**CURRICULUM VITAE – D. Pentari**

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**EDUCATION:**

• **2002** Ph.D. Degree in Geochemistry, Mineral Resources Engineering Department, Technical University of Crete, Chania, Greece.

Title of Ph.D Thesis: “Geochemistry of Lignites from the Elassona and Florina Coal Basins. Emphasis on Trace Elements”. Supervisor: Prof. A.E. Foscolos.

• **1990** Degree in Chemistry, Department of Chemistry, National Kapodestrian University, Athens, Greece.

**PUBLICATIONS**

**Refereed publications in journals**

1. SALTAS, V., PENTARI, D. & VALLIANATOS, F. 2020, "Complex electrical conductivity of biotite and muscovite micas at elevated temperatures: A comparative study", Materials, vol. 13, no. 16. 3513
2. PENTARI, D. & VAMVOUKA, D. 2019, "Cadmium Removal from Aqueous Solutions Using Nano-Iron Doped Lignite", IOP Conference Series: Earth and Environmental Science. 221(1), 012135
3. KOPANAKIS, I., MAMMI-GALANI, Ε., PENTARI, D., GLYTSOS, T. & LAZARIDIS, M. 2018, "Ambient Particulate Matter Concentration Levels and their Origin During Dust Event Episodes in the Eastern Mediterranean", Aerosol Science and Engineering, vol. 2, no. 2, pp. 61-73.
4. VAMVUKA, D., DERMITZAKIS, S., PENTARI, D. & SFAKIOTAKIS, S. 2018, "Valorization of Meat and Bone Meal through pyrolysis for soil amendment or lead adsorption from wastewaters", Food and Bioproducts Processing, vol. 109, pp. 148-157.
5. VAMVUKA, D., KANIADAKIS, G., PENTARI, D., ALEVIZOS, G. & PAPAPOLIKARPOU, Z. 2017, "Comparison of ashes from fixed/fluidized bed combustion of swine sludge and olive by-products. Properties, environmental impact and potential uses", Renewable Energy, vol. 112, pp. 74-83.
6. KATSIMICHA, D., PENTARI, D., PANTELAKI, O. & KOMNITSAS, K. 2017, "Effect of wet milling on the adsorption capacity of a Greek natural zeolite used for the removal of heavy metals from solutions", Bulletin of the Geological Society of Greece, vol. 47, pp. 953-962
7. VAMVUKA, D., TRIKOUVERTIS, M., PENTARI, D., ALEVIZOS, G. and STRATAKIS, A., 2017. Characterization and evaluation of fly and bottom ashes from combustion of residues from vineyards and processing industry. Journal of the Energy Institute, 90(4), pp. 574-587.
8. MORAETIS, D., LYDAKIS-SIMANTIRIS, N., PENTARI, D., MANOUTSOGLOU, E., APOSTOLAKI, C. and PERDIKATSIS, V., 2016. Chemical and physicalcharacteristics in uncultivated soils with different lithology in semiarid Mediterranean clima. Applied and Environmental Soil Science vol. 2016 3590548.
9. PENTARI, D., ALEVIZOS, G., REPOUSKOU, E. and KORELA, S., 2016.Synthesis, characterization and sorption properties of a sorbent synthesized using slag and red mud: Arsenic removal from spiked aqueous solutions. Global Nest Journal, 18(2), pp. 339-347.
10. MORAETIS, D., PAPAGIANNIDOU, S., PRATIKAKIS, A., PENTARI, D. and KOMNITSAS, K., 2016. Effect of zeolite application on potassium release in sandy soils amended with municipal compost. Desalination and Water Treatment, 57(28), pp. 13273-13284. doi:10.1080/19443994.2015.1065440.
