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EDUCATION

- 1997-2002** Ph.D. in Risk Assessment of Underground Excavations, NTUA
Ph.D. Thesis: “Hazard Identification in the Construction of Underground Excavations Using Tunnelling Boring Machines (TBM). The Case of the Athens Metro”
- 1990-1996** Diploma of Mining and Metallurgical Engineering (8,46/10).
National Technical University of Athens, School of Mining & Metallurgical Engineering.

PROFESSIONAL EXPERIENCE

- 2022 - today** Professor, School of Mining and Metallurgical Engineering, NTUA
- 2018 - 2022** Associate Professor, School of Mining and Metallurgical Engineering, NTUA
Director – Interdisciplinary Postgraduate MSc program “Design and Construction of Underground Works”, NTUA
- 2014 - 2018** Assistant Professor, School of Mining and Metallurgical Engineering, NTUA
- 2009 - 2014** Lecturer, School of Mining and Metallurgical Engineering, NTUA
- 2003 - 2009** Senior Researcher, Lab. of Mining and Environmental Technology, NTUA
- 1996 - 2003** Mining Engineer - Researcher, Lab. of Mining and Environmental Technology, NTUA

SCIENTIFIC FIELDS OF INTEREST

Underground space development, Design of underground excavations, Underground mining, Feasibility assessment and construction cost estimation, Risk assessment for underground projects, Ventilation, Safety and risk in underground construction, Evacuation design, Artificial Neural Networks in geo-engineering.

TEACHING ACTIVITIES

- Undergraduate courses**
(School of Mining and Metallurgical Eng. - NTUA):
Exploitation of Mines I, Underground Works, Design of Underground Mining Methods, Tunnelling Construction Methods
- Postgraduate courses**
(Design and Construction of Underground Works - NTUA):
Design and Feasibility Assessment of Special Underground Structures, Risk Management in Health and Safety Issues, Ventilation and E/M installations in underground projects
- Postgraduate courses**
(Hydrocarbon Exploration and Exploitation - AUTH):
Health Safety and Risk Management

RESEARCH – PROFESSIONAL ACTIVITIES

Participation in more than 25 research projects awarded by European, National bodies and private firms in the fields of mining, environmental impact assessment, risk management, underground development projects and hazardous waste management.

- External expert, consultant in mining, construction and consultancy firms in relation with underground mining projects, tunnel construction or specialized projects (TERNA SA, KYRIAKOU QUARRIES SA, ICAP SA, DEFLI-DISTOMO SA, LARCO GMMSA, ECHMES LTD, AURORAGEO SA, AD HOLDINGS AG)
- Expert Evaluator for Greek General Secretariat Research and Innovation (GRST), Horizon EU funded projects, South African National Research Foundation (NRF).

Some indicative Research Projects are:

- “Feasibility assessment for the disposal of hazardous wastes in selected abandoned quarries and mines”, (Hellenic Ministry for the Environment, Physical Planning and Public Works, 1999-2000).
- “Low Risk Disposal Technology”, (EVG1-CT-2000-00020, 2001 – 2003).
- “Underground Storage of Hydrocarbons”, *Principal Investigator*, (ASPROFOS S.A., 2002 – 2003).
- “Analysis and Decision-Making Procedures for Strategic Environmental Policies”, (Western Attica Prefecture, 2007).
- “Rehabilitation of the Markopoulon Quarries”, (Markopoulon Quarries S.A., 2007 – 2008).
- “Underground Solutions for Urban Waste Management: Status & Perspectives”, *Principal Investigator*, (ISWA, 2012).
- “Protection and enhancement of underground archaeological findings in Milos island with concurrent continuation of mining”, (S&B Industrial Minerals, 2012).
- “Life RECLAIM: Landfill mining pilot application for recovery of invaluable metals, materials, land and energy”, (LIFE12 ENV/GR/000427, 2013-2016).
- “Identification, assessment and Selection of Fire and Blast Protection Methods for the Katerini C&C Tunnel”, *Coordinator – Scientific Responsible*, (ENALOS LTD – Aegean Motorway, 2015).
- “Feasibility study for the exploitation and utilization of the emery ore of Naxos” (Echmes Ltd. – Greek Ministry of Development & Competitiveness. 2018).
- SMARTFAN (Smart by Design and Intelligent by Architecture for turbine blade fan and structural components systems) project, *Coordinator – Scientific Responsible for LTCP*, (Horizon2020, n. 760779, 2018-2021).
- “Preliminary investigation and design of the Melissourgou – Theodoriana tunnel”, *Principal Investigator*, (Prefecture of Epirus, 2020-21).
- “Geotechnical investigation and stability assessment for the underground access works at Vargiani mine”, *Coordinator – Scientific Responsible*, (Delfi-Distomo SA - Metlen SA, 2023).

