidis G. (2014)"A 3D simulation for TBM-EPB tunnelling interacting with adjacent buildings", 2nd Eastern European Tunnelling Conference, Athens.
- c.58 **Comodromos E.M.**, Papadopoulou M.C. and Konstantinidis G.K. (2014) "Numerical assessment of subsidence and adjacent buildings movements induced by TBM-EPB tunneling", 7th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.
- c.59 **Comodromos E.M.**, Papaoikonomou A.N., Papadopoulou M.C. and Konstantinidis G.K. (2014)"Effects from soil reinforced zone spatial variation to the response of a retaining structure", 7th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.
- c.60 **Comodromos E.M.**, Papadopoulou M.C. (2014) "Response prediction of horizontally loaded pile groups", 7th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.
- c.61 Papadopoulou M.C., **Comodromos E.M.** (2014) "Explicit extension of the p – y method to pile groups in sandy soils", 7th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.
- c.62 **Comodromos E.M.**, Papadopoulou M.C. and Konstantinidis G.K. (2014) "Effects from diaphragm wall installation to surrounding soil and adjacent buildings", 7th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.
- c.63 **Comodromos E.M.**, Papadopoulou M.C. (2014) "Effects from concrete cracking to the design and the response diaphragm walls and adjacent buildings", 7th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.
- c.64 Zorba T., Bareka S.V., **Comodromos E.M.** (2014). "Simplified method for three-dimensional analysis simulating pile foundations", 7th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.
- c.65 **Comodromos E.M.**, Papadopoulou M.K. (2015). "The effect of cracking on the response and design of diaphragm walls and adjacent buildings", XVI ECSMGE, Edinburgh.

- c.66 Petala E., Klimis N., **Comodromos E.** (2018) "The response of unreinforced highway embankment due to underlying reverse fault rapture", 16th ECEE, Thessaloniki.
- c.67 Kamas I., **Comodromos E.**, Skordas D., Georgiadis K. (2018). "Numerical investigation of the effects of thermal loading on the mechanical behaviour of energy piles in sand", 11th NUMGE, Porto.
- c.68 Skordas D., Kamas I., Georgiadis K., **Comodromos E.** (2018) "Mechanical behavior of geothermal piles with fixed head", 11th Conference on Renewable energy sources - I.H.T., Thessaloniki.
- c.69 **Comodromos E.M.** (2019) "*Piled raft foundations under combined loading: efficient methodology for a straightforward analysis and design*", 4th C.F.P.B Santa Cruz, Keynote Lecture.
- c.70 **Comodromos E.M.**, Papadopoulou M.K. (2019) "*Methodology for the Analysis and Design of Combined Piled Raft Foundations*", 8th Hellenic Conference on Geotechnical & Geoenvironmental Engineering, Athens.

Journal Reviewer

Geotechnique

Journal of Geotechnical and Geoenvironmental Engineering, ASCE

Canadian Geotechnical Journal

International Journal for Numerical and Analytical Methods in Geomechanics

Computers & Geotechnics

Bulletin of Earthquake Engineering

Tunnelling and Underground Space Technology

Journal of Rock Mechanics and Geotechnical Engineering

Soils and Foundations

Renewable Energy

Geotechnical and Geological Engineering

Acta Geotechnica

Ocean Engineering

Geomechanics for Energy and the Environment

Journal of Geomechanics and Geoengineering

Simulation Modelling Practice and Theory

KSCE Journal of Civil Engineering

Journal of Computing in Civil Engineering

Bulletin of Engineering Geology and the Environment

Journal of Zhejiang University-SCIENCE A

Supervisor of Doctoral Theses

- d.1 '*Contributing to the investigation of the response of axially loaded pile groups using numerical methods*', S. Bareka, Civil Engineering Department U.Th, (2003-2007).
- d.2 '*Numerical and experimental investigation of laterally loaded piles*', Papadopoulou M., Civil Engineering Department U.Th, (2007-2011).
- d.3 '*Contribution to the evaluation of piled raft response under combined loading*», Zormpa T., Civil Engineering Department U.Th, (2014-2017).

