

Resume

1. Personal data

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2. Education

9 / 1984 - 2 / 1988: Doctor of Philosophy (Ph.D.) in Applied Geophysics, Department of Physics, University of Alberta, Edmonton, Canada.

9 / 1981 - 5 / 1984: M.Sc. in Applied Geophysics, Department of Mining, Metallurgy and Applied Geophysics, McGill University, Montreal, Canada.

9 / 1976 - 3 / 1981: B.Sc. (Honors) in Physics, University of Thessaloniki, Greece.

3. Professional and scientific experience

2013-2017: Technical University of Crete, Chania, Greece, Mineral Resources Engineering Faculty. Vice Dean.

2007-2010: Technical University of Crete, Chania, Greece. Department Head.

10 / 2003 -present: Technical University of Crete, Chania, Greece. Professor.

11/1997-10 / 2003: Technical University of Crete, Chania, Greece. Associate Professor.

2 / 1989-11 / 1997: Technical University of Crete, Chania, Greece. Assistant Professor.

4. Publications

180. Apostolopoulos, G., Vafidis, A., Economou, N., Michalakopoulos, T., Amolochitis, G., Kritikakis, G. and Menegaki, M., (2017), Geophysical measurements to detect ahead of Bucket Wheel Excavators the problematic hard formations in coal mines, Proceedings of the «23rd European Meeting of Environmental and Engineering Geophysics», 3–7 September, Malmoe, Sweden.

179. Demirci, I., Candansayar, M.E., Vafidis, A. and Soupios, P., (2017), Two dimensional joint inversion of direct current resistivity, radio-magnetotelluric and seismic refraction data: An application from Bafra Plain, Turkey, **Journal of Applied Geophysics**, Volume 139, April, 316-330.

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175. Kritikakis, G., Hamdan, H., Vafidis, and Harb, M., (2017), MASW-Dual Streamer (DS): Preliminary results from the investigation of the proposed acquisition technique applicability, Fourth International Conference on Engineering Geophysics 9-12 October 2017, Al Ain, United Arab Emirates.

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172. Demirci, I., Candansayar, M.E., Soupios, P., Vafidis, A., Arslan, H. and Gündoğdu, N.Y., (2017), Interpretation Of Geophysical Data For Saltwater Intrusion On Bafra Plain Guided By Hydrogeological And Hydrochemical Data, 9th Congress of the Balkan Geophysical Society, Antalya, Turkey.
171. Vafidis, A., Economou, N., Kritikakis, G., Galetakis, G., Vasiliou, A., Apostolopoulos, G. and Michalakopoulos, T., (2017), Imaging boulders using the GPR method, 10th International Conference on Bearing Capacity of Roads, Railways and Airfields (BCRRA2017), Athens, Greece, 28-30th June.
170. Kourgialas N., Dokou Z., Karatzas G.P., Panagopoulos G., Soupios, P., Vafidis, A., Manoutsoglou, E. and Schafmeister M., (2016), Saltwater intrusion in an irrigated agricultural area: combining density-dependent modeling and geophysical methods, **Environmental Earth Sciences**, 75(1), 1-13.
169. Vafidis, A., Economou, N., Galetakis, G., Vasiliou, A., Michalakopoulos, T. and Apostolopoulos, G., (2016), Assessing the potential of Ground Penetrating Radar (GPR) to detect hard geological formations and inclusions during the excavation by bucket-wheel excavators, Proceedings of the 13th International Symposium on Continuous Surface Mining, ISCSM 2016, Belgrade, Serbia, 11-18 September, pp. 631-642.
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145. Savvaidis A., Margaris B., Theodoulidis N., Lekidis V., Karakostas Ch., Loupasakis C., Rozos D., Soupios P., Mangriotis M-D., Dikmen U., Tsangaratos P., Kokinou E., Vafidis A., Rondoyanni Th., Kalogeras I., Koutrakis S., Sarris A., Papadopoulos N. (2014) Geo-Characterization at selected accelerometric stations in Crete (Greece) and comparison of earthquake data recordings with EC8 elastic spectra, **Central European Journal of Geosciences**, Versita-Springer, 6:1, pp 88-103.
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140. Vafidis, A. Soupios, P., Economou, N., Hamdan, H., Andronikidis, N., Kritikakis, G., Panagopoulos, G., Manoutsoglou, E., Steiakakis, E., Candansayar, E., and Schafmeister, M., (2014), Seawater intrusion imaging at Tybaki, Crete, Greece, using geophysical data and joint inversion of electrical and seismic data, **First Break**, 32, 8, 107 - 114.
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138. Vafidis A., Steiakakis M., Agioutantis Z., Andronikidis N., Kritikakis G., Economou N., Pandi K., Spanoudakis N., Savvaidis A., Margaris B., Theodoulidis N., Lekidis V., Karakostas Ch., Mangriotis M-D., Kalogeras I., Koutrakis S., Rozos D., Loupasakis C., Rondoyanni Th., Tsangaratos P., Dikmen U., Papadopoulos N., Sarris A., Soupios P., Kokkinou E., Papadopoulos I., Kouli M. and Vallianatos F., (2013), "GEO-CHARACTERIZATION" of selected areas in Crete, Greece, towards realistic assessment of seismic design actions. Proceedings of the 13th International Congress of the