PUBLICATIONS - JOURNALS

1. Kaliampakos, D.C., **Benardos, A.G.**, 2000, Quarrying and sustainable development in large urban centres: A contradiction in terms?, CIM Bulletin, vol. 93, No. 1040, pp. 86-89.
2. **Benardos, A.G.**, Kaliampakos, D.C., Prousiotis, J., Mavrikos, A.A., Skoparantzou, K., 2001, Underground aggregate mining in Athens: A promising investment plan, Tunneling and Underground Space Technology, Vol. 16, Issue 4 pp. 323-329.
3. **Benardos, A.G.**, Kaliampakos, D.C., 2004, Modelling TBM performance with artificial neural networks, Tunneling and Underground Space Technology, vol. 19, no. 6, pp. 597-605.
4. **Benardos, A.G.**, Kaliampakos, D.C., 2004, A methodology for assessing geotechnical hazards for TBM tunnelling - illustrated by the Athens Metro, Greece, International Journal of Rock Mechanics and Mining Sciences, vol. 41, no. 6, pp. 987-999.

5. **Benardos, A.G.**, Kaliampakos, D.C., 2005, Hydrocarbon Storage in Unlined Rock Caverns in Greek Limestone, *Tunnelling and Underground Space Technology*, vol. 20, no. 2, pp. 175-182.
6. **Benardos, A.G.**, Benardos, P.G., 2005, Application of Artificial neural Networks in Geo-engineering, *Mining – Metallurgical Chronicles*, vol. 15, no. 1, pp. 65-81, 2005.
7. **Benardos, A.G.**, Stefopoulos, E.K., 2006, Unlined rock caverns for strategic oil storage in Greece, *Mineral Wealth*, Jan. – May 2006, no. 138, pp. 43-52.
8. **Benardos, A.G.**, Kaliampakos, D.C., 2006 Design of an underground hazardous waste repository in Greece *Tunnelling and Underground Space Technology* 21, pp. 3-4.
9. **Benardos, A.G.**, Mavrikos, A.A., Labrakis D.A., Menegaki, M.E., 2008, Perlite Exploitation on the Island of Kos, Greece, *CIM Bulletin*, Vol. 3, No. 3, pp. 1-4.
10. Argiris, I.D., **Benardos, A.G.**, Zevgolis, E.N., 2009, Quality Prediction of Fe-Ni Alloy Refined in OBM Converters with Artificial Neural Networks, *Mineral Wealth*, January - March 2009, no. 150, pp. 25-32.
11. Paraskevopoulou C., **Benardos, A.**, 2013, Assessing the construction cost of tunnel projects, *Tunnelling and Underground Space Technology*, 38, pp. 497-505.
12. Nakou, D., **Benardos, A.**, Kaliampakos, D., 2014, Assessing the financial and environmental performance of underground automated vacuum waste collection systems, *Tunnelling and Underground Space Technology*, 41 (1), pp. 263-271.
13. **Benardos, A.**, Athanasiadis, J., Katsoulakos, N., 2014, Modern Earth Sheltered Constructions: A paradigm of green engineering, *Tunnelling and Underground Space Technology*, 41 (1), pp. 46-52.
14. Tsangaratos, P., Rozos, D., **Benardos A.**, 2014, Use of artificial neural network for spatial rainfall analysis, *J. Earth Syst. Sci.* 123, No. 3, pp. 457-465.
15. Tsangaratos, P., **Benardos, A.**, 2014, Estimating landslide susceptibility through a artificial neural network classifier, *Natural Hazards*, 74, pp. 1489-1516.
16. Kaliampakos, D., **Benardos, A.**, Mavrikos, A., Panagiotopoulos, G., 2016, The Underground Atlas Project, *Tunnelling and Underground Space Technology*, 55, pp. 229-235.
17. Kaliampakos, D., **Benardos, A.**, Mavrikos, A., 2016, A review on the economics of underground space utilization, *Tunnelling and Underground Space Technology* 55, pp. 236-244.
18. Naghadehi, M.Z., **Benardos, A.**, Javdan, R., Tavakoli, H., Rojhani, M., 2016, The probabilistic time and cost risk analysis of a challenging part of an urban tunneling project, *Tunnelling and Underground Space Technology* 58, pp., 11-29.