Member of Advisory or Examination Committee of Doctoral Theses

- dc.1 **'Behavior of interface elements demonstrating creep'** Karambatakis D., Civil Engineering Department A.U.Th., 2000.
- dc.2 **'Contribution to the development of beck-analysis approach in geotechnical engineering'**, Giannopoulos G., Civil Engineering Department A.U.Th., 2001.
- dc.3 **'Elastoplastic yield criteria with multiple surfaces: Numerical solution in principal stress condition and application to geotechnical engineering'**, Karaoulanis F., Civil Engineering Department A.U.Th., 2010.
- dc.4 **'Computational approach to reinforce the stability of trenches using soil nailing'** Sarigiannis D., Civil Engineering Department A.U.Th., 2012.
- dc.5 **'Mechanical behavior of buried steel pipelines crossing active strike slip faults v'** Vazouras P., Civil Engineering Department U.Th., 2013.
- dc.6 **'Contribution to the static and dynamic lateral response of piles'** Giannakos S., School of Civil Engineering N.T.U.A, 2013.
- dc.7 **'Study of the influence of soil improvement on dynamic soil-foundation-superstructure interaction'** Trevlopoulos K., Civil Engineering Department A.U.Th., 2014.
- dc.8 **'Landslide stabilisation with piles'** Papavasiliou E., Civil Engineering Department A.U.Th., 2015.
- dc.9 **'Underground mining models for full face and point cutting machines'**, Xiroudakis G, School of Mineral Resources Engineering, TUC 2014.
- dc.10 Συμμετοχή στην τριμελή και επταμελή επιτροπή της διδακτορικής διατριβής **'Effect of spatial variability of soil properties in permanent seismic displacements of road slopes'**, Alamanis N, Civil Engineering Department U.Th., 2016.
- dc.11 **'Passive soil stabilization against liquefaction: experimental investigation of stabilizer permeation potential – numerical investigation of seismic response of stabilized soils and foundations'**, Agapoulaki G., Civil Engineering Department U.Th., 2017.
- dc.12 **'Methodology of automated seismic hazard studies with interoperable geographic information systems - Application in a Greek city'**, Papadopoulou M., Civil Engineering Department U.Th., 2017.
- dc.13 **'Numerical analysis of highway embankment's response due to rupture of underlying active fault'**, Petala E., Civil Engineering Department D.U.Th., 2019.

Supervisor of Master Theses

- m.1 **'Development of a numerical code for p-y curves'**, Tsaros Ch., 2007.
- m.2 **"Investigation of horizontal load distribution and bending moment development in pile groups in sandy soils "**, Katsaouni C., 2013.
- m.3 **"Comparative analysis of retaining structures response with different constitutive laws"**, Pappalos A., 2011.
- m.4 **"Effect assessment of spatial variability parameters on geotechnical structures"**, Dalakoura E., 2016.
- m.5 **"Analysis of installation and operation of a geothermal system in an underground tunnel"**, Kalyvas E., 2018.

Supervisor of Diploma Theses

- g.1 **'Investigation of the interaction of tunneling with primary support measures and the surrounding rock mass'**, A. Symeou, Βόλος 2002.
- g.2 **'Response evaluation of piles under horizontal loading '**, E. Garagouni – S. Bareka, 2002.
- g.3 **'Desing of reinforced embankments: Assumptions - Methodologies - Analysis'**, Michailidou Parthena, 2003.