Geological Society of Greece, Bulletin of the Geological Society of Greece, vol. XLVII, Pre-Congress Proceedings' CD - Paper Number 326.

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136. Savvaidis A., Margaritis B., Theodoulidis N., Lekidis V., Karakostas Ch., Mangriotis M-D., Kalogeras I., Koutrakis S., Vafidis A., Steiakakis M., Agioutantis Z., Rozos D., Loupasakis C, Rondoyianni Th., Tsagaratos P., Dikmen U., Papadopoulos N., Sarris A., Soupios P., Kokkinou E., Papadopoulos I., Kouli M. and Vallianatos F., (2013), GEO-CHARACTERIZATION ACCORDING TO RECENT ADVANCES OF EUROCODE (EC8), First International Conference on Remote Sensing and Geoinformation of Environment, 8-10 April 2013, Paphos, Cyprus. Received the BEST PAPER AWARD.

135. Candansayar, E., Demirci, İ., Vafidis, A. and Soupios, P.,(2013), Investigation of Salt Water Intrusion with Joint Inversion of Direct Current Resistivity and Seismic Refraction Data, accepted for oral presentation to 20th International Geophysical Congress and Exhibition of Turkey, 25-27 November, Antalya, Turkey.

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1. Abramovici, F., Vafidis, A. and Kanasewich, E.R., (1987), "Supercomputer algorithms for solving elastic wave propagation problems in two dimensions", Proceedings, 1st Canadian Supercomputing Symposium, Calgary, Alberta, May, pp. 127-138.

5. Research projects

1. Seismic Imaging and Tomography of Oil Sands. (1986-1996) funded by Alberta Oil Sands Technology and Research Authority, Canada . Scientific leader: Prof. E.R. Kanasewich. Research Associate.
2. Lithoprobe funded by the government of Canada. Seismic reflection study of the lithosphere in Western Canada. Scientific leader: Prof. E.R. Kanasewich. Research Associate.