19. Papakonstantinou, A., **Benardos, A.**, Kallianiotis, A., Menegaki, M., 2016. Analysis of the crowd evacuation modeling approaches for the case of urban underground spaces, *Procedia Engineering*, 165, pp. 602-609.
20. Panagiotopoulos, G., Kaliampakos, D., **Benardos, A.**, Mavrikos, A., 2016. The underground atlas project: Can we really crowdsource the underground space?, *Procedia Engineering*, 165, 233-241.
21. Sotiropoulos, N., **Benardos, A.**, Mavrikos, A., 2016. Spatial modelling for the assessment of geotechnical parameters, *Procedia Engineering*, 165, pp. 334-342.
22. Deliveris, A.V., **Benardos, A.**, 2017. Evaluating performance of lignite pillars with 2D approximation techniques and 3D numerical analyses, *International Journal of Mining Science and Technology*, 27 (6), pp. 929-936.
23. Menegaki M., **Benardos, A.**, Damigos, D., Kaliampakos, D., Tsakalakis, K., 2017. Emphasizing the Role of E-Waste in the Financial Profitability of Landfill Mining Projects, *MATTER: International Journal of Science and Technology*, 3(2), pp. 122-144.
24. Kallianiotis, A., Papakonstantinou, D., Arvelaki, V., **Benardos, A.**, 2018. Evaluation of evacuation methods in underground metro stations, *International Journal of Disaster Risk Reduction*, 31, pp. 526-534.
25. Tzalamarias, M., Tzalamarias. I., **Benardos, A.**, Marinos, V., 2018. Room and Pillar Design and Construction for Underground Coal Mining in Greece, *Geotechnical and Geological Engineering*, 2019, 37(3), pp. 1729-1742.
26. Sakkas, K., Vagiokas, N., Tsiamouras, K., Mandalozis, D., **Benardos, A.**, Nomikos, P. 2019. In-situ fire

- test to assess tunnel lining fire resistance, *Tunnelling and Underground Space Technology*, 85, pp. 368-374.
27. **Benardos, A.**, Sourouvali, N., Mavrikos, A., 2021. Measuring and benchmarking the benefits of Athens metro extension using an Ex-post Cost Benefit Analysis, *Tunnelling and Underground Space Technology*, 111, 103859.
 28. Papadopoulos, D., **Benardos, A.**, 2021. Enhancing Machine Learning Algorithms to Assess Rock Burst Phenomena. *Geotechnical and Geological Engineering*, 39(8), pp. 5787-5809
 29. Delentas, A., **Benardos, A.**, Nomikos, P., 2021. Analyzing Stability Conditions and Ore Dilution in Open Stope Mining. *Minerals*, 11(12), 1404.
 30. Kallianiotis, A., Papakonstantinou, D., Toliás, I.C., **Benardos, A.**, 2021. Evaluation of fire smoke control in underground space, *Underground Space*, 7(3), pp. 295-310.
 31. Paraskevopoulou, C., Dallavalle, M., Konstantis, S., Spyridis, P., **Benardos, A.** 2022. Assessing the failure potential of tunnels and the impacts on cost overruns and project delays, *Tunnelling and Underground Space Technology*, 123, 104443.
 32. Karagianni, M.; **Benardos, A.** 2023. Machine Learning Techniques to Model and Predict Airflow Requirements in Underground Mining. *Mater. Proc.*, 15, 17.
 33. Nalmpant-Sarikaki, D.M., Theocharis, A.I., Koukouzas, N.C.; **Benardos, A.G.**, Zevgolis, I.E. 2023. Multi-Risk Assessment in Post-Mining Lignite Areas. *Mater. Proc.*, 15, 65.
 34. Papadopoulos, D., **Benardos, A.** 2024. Combining machine learning and numerical modelling for rockburst prediction. *Geomechanics and Geoengineering*, 19(2), 183–198.
 35. Vlachogiannis, I., **Benardos, A.** 2024. Proposed formulas for pillar stress estimation in a regular room-and-pillar pattern, *International Journal of Rock Mechanics and Mining Sciences* 180, 105826.