11. VAMVUKA, D., TRIKOUVERTIS, M., PENTARI, D. and ALEVIZOS, G., 2014.Evaluation of ashes produced from fluidized bed combustion of residues from oranges' plantations and processing. Renewable Energy, 72, pp. 336-3438.
12. SALTAS, V., CHATZISTAMOU, V., PENTARI, D., PARIS, E., TRIANTIS, D., FITILIS, I. and VALLIANATOS, F., 2013. Complex electrical conductivity measurements of a KTB amphibolite sample at elevated temperatures. Materials Chemistry and Physics, 139(1), pp. 169-175.
13. STAMBOLIADIS, E., EMEJULU, A., PANTELAKI, O., PENTARI, D. and PETRAKIS, E., 2012. Removal of phenols from the water effluents of olive presses. Environmental and Climate Technologies, 8(1), pp. 4-11.10.
14. KOPANAKIS, I., ELEFTHERIADIS, K., MIHALOPOULOS, N., LYDAKIS-SIMANTIRIS, N., KATSIVELA, E., PENTARI, D., ZARMPAS, P. and LAZARIDIS, M., 2012. Physico-chemical characteristics of particulate matter in the Eastern Mediterranean. Atmospheric Research, 106, pp. 93-107.
15. KOPANAKIS, I., LYDAKIS-SIMANTIRIS, N., KATSIVELA, E., PENTARI, D., ZARMPAS, P., MIHALOPOULOS, N. and LAZARIDIS, M., 2010. Size distribution and chemical composition of airborne particles at Akrotiri research station, Crete, Greece. Global Nest Journal, 12(1), pp. 54-62.
16. GIANNIS, A., PENTARI, D., WANG, J.-. and GIDARAKOS, E., 2010. Application of sequential extraction analysis to electrokinetic remediation of cadmium, nickel and zinc from contaminated soils. Journal of hazardous materials, 184(1-3), pp. 547-554.
17. PENTARI, D., PERDIKATSIS, V., KATSIMICHA, D. and KANAKI, A., 2009. Sorption properties of low calorific value Greek lignites: Removal of lead, cadmium,
18. zinc and copper ions from aqueous solutions. Journal of hazardous materials, 168(2-3), pp. 1017-1021.
19. VAMVUKA, D., PITHAROULIS, M., ALEVIZOS, G., REPOUSKOU, E. and PENTARI, D., 2009. Ash effects during combustion of lignite/biomass blends in fluidized bed. Renewable Energy, 34(12), pp. 2662-2671.
20. GIANNIS, A., NIKOLAOU, A., PENTARI, D. and GIDARAKOS, E., 2009. Chelating agent-assisted electrokinetic removal of cadmium, lead and copper from contaminated soils. Environmental Pollution, 157(12), pp. 3379-3386.
21. PENTARI, D., FOSCOLOS, A.E. and PERDIKATSIS, V., 2008. Trace elements in the lignite-bearing area of Lofoi, Florina Basin, Western Greek Macedonia, Greece. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 30(4), pp. 316-324.
22. PENTARI, D., TYPOU, J., GOODARZI, F. and FOSCOLOS, A.E., 2006.Comparison of elements of environmental concern in regular and reclaimed soils, near abandoned coal mines Ptolemais-Amynteon, northern Greece: Impact on wheat crops. International Journal of Coal Geology, 65(1-2), pp. 51-58.
23. LYDAKIS-SIMANTIRIS, N., PENTARI, D., KATSIVELA, E., KOUTOULAKIS, D., PERDIKATSIS, V. and PAVLAKI, A., 2006. A chemical and microbiological study of the water of the Agyia Springs in Western Crete. WSEAS Trans.Environ.Dev., 2(6), pp. 816-822.
24. VAMVUKA, D., HAHLADAKIS, J. and PENTARI, D., 2005. Leaching of toxic elements from lignite and agroresidue ashes in cultivated soils of Crete. Energy and