3. Development of groundwater exploitation methods in Western Crete. Funded by the General Secretariat of Research and Development, Greece. Scientific Leader: Associate Professor D. Monopolis. Principal Investigator.
4. Geotechnical survey of Ano Meros village landslides. Funded by Rethymnon Prefecture. Scientific Leader: Associate Professor D. Monopolis. Principal Investigator.
5. Geological and geophysical survey at Almiros river. Funded by the Heraklion Municipality. Scientific Leader: Associate Professor D. Monopolis. Principal Investigator.
6. 3-D Asymptotic seismic imaging (1993-95). Funded by the European Union (JOULE). Scientific Leader: Assistant Professor J. Louis. Principal Investigator.
7. Automated scientific program to predict-reduce seismic risk of high seismicity cities in the frame of microzoning studies. Funded by EPET II. Scientific Leader: Professor J. Drakopoulos. Principal Investigator.
8. 3D Seismic Imaging of the complex structure of the Western Hellenides (1995-1998). Funded by the European Union (JOULE-Thermie). Scientific Leader: Assistant Professor A. Vafidis.
9. Imaging of the subsurface using the ground penetrating radar (1995-1997). Funded by the Crete Region Authority. Scientific Leader: Assistant Professor A. Vafidis.
10. Geophysical survey at the Monastiraki Subway Station (1995-1996). Funded by Olympic metro. Scientific Leader: Professor J. Drakopoulos. Principal Investigator.
11. Geophysical survey in the archaeological site of Itanos, Crete (1995-2001). Funded by the French School of Archaeology in Athens Scientific Leader: Assistant Professor A. Vafidis.
12. Passive and active seismics in Western and Central Crete, Greece (1996 – 2006). Funded by the German Science Foundation. Scientific Leader: Professor Hans-Peter Harjes. Principal Investigator.
13. Geophysical survey at Alexandria, Egypt (6/2000). Funded by the Foundation of Research and Technology, Greece. Principal Investigator.
14. Geophysical survey for hydrogeological purposes at Kalimnos island (2001). Funded by the Kalimnos Municipality. Scientific Leader: Professor G. Tsokas. Principal Investigator.
15. Geological and geophysical survey of Vasilies village (2001-2002). Funded by Heraklion Municipality Scientific Leader: Professor D. Monopolis. Principal Investigator.
16. Artificial lakes in West Crete: Geophysical survey at Kountoura. Funded by the Pelekanos Municipality (2003-2004). Scientific Leader: Associate Professor A. Vafidis.
17. Hybrid Geophysical technology for the Evaluation of Insidious contaminated Areas (2001-2005). Funded by the European Union. Scientific Leader: Associate Professor A. Vafidis.
18. Monitoring of soil and groundwater pollution from petroleum using modern geophysical methods (2004–2006). Funded by the General Secretariat of Research and Development, Greece. Scientific Leader: Professor A. Vafidis.
19. Geophysical survey at Chania athletic center (2004-2005). Funded by the Chania Athletic Center Co. Scientific Leader: Professor A. Vafidis.
20. Groundwater management and protection from saline water intrusion (2004 – 2005). Funded by the General Secretariat of Research and Development, Greece. Scientific Leader: Professor A. Vafidis.
21. Hybrid geophysical survey for imaging the saline water front at Stilos, Chania Prefecture, Greece (2005-2006). Funded by the Ministry of Education. Scientific Leader: Professor A. Vafidis.
22. Methodology for standardized geotechnical investigations combining geological, geophysical, drilling and experimental data, Funded by the Ministry of Education (2005-2006). Scientific Leader: Professor Z. Agioutantis. Principal Investigator.