PUBLICATIONS - CONFERENCES

1. Panagopoulos, K., Kaliampakos, D., **Benardos, A.**, 1996, Study for the Potential Construction of Underground Oil Storage in the Perama Area, Meeting organized by Technical Chamber of Greece, Municipality of Perama, Dec. 1996, Greece.
2. Kaliampakos, D., Damigos, D., **Benardos, A.**, 1997, Environmental Management of an Aggregate Quarry. A Complex Case Study, 1st International Conference on Information Technologies in the Minerals Industry (via the Internet), MineIT '97, 1-12 Dec., Athens, Greece.
3. Kaliampakos, D.C., **Benardos, A.G.**, 1999, Sustainable Aggregate Quarrying in Athens (Greece): Problems and Solutions, GME '99 Conference, 24-27 May, Beijing, China, pp. 182-185.
4. **Benardos, A.**, Mavrikos, A., Skoparantzou, K., Prousiotis, J. Kaliampakos, D., Panagopoulos, K., 2000, Feasibility of Underground Aggregate Mining in Athens, 3rd Conference of Mineral Wealth in Greece, 22 - 24 November, Athens, pp. 553-559, 2000.
5. Panagopoulos, A., **Benardos, A.**, Kaliampakos, D., Panagopoulos, K., Koumantakis, J., 2000, Possibilities for the redevelopment and reuse of abandoned mines and quarries in Greece, 3rd Conference of Mineral Wealth in Greece, 22 - 24 November, Athens, pp. 247-253, 2000.
6. Kaliampakos, D.C., **Benardos, A.G.**, Mavrikos, A.A., 2001, Underground oil storage perspectives in Greece, International Symposium on Geotechnological Issues of Underground Space Use, 26-29 June, Dnipropetrovsk, Ukraine.
7. Kaliampakos, D.C., **Benardos, A.G.**, Mavrikos, A.A., 2002, Underground storage warehouses in Attica, Greece: A feasible long – term solution, 9th International Conference "Urban Underground Space: a Resource for Cities", 14-16 November, Torino, Italy.
8. Kaliampakos, D.C., **Benardos, A.G.**, 2003, Development of Underground oil Storage Facilities in Perama: A new Approach for Hazard Mitigation, Conference organised by Technical Chamber of Greece Hazard Management: The Seveso I & II Directives in Greece, 4-5 November, Athens, Greece, 2003.
9. Damigos, D., **Benardos, A.**, Kaliampakos, D., 2004, The space beneath: Developing the new human-friendly cities, 1st Int. Conf. Advances in Mineral Resources Management and Environmental