Fuels, 19(3), pp. 807-812.

1. PENTARI, D., FOSCOLOS, A.E. and PERDIKATSIS, V., 2004. Trace element contents in the Domeniko lignite deposit, Elassona basin, Central Greece. International Journal of Coal Geology, 58(4), pp. 261-268.

**Refereed publications in International Conferences**

1. Despina Vamvouka, Despina Pentari “Environmental impact of heavy metals released from deposition of lignite and waste material ashes” *Goldschmidt 2019,* Barcelona, August 2019.
2. Despina Pentari, Pavlina Rotondo “Determination of light rare earth elements in geological material by energy dispersive X ray fluorescence spectroscopy. Evaluation of different calibration methods” *11th Aegean Analytical Chemistry Days (AACD 2018)* Chania September 2018
3. Pentari, D. & Vamvouka, D. 2019, "Cadmium Removal from Aqueous Solutions Using Nano-Iron Doped Lignite", *World Multidisciplinary Earth Sciences Symposium – 2018*, Praga, September 2018.
4. Despina Vamvouka Despina Pentari “Characterization of Ash Materials from Fluidized Bed Combustion of Agricultural Wastes. Effect on System Performance, Environmental Impact and Valorization” *ISERD-17,* Madrid, October 2017
5. Despina Pentari A, Pavlina RotontoA “Evaluation of Energy Dispersive X-ray Fluorescence Spectroscopy for the Determination of Light Rare Earth Elements in Geological Material” *10th Aegean Analytical Chemistry Days (AACD 2016)* Tsanakale, September 2016.
6. Chr. Tsekos, D. Vamvuka, S. Sfakiotakis, Chr. Mihailof, A. “Kinetic Modeling for the Pyrolysis of Biomass Fuels derived from Oil Crops” European combustion meeting, Budapest April, 2015
7. D. Pentari, A. Turnavitou, G. Alevizos, E. Repouskou, K. Komnitsas “Synthesis of nanoscale iron for waste water treatment using red mud as an iron precursor” Geoberlin 2015, Berlin, October 2015
8. D. Pentari, J. Typou, A.E. Foscolos ‘Environmental impact of lignite fly ashes upon recycling to soil” 30th SEGH International Conference, Northumbria University, Newcastle upon Tyne, UK, 30 June to 4 July 2014
9. D. Pentari, D. Vamvuka “Investigation of the Environmental impact of Ptolemais lignite and olive tree residues fly ashes upon recycling to soil” 4th International Conference Industrial and Hazardous Waste managment, Crete, October, 2014
10. V. Saltas, I. Fitilis, F. Vallianatos D. Pentari “Broadband dielectric spectroscopy of muscovite and biotite micas at elevated temperatures” 30th PanHellenic conference on Solid-State Physics and Materials Science 21-24 September, Heraklion, Crete 2014
11. Moraetis D., Pentari D., Papagiannidou S., Pratikakis A., Komnitsas K. ‘The effect of clinoptilolite in potassium release from sandy soil treated with compost’, International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey, September 2013
12. Katsimicha D., Pentari D., Pantelaki O., and Komnitsas K. “Effect of wet milling on the adsorption capacity of a greek natural zeolite used for the removal of heavy metals from solutions” Bulletin of the Geological Society of Greece, vol. XLVII 2013 Proceedings of the 13th International Congress, Chania, Sept. 2013
13. Pentari D., Repouskou E., Korela S., “Removal of metal ions from spiked aqueous solutions using a sorbent produced by slag and red mud”, 9th International Symposium of Environmental Geochemistry, Aveiro, Portugal, July, 2012
14. V. Kapenis, F.-M. Pellera, K. Anastasiadou, D. Pentari and E. Gidarakos “Evaluation of asbestos derived zeolite as an adsorbent for Pb(II) and Cd(II) removal from aqueous solutions” 3rd International Conference on Industrial and Hazardous Waste Management, Crete 2012
15. Despina Pentari, Despina Katsimicha, Asimina Moraiti, Vasilis Perdikatsis, Konstantinos Komnitsas, “Mercury contents in soils and sea sediments in Crete, Greece” 25th International Applied Geochemistry Symposium, Rovaniemi, Finland, 20-26 August 2011.