23. Exploring the Geodynamics of Sub ducted Lithosphere using an Amphibian Deployment of Seismographs (EGELADOS). Passive seismic experiment in the Hellenic Subduction Zone that is conducted within the framework of the Collaborative Research Center 526 “Rheology of the Earth” at Ruhr-University Bochum (2005-2006). Scientific Leader: Professor Hans-Peter Harjes. Principal Investigator.
24. Geophysical survey for Fe-Ni mineral exploration at Skyros Island (2005-2006). Funded by the Institute Geological and mineral exploration surveys. Leader: Professor A. Vafidis.
25. Geotechnical and geophysical survey at Plakiotissa dam, Messara, Heraklion (2005-2006). Funded by the Asterousia Municipality. Scientific Leader: Professor Z. Agioutantis. Principal Investigator.
26. Geophysical survey on the E65 national road, Greece (7/3/2006-6/4/2006). Funded by ISTRIA Ltd. Scientific Leader: Professor A. Vafidis.
27. Geophysical survey at Talos shopping center, Heraklion (2007). Funded by Cretan Mills Co. Scientific Leader: Professor A. Vafidis.
28. Geophysical survey on Ionian national road, Greece (2/7/2007-31/8/2007). Funded by ISTRIA Ltd. Scientific Leader: Professor A. Vafidis.
29. Geoelectrical survey for imaging saline water intrusion front at Ofrinio, Kavala (2008). Funded by GeoTech Ltd. Scientific Leader: Professor A. Vafidis.
30. Geoelectrical tomography survey and groundwater modeling at Pirkal, Elefsis. Funded by the Hellenic Petroleum Co. Scientific Leader: Professor N. Kalogerakis. Principal Investigator.
31. Geophysical survey on the E55 national road Greece (19/5/2008-18/12/2008). Funded by ISTRIA Ltd. Scientific Leader: Professor A. Vafidis.
32. Geophysical survey at coastal areas on Crete and nearby small islands (1/5/2009-30/6/2010). LIFE+ Nature project “Actions for the conservation of coastal dunes with Juniperus spp. in Crete and the South Aegean (Greece)”, JUNICOAST, LIFE07NAT/GR/000296. Principal Investigator.
33. Geophysical survey at the Loutsia Remeri quarry (25/1/2010-24/4/2010). Funded by Titan Ltd. Scientific Leader: Professor A. Vafidis.
34. Geophysical survey at the Kelefina dam, Sparti, Greece (1/9/2010-30/12/2010). Funded by ISTRIA Ltd. Scientific Leader: Professor A. Vafidis.
35. Geophysical survey at Mallia, Crete, Greece (1/7/2011-30/10/2011). Funded by ISTRIA Ltd. Scientific Leader: Professor A. Vafidis.
36. Geotechnical evaluation of carbonates at the Electrical Company of Greece mines” (7/2012-3/2012). Funded by PPC Ltd. Scientific Leader: Professor Z. Agioutantis. Principal Investigator.
37. GeophysiCaL basEd hydrogeologicAL modeling to pRevent pollution from sea WATER intrusion at coastal areas- CLEARWATER, BLACK SEA ERA.NET - Pilot Joint Call - Networking on Science and Technology in the Black Sea Region. Thematic Focus 1.2 Water pollution prevention options for coastal zones and tourist areas. (1/2/2012-30/1/2015). Scientific Leader: Professor A. Vafidis.
38. Geotechnical characterization of selected areas in crete using geophysical and geotechnical methods”, Acronym: GEOCHARACTERIZATION (1/2/2012 – 30/9/2015). THALIS. Funded by the Ministry of Education and Religious Affairs, Hellenic Republic. Scientific Leader: Professor Antonis Vafidis.
39. Geophysical survey design at Thermaikos basin (2012-2013). Funded by the Ministry of Energy and Environment. Scientific Leader: Professor G. Tsokas. Principal Investigator.
40. Geophysical investigation using electrical tomography at the Loutsia-Remeri quarry (7/2012-10/2012). Funded by TITAN cements Ltd. Scientific Leader: Professor Antonis Vafidis.