- Geotechnology, 7-9 June, Crete, pp. 641-646.
10. **Benardos, A.**, Kaliampakos, D., Stamataki, S., 2004, Storage of Natural Gas in Salt Domes. A New Perspective for Heparus?, 4th Interdisciplinary NTUA Congress: Comprehensive Development for Heparus, 23 - 26 September, Metsovo, 2004.
 11. Kaliampakos, D.C., Sofos, N.I., **Benardos, A.G.**, 2005, 3D Visualization in Underground Space Development, 10th ACUUS International Conference: Underground Space: Economy and Environment, 24-28 January, Moscow, pp. 94-98.
 12. Papani, K., **Benardos, A.**, Kaliampakos, D., 2005, Going Underground: An LCA approach, International Conference on Innovation by Life Cycle Management (LCM 2005), 5-7 September, vol. 1, pp. 231-235.
 13. **Benardos, A.G.**, Kaliampakos, D.C., 2006, Design of an underground hazardous waste repository in Greece, ITA-AITES World Tunnel Congress, 22 - 27 April, Seoul.
 14. Brachos, G., **Benardos, A.**, 2007, Thermal Loads Analysis of an Underground Cold Storage Facility in Attica, 11th ACUUS International Conference, Athens, 10-13 September, pp. 237-242.
 15. Papa, M., **Benardos, A.**, 2007, Comparative Evaluation of Alternative Methods for the Construction of Underground Car Parks, 11th ACUUS International Conference, Athens 10-13 September, pp. 487-492.
 16. **Benardos, A.**, 2007, Key Aspects of Underground Nickel Mining In Greece, Mine Planning and Equipment Selection Symposium (MPES 2007), Bangkok, December 11-13, pp. 80-87.
 17. **Benardos, A.**, 2008, Artificial Intelligence in Underground Development: A case Study of TBM Performance, Underground Spaces 2008, New Forest, UK, September 8-10, pp. 21-32.
 18. Kaliampakos, D., **Benardos, A.**, 2008, Underground Space Development: Setting Modern Strategies, Underground Spaces 2008, New Forest, UK, September 8-10, pp. 1-10.
 19. Petalas, A., Zevgolis, I., **Benardos, A.**, 2009, Assessment of the Foundation Conditions of a Metallurgical Waste Embankment, 3rd AMIREG International Conference, Athens, Greece, September 7-9, pp. 355-359.
 20. Kaliampakos, D., **Benardos, A.**, 2009, Developing the First Underground Hazardous Waste Repository in Greece, 3rd AMIREG International Conference, Athens, Greece, September 7-9, pp. 182-187.
 21. **Benardos, A.**, Souladaki, M., Tampakopoulou, L., 2009, Underground Parking Facilities in Athens: Technical Requirements and Feasibility Analysis of Two Proposed Schemes, 12th ACUUS International Conference, Shenzhen, China, November 18-19, pp. 353-358.
 22. Kaliampakos, D., **Benardos, A.**, 2009, On-site Underground Hazardous Waste Repositories: A Successful Model, 12th ACUUS International Conference, Shenzhen, China, November 18-19, pp. 14-18.
 23. **Benardos, A.**, Zevgolis, I., Michalopoulos, I., Kaliampakos, D., 2010, Underground Sewage Treatment Plant in Kea Island: A Novel Application, 3rd Conference on Small and Decentralized Water and Wastewater Treatment Plants, Skiathos, May 14 - 16, pp. 99-104 (in Greek).
 24. **Benardos, A.**, Vantolas, V., Tsatsanifos, C., Psarropoulos, P., Panagiotou, M., 2010, Geological and Geotechnical Problems during the Construction of the First Underground Hazardous Waste Repository in Greece 6th Greek National Conference of Geotechnical and Geo-environmental Engineering, Volos, 29/09 - 1/10/2010, vol.3, pp. 125-132 (in Greek).
 25. Kaliampakos, D., **Benardos, A.**, 2010, Underground Hazardous Waste Disposal: Current Trends and Future Prospects, Proc. ISWA Beacon 2010 Public Private Partnership and Hazardous Waste, 8 - 10 Dec. 2010, Novi Sad, Serbia, pp. 6-13.
 26. **Benardos, A.**, Katopodis, D., 2011, Design of an underground bauxite exploitation in Greece, Proc. Mine Planning and Equipment Selection Symp. MPES 2011, Almaty, Kazakhstan, October 12-14, pp. 115-126.
 27. Karachaliou, T., **Benardos, A.**, Kaliampakos, D., 2011, Risk Assessment of an Urban Underground Hazardous Waste Repository, Proc. 34th Int. Conf. of Safety in Mines Research Institutes, New Delhi, India, December 7-10, pp. 459-466.