- g.4 ***'Investigation of tunnel response using three-dimensional numerical analysis***, Tsigotis Demetrios, 2004.
- g.5 ***'Effect of concrete cracking on pile response under horizontal loading '***,Tzika Maria, 2007.
- g.6 ***'Evaluation of pile response founded in rock formations using three-dimensional nonlinear analysis***, Lazoudi Rena, 2006.
- g.7 ***'Investigation of the contribution of the pile-head to the response of a group of piles under vertical loading "***, Dova Evi, 2008.
- g.8 ***'Three-dimensional fixed head pile group analysis under axial loading: Load distribution on characteristic piles "***, Tsoli X. – Mina X., 2008.
- g.9 ***"Investigation of horizontal load distribution and bending moment development of piles in clayey soils "***, Frousiou E., 2010.
- g.10 ***"Programming automation fro solving and designing raft foundations within the framework of Eurocode 7"***, Felekis K., 2013.
- g.11 ***"Effect assessment on the design of retaining struictures from numerical simulation assumptions "***, Anastasiou X. – Chioktouridou D., 2014.
- g.12 ***"Evaluation of effects and sufficiency of piled raft foundations due to reduced resistance of individual piles "***, Perdikis H., 2014.
- g.13 ***"Types and methodologies of test loads for determining pile response and ultimate resistance "***, Houseion O., 2015.
- g.14 ***"Geothermal piels: Operating mode - Numerical analysis "***, Papathanasiou K. 2016.
- g.15 ***"Geothermal piels: Bibliographic overview with empasis in thermomechanical behavior"***, Kantas I., 2016.
- g.16 ***"Jet grout slab as retaining element of deep excavations: Modes for simulating the variability of geometry, strength, and deformability parameters"***, Garagouni A., 2017.
- g.17 ***"Numerical analysis of geothermal piles in sandy soils by Finite Element Method"***, Kammas I., 2017.
- g.18 ***"Analysis of a circular underground tank with simplified and complex simulation methods"***, Zarra D., 2018.
- g.19 ***"Determination of kinematic and intensive state of foundations by instumentations methods "***, Makri I., 2018.
- g.20 ***"Pile response under lateral loading: Comparative study of 'p-y curves"***, Alexiou E., 2018.

PROFESSIONAL EXPERIENCE

The professional experience includes the elaboration of over three hundred of studies covering the fields of geotechnical investigations and design of foundations, tunnels, bridges, landslides, retaining structures and soil-structure-interaction projects. Set-up of a soil and rock laboratory with automated data registration and evaluation of results. Deep knowledge in computing on multi-processors computers with remote management. Great efficiency and experience in numerical methods, mainly in simulating soil-structure interaction problems with FEM and FED.

Technical Reports

- r.1 Comodromos E.M. (1997). ***'Investigation of geotechnical conditions of historical monuments based in coastal zones-marshy areas with application to the fortress of Lefkada to address geotechnical and soil problems'***, Ministry of Culture, pp. 150.
- r.2 Comodromos E.M. (1998). ***'Survey of the geotechnical conditions of historical monuments based on rock formations applied to the Castle of Skyros'***, Ministry of Culture, pp. 200

- r.3 Comodromos E.M. (2001). *'Survey of geotechnical stability conditions of the western slope of the Castle of Skyros - Update after the earthquake of 26 July 2001'*, Ministry of Culture, pp. 100.
- r.4 Comodromos E.M. (2000). *'Investigation and Determination of Earthquake Dam Design Criteria under Seismic Action'*, PPC, pp. 200.
- r.5 Comodromos E.M. (2003). *'Investigation of the intensive and kinematic state of the Hilarion Dam during the construction and the impoundment'*, PPC, pp. 180.
- r.6 Comodromos E.M. (2012). *'Assessment of the impact of the construction of bulkheads on adjacent buildings'* pp. 94, ATTIKO METRO S.A.
- r.7 Comodromos E.M (2012). *'Influence factors and impacts of tunnel construction using the TBM-EPB method'*, pp. 145, ATTIKO METRO S.A.
- r.8 Comodromos E.M (2012). *'Determination of permeability by performing a numerical flow analysis on the northern shaft of the Analipsis's Station'*, pp. 500, ATTIKO METRO S.A.
- r.9 Comodromos E.M (2014). *'Determination of soil deformability parameters considering spacial variatoin of geometry and jet grout parameters'*, pp. 54, ATTIKO METRO S.A.
- r.10 Comodromos E.M (2014). *'Impact assessment on diaphragm wall by spatial variability of parameters'*, pp. 70, ATTIKO METRO S.A.
- r.11 Comodromos E.M (2014). *'Prediction of the cinematic field and stress distribution of a diaphragm wall by considering the spatial variability of the parameters and the post-peak behavior of the grout slab'*, pp. 145, ATTIKO METRO S.A.
- r.12 Comodromos E.M. (2014). *'Evaluation of measurements - Reliability assessment and ability to use inclinometer's measurements to assess the behavior of diaphragm elements and the soil surrounding the Analipsis's station'*, pp. 114, ATTIKO METRO S.A.
- r.13 Comodromos E.M (2014). *'Evaluation - Presentation of settlements variation with the progress of excavation in characteristic locations of buildings at the Analipsis's station'*, pp. 89, ATTIKO METRO S.A.
- r.14 Comodromos E.M (2012). *'Investigating the stability site conditions in the Mesochora area, the impact of filling the Mesochora dam basin and proposal of measures to ensure stability during impoundment and operation.'*, pp. 119, MINISTRY of ENERGY and ENVIRONMENT.