16. Pellera, F., Giannis, A., Anastasiadou, K., Kalderis, D., Pentari, D. & Gidarakos, E. 2010, "Adsorption of Cu(II) ions from aqueous solutions using biochar prepared from agricultural byproducts", International Conference on Industrial and Hazardous Waste Management, Crete 2010
17. Pentari D., Serafim V., Perdikatsis V., “Treatment of coal fly ash with ferrous sulfate solution and ochre to reduce the mobility of Zn, Mn, and Cr” Proceedings of the XIIth Mineral Processing Symposium, Cappadocia, Turkey, 6-8 October, 2010.
18. E. Stamboliadis, O. Pantelaki, D. Pentari, E. Panagiotara “Beneficiation of anickeliferous laterite ore from Euboea, Central Greece” Proceedings of the XIIth Mineral Processing Symposium, Cappadocia, Turkey, 6-8 October, 2010
19. D. Katsimicha, D. Pentari, V. Perdikatsis, K. Komnitsas “Determination of Hg in selected greek soils and sea sediments” Proceedings of the 3rd International Conference on Advances in Mineral Resources Management and Environmental Geotechnology Athens, 7-9 September 2009.
20. Vamvuka, D., V. Topouzi, S. Sfakiotakis, D. Pentari, and M. Christou 2009.“Production yield and combustion characteristics of cardoon grown as a potential feedstock for energy applications in Greece” Proceedings of the 17th European Biomass Conference and Exhibition: 1 269-1272, Hamburg; 29 June-3 July 2009
21. Kopanakis, M. Lazaridis, N. Lydakis-Simantiris, E. Katsivela, K. Eleftheriadis, D. Pentari, P. Zarmpas, and N. Mihalopoulos “Particulate Matter Size Distribution Measurements at Akrotiri Station, Crete, Greece” Proceedings of the International Conference on the Protection and Restoration of the Environment IX, Kefalonia, June 29 - July 3, 2008.
22. S. Aslanidou, N. Lydakis-Simantiris, C. Kotsifaki, D. Pentari, and E. Katsivela “Ferric Chloride (FeCl3) as Regulatory Agent for the Reduction of Hydrogen Sulfide (H2S) in Municipal Wastewater” Proceedings of the International Conference on the Protection and Restoration of the Environment IX, Kefalonia, June 29 - July 3, 2008.
23. V. Voudouri, N. Lydakis-Simantiris, D. Pentari and E. Katsivela “TSP and heavy metals mesourments in the roadside environment of the coastal city of Chania,Greece” European aerosol conference, Austria September 2006
24. D. Moraetis, V. Perdikatsis, D. Pentari, E. Manutsoglu, Ch. Apostolaki, and N.Lydakis - Simantiris “A Study on the Correlation of the Properties of Parent Rock and Soils of Different Geological Origin” Proceedings of the 2nd International Conference on: "Advances in Mineral Resources Management and Environmental Geotechnology", pp 349-354 Chania, Crete, September 2006.
25. N. Lydakis - Simantiris, D. Pentari, E. Katsivela, D. Koutoulakis, V. Perdikatsis, and Aik. Pavlaki “A Study on the Quality of the Water of the Agyia Springs in Western Crete” Proceedings of 2006 World Congress of Energy, Environment, Ecosystems, Sustainable Development (EEESD'06) pp. 342-347Vouliagmeni Beach, Athens, Greece, July 11-13, 2006.
26. V. Perdikatsis, E. Kizlari, N. Pasadakis, D. Pentari “Soil pollution by pesticides in greenhouses in the perfecture of Hania Greece” AMIREG 2006, “Advances in Mineral Resources Management and Environmental Geotechnology” ISBN: 960-89228-1-X, p.717-722, Chania 2006.
27. N. Lydakis-Simantiris, D.Pentari, V. Perdikatsis, E. Manutsoglou, D. Moraetis, and Ch. Apostolaki “Mineralogical, geochemical and nutrient analysis of soils from Omalos polje-plateau, western Crete”. Geonvironment and Geotectonics International Workshop, Book of Proceedings September 2005.
28. D. Pentari, A.E. Foscolos “Geochemistry of Florina and Elassona coal basins with emphasis on trace elements and elements of environmental concern.” Proceedings of the 1st International Conference on Advances in Mineral Resources Management and Environmental Geotechnology. pp 665-662, Chania, June 2004.
29. D. Pentari “Evaluation of different analytical methods used for the determination of trace elements in coal ash” 10th International Congress of the Geological Society of Greece, Thessaloniki, April 2004.