28. Paraskevopoulou, C., **Benardos, A.**, 2012, Construction cost estimation for Greek road tunnels in relation to the geotechnical conditions, Proc. Int. Symp. Practices and Trends for Financing and Contracting Tunnels and Underground Works (TunnelContracts 2012), 22 - 23 March 2012, Athens.
29. **Benardos, A.**, Kazos, X., Sotiropoulos, N., 2012, Design analysis for the underground relocation of a central road artery in Athens, Proc. 13th ACUUS Int. Conf. (ACUUS 2012), 7 – 9 November 2012, Singapore, pp. 557-566.
30. **Benardos, A.**, Mavromichalis, D., Kaliampakos, D., 2012, Drill-and-Blast tunneling in very sensitive areas: Assessing the DIN 4150-3 standard's performance, Proc. 13th Int. Symp. on Environmental Issues and Waste Management In Energy And Mineral Production (SWEMP 2012), November 28-30, New Delhi, India, pp. 33-43.
31. Tsangaratos, P., **Benardos, A.**, 2013, Applying artificial neural networks in geological related phenomena Bulletin of the Geological Society of Greece, vol. XLVII 2013 Proceedings of the 13th International Congress, Chania, Sept. 2013.
32. **Benardos, A.**, Paraskevopoulou C., Diederichs, M., 2013, Assessing and benchmarking construction cost of tunnels, Proc. 66th Canadian Geotechnical Conference, GeoMontreal 2013.
33. **Benardos, A.**, Mavrikos, A., 2014, Financial assessment and valuation of the underground hazardous waste repository in Lavrion, Greece, Proc. 14th ACUUS Int. Conf. (ACUUS 2014), 24-26 September 2014, Seoul, pp. 213-219.
34. Papakonstantinou, D., **Benardos, A.**, 2014, Pillar stability analysis using the finite element method at the Lavrion Technological and Cultural Park's underground hazardous waste repository, Proc. 2nd Eastern European Tunnelling Conf., 28 Sep. - 1 Oct. 2014, Athens.
35. Menegaki, M., **Benardos, A.**, Kaliampakos, D., Tsakalakis, K., 2015. Is Landfill Mining a New Prospect for the Mining Sector? Proc. 24th Int. Mining Congress and Exhibition of Turkey-IMCET'15 Antalya, Turkey, April 14-17, 2015, pp. 101-111.
36. Tsakalakis, K., **Benardos, A.**, Sammas, I., 2016, Metals recovery from pulverized printed circuit boards (PCBs) by flotation, Proc. 3rd Symp. on Urban Mining and Circular Economy (SUM2016), 23-25 May 2016, Bergamo, Italy.
37. Damigos, D., **Benardos, A.**, Menegaki, M., Kaliampakos, D., Papagrigoriou, S., Gaitanarou, Z., Stasinou, S., 2016, Assessing the economic viability of landfill mining projects in Greece, Proc. of 4th Int. Conf. on Sustainable Solid Waste Management (CYPRUS 2016), 23-25 June 2016, Limassol, Cyprus.
38. Sakkas, K., Vagiokas, N., Tsiamouras K., Mandalozis D., **Benardos A.**, Nomikos, P., 2017. In-situ fire test to assess tunnel lining fire resistance, Proc. of the World Tunnel Congress (WTC) 2017, 9-15 June, Norway, pp. 2840-2847.
39. Papakonstantinou, D., Kallianiotis, A., **Benardos, A.**, 2018. Fire characteristics and available egress time in rail tunnels, Proc. ITA - AITES World Tunnel Congress, WTC 2018, 21 - 26 April 2018, Dubai.
40. Kallianiotis A., Papakonstantinou, D., Zografos, G., **Benardos, A.**, Kaliampakos, D., 2018. Fire and smoke effects to occupants and evacuation procedures in Metro station, Proc. 16th World Conference of the Associated Research Centers for the Urban Underground Space (ACUUS 2018), 4-8 November 2018, Hong Kong, pp. 338-344.
41. Menegaki, M., Damigos, D., **Benardos, A.**, Kaliampakos D., 2018. Finding the Right Time to Mine: A Real Options Analysis of Landfill Mining Projects, Proc. of the 18th Symposium on Environmental Issues and Waste Management in Energy and Mineral Production, 19-23 November, Santiago, Chile, pp. 257-267.
42. Poulidi, N., **Benardos, A.**, 2021. "Moving underground for urban regeneration – Design challenges and cost assessment for the proposed undergrounding of Poseidonos av.", Proc. ACUUS 2020 Int. Conference, February 3-4, Helsinki, Finland. IOP Conf. Series: Earth and Envir Sci 703 (2021) 012032.
43. Sourouvali, N., **Benardos, A.**, Mavrikos, A., 2021. "Cost benefit analysis of the Athens metro line 3 expansion project", Proc. ACUUS 2020 Int. Conference, February 3-4, Helsinki, Finland, IOP Conf. Series: Earth and Environmental Science 703 (2021) 012032. doi:10.1088/1755-1315/703/1/012032
44. Xenios, Z., **Benardos, A.**, 2021. "Prediction of blast-induced ground vibrations with the use of