Professional Experience as associate to GEOGNOSIS S.A. (1991 – 1996)

Naskos N., Comodromos E., Klimis N., Dimaras K. (1992). *Geotechnical investigation for the foundation of the New Railway on the bridge of Axios river.*

Naskos N., Comodromos E., Klimis N. (1992). Pile Test on a pile with D=1.20 m at foundation of the New Railway at river Aliakmonas.

Comodromos E. (1992). Geotechnical investigation and foundation design of bridge Magazi of Egnatia Odos.

Comodromos E. (1992). Geotechnical investigation, foundation and retaining structures design of pump station N1 at the river of Evros.

Comodromos E. (1992). Geotechnical investigation, foundation and retaining structures design of pump station N2 at the river of Evros

Naskos N., Comodromos E.(1992). Laboratory testing and determination of parameters for the mix design of ciment-betonite for the diaphragm walls at the location of Saint Barbara at river Aliakmonas

Comodromos E. (1992). Geotechnical investigation and retaining structure design for the river crossing of fuel pipeline at river Strymonas.

Comodromos E. (1992). Geotechnical investigation and foundation design for the extension of Thessaloniki Airport.

Comodromos E., Naskos N., (1992). Stability analysis and design of retaining structures for the national road Karditsda-Arta.

Comodromos E. (1993). Geotechnical investigation and foundation design of the culture center of Evosmos Municipality

Comodromos E. (1993). Geotechnical investigation and evaluation at the locations of New Kerdylia sewage system

Comodromos E. (1993). Geotechnical investigation and foundation design for the oil tanks of KAOIL at Almyros-Volos

Comodromos E. (1993). Geotechnical investigation and design of foundation and retaining structures for the Public Library of Veria.

Comodromos E. (1993). Geotechnical investigation and design of foundation and retaining structures for the Byzantine Museum of Veria.

Klimis N., Naskos N., Comodromos E and Dimaras K. (1993-1994). In situ rock tests or the design of a rock fill dam at Almopeos river.

Comodromos E. (1994). 'Geotechnical investigation and foundation design of bridge at Gardikaki

Comodromos E. (1994). 'Geotechnical investigation and foundation design of the building of OSE (Railway Co.) at the Thessaloniki port.

Comodromos E. (1994). Flootation Prevention under Static Conditions of the Natural Gas Pipeline at Strymonas area.

Comodromos E. (1994). Geotechnical investigation and foundation design at the location of PVC production, EKO installations, Thessaloniki.

Comodromos E. (1994). 'Geotechnical investigation and foundation design for the Thessaloniki Music Hall

Comodromos E. (1994). Geotechnical investigation and foundation design for the bridge of river Litheos

Comodromos E. (1994). Geotechnical investigation and foundation design for the chimney of Hellenic Sugar Company at Orestiada

Comodromos E. (1994). Geotechnical investigation and foundation design for the branch of Agrotiki Bank at the city of Edessa

Comodromos E. (1995). Geotechnical investigation foundation design at the site of the bridge of river Kravsidonas, Volos.

Comodromos E. (1995). Geotechnical investigation and design of retaining structures for the parking station of the city of Katerini

Comodromos E. (1995). Geotechnical investigation at the location of the New Silo 50000 Ton at Platy'.

Comodromos E. (1995). Geotechnical investigation for the Natural Gas pipeline at Oinofyta

Comodromos E. (1995). Geotechnical investigation and foundation design for the tanks HDM of BIAMYA S.A.

Comodromos E. (1995). Geotechnical investigation at the chainage 16+468 of the national road Litochoro-Dion.