41. ISTRIA. Development of an integrated rock fall monitoring and prediction system. Synergasia 2011-Greek National Organization of Research and Technology. (5/2012-5/2015). Scientific Leader: G. Exadaktylos.
42. Additional works for the Omalos polje dam, including its environmental impact (7/2012-10/2012). Funded by Municipality of Kandanos. Scientific Leader: Professor Antonis Vafidis.
43. TUD COST Action TU1208 Civil Engineering Applications of Ground Penetrating Radar (4/4/2013-3/4/2017). Scientific Leader: Dr. L. Pajewski.
44. Shale-gas formation evaluation in Northern Greece (2013-2015). Funded by the Ministry of Energy and Environment. Scientific Leader: Professor Antonis Vafidis.
45. Integrated study for bedrock stability control at Mavropigi open pit mine (2013-2015). Funded by PPC Ltd. Scientific Leader: Professor Z. Agioutantis. Principal Investigator. Principal Investigator.
46. Geophysical survey for the detection of karstic voids at the excavation of the Chania airport extension (2/2014-7/2014). Funded by AKTOR S.A. Scientific Leader: Vafidis Antonis,
47. Geophysical investigation using electrical tomography at the Loutsas-Remeri quarry (10/2014-12/2014). Funded by TITAN cements Ltd. Scientific Leader: Professor Antonis Vafidis.
48. Geotechnical investigations at Frangokastello, Sfakia (2014-2015). Funded by the Sfakia Municipality. Scientific Leader: Associate Professor N. Skoutelis. Principal Investigator.
49. Geophysical investigation using electrical tomography at the Katavothres quarry (6/2015-12/2015). Funded by TITAN cements Ltd. Scientific Leader: Professor Antonis Vafidis.
50. Preliminary geophysical investigation for water exploitation at Askyfou, Chania (2015). Funded by Crete Development Organization. Scientific Leader: Professor Antonis Vafidis.
51. BEWEXMIN-Bucket wheel excavators operating under difficult mining conditions including unmineable inclusions and geological structures with excessive mining resistance. RFCR-CT-2015-00003 (2015- 2018). EUROPEAN COMMISSION. role: co-PI Galetakis Principal Investigator.
52. Seismic investigation at Myrtos dam, Ierapetra Crete (2016). Funded by the Ministry of Agriculture. Scientific Leader: Professor Antonis Vafidis
53. Research services for geophysical mapping of the stratigraphy at Agia springs, Chania (2016-2017). Funded by Chania water supply company. Scientific Leader: Professor Antonis Vafidis.
54. Geophysical survey at the Artimes quarry (2017). Funded by TITAN cements Ltd. Scientific Leader: Professor Antonis Vafidis.

6. Honors & Awards

- The paper Savvaidis et al., 2013 received the best paper award in the First International Conference on Remote Sensing and Geoinformation of Environment.
- The paper Manataki et al., 2015 received the 2nd best paper award in the 8th International Workshop on Advanced Ground Penetrating Radar.

7. Postgraduate Thesis Mentored

- **PhD:** Eleni Kokinou, Nikos Spanoudakis, Nikos Economou, Giorgos Kritikakis, Hamdan Hamdan.
- **MSc:** Eleni Kokinou, Cleopatra Georgila, Evagelia Vrontaki, Maria Manakou, Haralambos Karathanasis, Ioannis Ganiatsos, Giorgos Sourlas, Nikos, Poulioudis Spanoudakis, Nikos Economou, Giorgos Kritikakis, Hamdan Hamdan., Giorgia Horeftaki, Antonis Antoniou, Ioannis Mihalakis, Meropi Manataki, Maria Gialitaki, Ageliki Vlasopoulou, Ekaterini

Stathopoulou, Emanouil Choustoulakis, Ageliki Ageli, Konstantina Gerodimou

- **Ongoing:** Nikos Andronikidis 2012-now, PhD, Meropi Manataki 2015-now, PhD, Konstandinos Georgilas 2015-now, MSc Haralambos Papadopoulos, 2016-now, MSc, Ioannis Bridakis 2016-now, MSc, Antonis Tsourvakas 2016-now, MSc Maria-Konstantina Kabaki 2016-now, MSc.

8. Research Visits

- 6 / 1993 - 8 / 1993: University of Alberta, Edmonton, Canada.
- 6 / 1992 - 8 / 1992: University of Alberta, Edmonton, Canada.
- 6 / 1991 - 8 / 1991: University of Alberta, Edmonton, Canada.
- 6 / 1990 - 8 / 1990: University of Alberta, Edmonton, Canada.

9. Professional Service:

I have served as

- **reviewer** in several International Journals
- **Editor** (2006 - 2013) of the “Journal of Balkan Geophysical Society”.
- **Member** of committees of the Greek Ministry of Environment and Energy for hydrocarbons exploration and exploitation (2012-present)