- artificial neural networks”, A case study in Greece, Proc. ACUUS 2020 Int. Conference, February 3-4, Helsinki, Finland, IOP Conf. Series: Earth and Envir Sci 703 (2021) 012033.
45. Papakonstantinou, D., Kallianiotis, A., **Benardos, A.**, 2021. “Parameters that affect tenability conditions during fire emergency in metro tunnels”, Proc. ACUUS 2020 Int. Conference, February 3-4, Helsinki, Finland, IOP Conf. Series: Earth and Envir Sci 703 (2021) 012032.
 46. Delentas, A., **Benardos, A.**, Nomikos, P., 2021. Linking Stability Conditions and Ore Dilution in Open Stope Mining, Proc. RAWMAT 2021 Int. Conference, 05-09 September 2021, Athens, Materials Proceedings, 5(1), 34.
 47. **Benardos, A.**, Vlachogiannis, I., Stenos, C., Pappas, S., Bourmas, G., Koukoumtzis, S., Koronakis, N., 2021. Going underground for ferronickel mining in Greece: Preliminary feasibility and potential benefits, Proc. RAWMAT 2021 Int. Conference, 05-09 September 2021, Athens, Materials Proceedings, 5(1), 6.
 48. Karagianni, M., **Benardos, A.**, 2021. Ventilation design modelling and optimization for an underground bauxite mine, Proc. RAWMAT 2021 Int. Conference, 05-09 September 2021, Athens, Materials Proceedings 5, 5(1), 29.
 49. Kaliampakos, D., **Benardos, A.**, Nomikos, P., Marinos, V., Zevgolis, I., Vlahogianni, E., Panagiotopoulos, G., Bougas, A. 2023. Preliminary design and socio-economic benefits of a road tunnel construction in the Tzoumerka mountainous area. Proc. ITA-AITES WTC2023, 12-18 May, Athens, Greece, CRC Press, pp. 74-82.
 50. Sioutas, K.N., Vlachogiorgos, A., **Benardos, A.**, 2023. Analysing and predicting surface settlements from metro construction using machine learning methods, Proc. ITA-AITES WTC2023, 12-18 May, Athens, Greece, CRC Press, pp. 2902-2909.
 51. Khoury, A.L.J., Paraskevopoulou, C., **Benardos, A.**, 2023. Investigating the effectiveness of transfer learning in rock strength prediction, Proc. ITA-AITES WTC2023, 12-18 May, Athens, Greece, CRC Press, pp. 2725-2732.
 52. Kounadis, A., Anagnostopoulos N., Douvis, P., Nomikos, P., **Benardos, A.**, Tsakiris, A.N., Katsivelis, E., 2023. Using a vermiculite-based fire protection mortar to increase the fire resistance of reinforced concrete tunnels, Proc. ITA-AITES WTC2023, 12-18 May, Athens, Greece, CRC Press, pp. 687-694.
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 55. Karagianni, M., **Benardos, A.**, 2023. Modelling underground mine ventilation characteristics using artificial neural networks, Proc. ITA-AITES WTC2023, Athens, Greece, CRC Press, pp. 3136-3144.
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 57. Papakonstantinou, D., Kallianiotis, A., **Benardos, A.**, 2023. ASET Estimation through fire dynamics simulation for various cases of fire incidents in rail tunnels, Proc. ITA-AITES WTC2023, 12-18 May, Athens, Greece, CRC Press, pp. 3242-3249.
 58. Δελέντας, Α., Μπενάρδος, Α., 2023. Σχεδιασμός Προτεινόμενου Υπόγειου Συγκροτήματος Αποθήκευσης LNG, 9ο Πανελλήνιο Συνέδριο Γεωτεχνικής Μηχανικής, , 4-6 Οκτωβρίου 2023 Αθήνα.
 59. Kaliampakos, D., **Benardos, A.**, Nomikos, P., Marinos, V., Zevgolis, I. 2024. Developing Mountainous Tunnels in Greece—The Case of the Melissourgioi Tunnel, Proc. 18th Conf. of the Associated Research Centers for the Urban Underground Space (ACUUS 2023), Lecture Notes in Civil Engineering, vol 471, pp 195–200.
 60. Sioutas, K.N., **Benardos, A.** 2023. Machine Learning Methods on Predicting TBM's Penetration Rate in Athens Metro, Proc. 18th Conf. of the Associated Research Centers for the Urban Underground