Comodromos E. (1995). Design of retaining structures at Dedropotamos

Comodromos E. (1996). Design of retaining structures at a landslide on the national road Goumenissa-Karpi.

Professional Experience from Projects entrusted from Public Organizations (1991 – 1999)

Comodromos E. (1991). Geotechnical investigation and foundation design for the elementary school of Kalohori.

Comodromos E. (1991). Geotechnical investigation and foundation design for the 3rd and 5th elementary schools of Thessaloniki.

Comodromos E. (1992). Geotechnical investigation and foundation design for the building of IKA at Kavala.

Comodromos E. (1994). Geotechnical investigation and foundation design of the bridge across the road Prohoma-Koufalia.

Comodromos E. (1995). Geotechnical investigation and design of the culture building of Saint Paul Municipality.

Comodromos E. (1995). Geotechnical investigation and design for the building of the Ministry of Interior at Sindos, Thessaloniki.

Comodromos E. (1996). Geotechnical investigation for the Dam of Saint George at the village of Dafnonas, Xanthi.

Comodromos E. (1996). Geotechnical investigation and foundation design for the building of EMAK in Northern Greece.

Comodromos E. (1997). Geotechnical investigation and foundation design for the elementary school of Stavroupolis.

Comodromos E. (1997). Geotechnical investigation, foundation and retaining structure design for the parking station at the square of Gatsos Road'.

Comodromos E. (1997). Geotechnical investigation and foundation design for the building of IAK at the town of Messologi.

Comodromos E. (1997). Geotechnical investigation and design of retaining structures at the area of a landslide at the municipality of Ardamer.

Comodromos E. (1997). Foundation design for the building of IKA at the town of Kiato.

Comodromos E. (1998). Geotechnical investigation and design of the bridge on the road of Alatopetrap-Prosvoro.

Comodromos E. (1998). Geotechnical evaluation and retaining structure design at the location of a landslide across the road Milia-Krania of Egnatia Odos.

Comodromos E. (1998). Structural design of the complex of lacunas of Kalamaria Municipality.

Comodromos E. (1998). Geotechnical evaluation and stability analysis for the section Pylea-Kipoi of Egnatia Odos..

Comodromos E. (1998). Geotechnical evaluation and Final design of tunnels Σ2.1, Σ3 and Σ5, section Lefkopetra-Kouloura of Egnatia Odos.

Comodromos E. (1999). Geotechnical investigation and design for the retaining structures for the parking station on the road of Komnion and Mourouzidon, Kalamaria Municipality.

Comodromos E. (1999). Geotechnical investigation and foundation design for the building of IKA at the town of Kozani.

Professional Experience as shareholder and Senior Principal to GEOSTATIKI S.A. (1997 –)

Comodromos E. (1997). Structural projects and high embankments at the entrance of Thessaloniki.

Comodromos E. (1997). Geotechnical investigation and foundation study for the bridge T66 on the old national road of Thessaloniki-Veria.

Comodromos E. (1997). Geotechnical Investigation at Chevalier Tailing Areas - Stability and Seepage Analysis, Cassandra Mines Complex.

Comodromos E. (1997). Supplementary Geotechnical Investigation at Chevalier Dam Tailing Area, Cassandra Mines Complex.

Comodromos E. (1997). Supplementary Geotechnical Investigation at Chevalier and Karakoli Tailing Areas, Cassandra Mines Complex.

Comodromos E. (1997). Geotechnical final design of Platia Karras Dam, Cassandra Mines Complex.

Comodromos E. (1997). Foundation preliminary design for the bridges of the section Grevena-Kozani of Egnatia Odos.

Comodromos E. (1997). Pre-study of tunnel Taxiarchis of section Kozani-Grevena of Egnatia Odos.

Comodromos E. (1997). Pre-study of tunnel T8 of section Kozani-Grevena of Egnatia Odos.

Comodromos E. (1998). Design of the embankment of Karakoli TVX Hellas A.E.

Comodromos E. (1999). Geotechnical investigation and foundation design for the building of IKA at Kavala, location Panagouda.

Comodromos E., Bousgolitou X. Yiannagogiorgos A. (2000). Geotechnical evaluations for the bridges K6, K7, K8 and K9 of Thessaloniki Ring Road.

Comodromos E., Bousgolitis C., Tsopelas P. (2000). Geotechnical investigation and foundation design of bridge Mertziani of Egnatia Odos.

Comodromos E., Bousgolitis C., Tsoplelas P. (2000). Foundation design for bridges T1, T3, T6, T8, T9, T10, T11 of section 80.45 of Egnatia Odos.

Comodromos E., Bousgolitis C., Giannadaki A. (2001). Foundation design for bridges and embankments of the section Profitis-Airport of Egnatia Odos.

Comodromos E., Bousgolitis C., Giannadaki A. (2001). Pre-studies for the bridges of the section Profitis-Airport of Egnatia Odos.

Comodromos E., Bousgolitis C., (2002). Geotechnical investigation and design of the parking station of Neapolis at Gatsos square.

Giannagogiorgos A., Papadopoulou M. Comodromos E. (2003). Design against liquefaction on the road of General Timaya, Larnaca Municipality, Cyprus.

Giannakogiorgos A. and Comodromos E. (2004). Design of temporary retaining structure for the cooling water pump building', Combined Cycle Power Plant (CCPP) 390MW, VA TECH HYDRO GmbH.

Giannagogiorgos A., Papadopoulou M, Anagnostou S. and Comodromos E. (2004). 'Design of retaining structures at the location of a landslide at the rail station of Platamonas.

Papadopoulou M, Anagnostou S. and Comodromos E. (2004). Final design of the bridge of Amfipolis.

PROJECT: Combined Cycle Power Plant (CCPP) 390MW at Thessaloniki, STUDY: Design of retaining structures.

PROJECT: Lake at the location of Palaiopriono, Municipality of Macedonida STUDY: Final design of the dam

PROJECT: 6th Wharf of the Port of Thessaloniki, Egnatia Odos STUDY: Geotechnical evaluation across the bridge.

PROJECT: Vertical Axis 75 of Egnatia Odos, section 6+850 ÷ 12+850 STUDY: Design of Bridge Foundations and embankments.

PROJECT: 6th Wharf of the Port of Thessaloniki, Egnatia Odos STUDY: Pile Test, design construction and evaluation of results.

PROJECT: Tunnel T6 of section Panagia-Ioannina of Egnatia Odos, STUDY: Design of retaining structures for the stability of the area at the exit portal.

PROJECT: Tunnels Panagia, Velanidia, Karatza and Koiloma of the section Panagia-Grevena of Egnatia Odos STUDY: Investigation on the development of local collapses.

PROJECT: Main road passing through the town of Ioannina STUDY: Preliminary study for the possibility of underground construction at the center of the city.

PROJECT: Tunnel of Driskos, Egnatia Odos. STUDY: Design of the main shaft of the tunnel.

PROJECT: Tunnel of Prionia, Egnatia Odos STUDY: Redesign of the portals of the tunnel.

PROJECT: Tunnel Syrtos, Egnatia Odos STUDY: Redesign of the entrance portal of the tunnel.

PROJECT: Bridge G2, Section 4.1.3s of Egnatia Odos STUDY: Measure to reinforce the response of the foundation shafts of the bridge

PROJECT: Tunnel of Dorkada, section 60.1.2. of Egnatia Odos STUDY: Investigation of the factors that contribute to the development of a local failure of the tunnel.

PROJECT: Tunnel of Symvolos, section 12. Of Egnatia Odos STUDY: Assessment of the in-situ condition of chainage 35+780 and re-estimation of the primary support measures.

PROJECT: Tunnel Nymfera, Egnatia Odos STUDY: Assessment of the in-situ condition of chainage 35+780 and re-estimation of the primary support measures.

PROJECT: Tunnel Solomonta, Egnatia Odos STUDY: Assessment of the in-situ condition of chainage 35+780 and re-estimation of the primary support measures.

PROJECT: Tunnel Memaliaj, North – South Corridor / FIER – TEPELENI Section Albania STUDY: Pre-study of Memaliaj Tunnel at chainage 24+125.50 to 24+586.00