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1. Panou K., **Benardos A.**, Sofianos A., Kaliampakos D., 2005, The Environmental Importance of Underground Works, Honorary Volume of Prof. Frangiskos, pp. 187-197, 2005.
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3. **Benardos, A.**, Kaliampakos, D., 2016. Risk Management Plan for the Restoration of the Plaka Bridge in book: PLAKA BRIDGE – The NTUA’s work for its restoration, pp. 329-335, ISBN: 978-618-82612-1-1.

MEMBER OF REVIEWING / EDITORIAL / ORGANIZING COMMITTEES

- Reviewer in Journal/Books:

Anais da Academia Brasileira de Ciências, Arabian Journal of Geosciences, Automation in Construction, Bulletin of Engineering Geology and the Environment, Energy Science & Engineering, Energy Sources, Part A: Recovery, Utilization and Environmental Effects, Elsevier Books, Engineering Applications of Artificial Intelligence, Engineering Geology, Engineering with Computers, Geofluids, Geomechanics and Engineering: An International Journal, Geomechanics and Geoengineering: An International Journal, Geotechnical and Geological Engineering, Heliyon, International Journal of Disaster Risk Reduction, International Journal of Mining and Mineral Engineering, International Journal of Rock Mechanics and Mining Sciences, Journal of Loss Prevention in the Process Industries, Journal of Power and Energy Engineering, Land Use Policy, Minerals, Mining, Neural Computing and Applications, REM - International Engineering Journal, Rock Mechanics and Rock Engineering, Simulation Modelling Practice and Theory Journal, Stochastic Environmental Research and Risk Assessment, Sustainability, Sustainable Cities and Society, The Open Construction & Building Technology Journal, The Open Construction and Building Technology Journal, Tunnelling and Underground Space Technology.

- Editorial Board Member:

The Open Construction and Building Technology Journal (2009-today), The Open Mineral Processing Journal (2009-2015)

- Guest editor:

- [Infrastructures] Special Issue: “Underground Infrastructure Engineering”
- [Applied Sciences] Special Issue: “Artificial Intelligence and Digital Technologies Shaping Mineral Industry 4.0”

- Member of Editorial/Scientific/Organizing Committees of Conferences:

“7th Biennial Society for Geology Applied to mineral deposits (SGA) Meeting”, 24 - 28 August 2003, Athens, Greece / “Underground Spaces”, 8 - 10 September 2008, New Forest, UK / “1st Greek Landfill Mining Conference”, 16 September 2014, Thessaloniki, Greece / “Athens 2015 International Landfill Mining Conference” September 24-25, 2015, Athens, Greece / “2nd Greek Landfill Mining Conference”, 15-16 June 2016, Athens, Greece / “RAWMAT 2021” Int. Conference, 05-09 September 2021 / “Word Tunnel Congress WTC2023”, Athens, Greece.

- Editor of Conference Proceedings

- Kaliampakos, D., **Benardos, A.**, Eds. (2007). Proceedings of the 11th ACUUS International Conference (ACUUS 2007): “Underground Space: Expanding the Frontiers”, 10 – 13 September 2007, Athens, Greece.
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AFFILIATIONS

- Member of the Technical Chamber of Greece
- Member of the Pan-Hellenic Society of Graduated Mining Engineers
- Member of the Greek Tunnelling Society – GTS (Board Member and Editor of GTS)
- Member of the Associated Research Centers for the Underground Urban Space (ACUUS), Deputy General Manager, Newsletter Editor.
- Member of the International Tunnelling Association (ITA)