Appendix B

Curriculum Vitae & List of publications

Aikaterini Mitzia

Born: 20.04.1993, Thessaloniki, Greece

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ORCiD: 0000-0003-4911-4036

Education

(2017 – present) **PhD studies** in Applied and Lanscape Ecology, Faculty of Environmental Sciences, Department of Environmental Geochemistry Czech University of Life Sciences Prague (CZU)

Thesis topic: Characterisation and use of innovative sorbents for metal/metalloid stabilisation in contaminated soils

(2011 – 2017) **Integrated Master** in Forestry and Natural Environment, Aristoteles University of Thessaloniki (AUTH)

Specialisation: Forest Genetics and Tree Improvement
Diploma thesis title: Cross matching between Pinus nigra Arn. clones under xerothermic conditions

Fellowships

(2021) Research visit to the SOLEIL synchrotron (Paris, France) at LUCIA beamtime.

(2019-2020) Research fellowship at the laboratory of Soils and Groundwater Management, University of Wuppertal (Germany).

(2017) Erasmus internship at the laboratories of the Department of Environmental Geochemistry, Czech University of Life Sciences Prague (CZU).

Publications

Mitzia, A., Böserle–Hudcová, B., Vítková, M. Kunteová, B., Casadiego–Hernandez, D., Moško, J., Pohořelý, M., Grasserová, A., Cajthaml, T., & Komárek, M. (2024). Pyrolysed Sewage Sludge for Metal(loid) Removal and Immobilisation: Exploring Variety of Risk Elements Across Contamination Levels, Science of the Total Environment, 918, 170572, DOI: 10.1016/j.scitotenv.2024.170572

Mitzia, A., Vítková, M., Ratié, G., Chotěborský, R., Vantelon, D., Neaman, A., & Komárek, M. (2023). Revealing the long-term behaviour of nZVI and biochar in metal(loid)-contaminated soil: focus on Fe transformations. Environmental Science: Nano, 10, 2861-2879, DOI: 10.1039/D3EN00429E

Hudcová, B., Osacký, M., Vítková, M., **Mitzia, A.**, & Komárek, M. (2021) Investigation of zinc binding properties onto natural and synthetic zeolites: Implications for soil remediation. Microporous and Mesoporous Materials 317,111022, DOI: 10.1016/j.micromeso.2021.111022

Mitzia, A., Vítková, M., & Komárek, M. (2020). Assessment of biochar and/or nano zero-valent iron for the stabilisation of Zn, Pb and Cd: A temporal study of solid phase geochemistry under changing soil conditions. Chemosphere, 242, 125248. DOI: 10.1016/j.chemosphere.2019.125248

Participation in conferences

Mitzia, A., Vítková, M., Yang, X., Shaheen, S., & Rinklebe, J. The effect of dynamic redox conditions on metal(loid) immobilisation using nZVI and biochar: new insight into soil remediation efficiency. 1st joint conference: International Conference on Biochemistry of Trace Elements & International Conference on Heavy Metals (ICOBTE/ICHMET; Wuppertal, 2023).

Mitzia, A., Vítková, M. Efficiency of different Fe-based treatments for metal(loid) stabilisation in a contaminated soil. International conference: Interfaces Against Pollution: Chemical and Biological Perspectives (Antwerp, 2022).

Mitzia, A., Vítková, M., & Zarzsevszkij, S. Laboratory application of un/treated sewage sludge for soil remediation; focus on sewage sludge mineralogy. International symposium on waste management and sustainable landfilling, SARDINIA (Sardinia, 2021).

Mitzia, A., & Vítková, M. Long-term Application of Novel Materials in Contaminated Soil: laboratory Testing for Metal (loid) Stabilisation Efficiency. 6th World Congress on New Technologies (online, 2020).

Mitzia A, Vítková M & Komárek M. Assessment of nano zero-valent iron and biochar towards risk metal stabilisation in soil: a temporal study. International conference: Goldsmidt (Barcelona, 2019).

Mitzia, A., Vítková, M., & Komárek, M. Laboratory testing of biochar and/or nano zero-valent iron for remediation of metal-contaminated soil. International Conference Contaminated Sites (Banská Bystrica, 2018).

Manuscripts in preparation

Mitzia, A., Vítková, M., Yang, X., Shaheen, S., Komárek, M., Rinklebe, J. Remediation of contaminated soil under dynamic redox conditions: implications for amendment efficiency in environmental relevant conditions.

Grants & project co-operation

Team member in project: Nanoremediation of contaminated soils: Technology implementation with respect to ecotoxicological aspects Project No: TO01000170, Technology Agency of the Czech Republic (2021–2024).

Team member in project: Performance comparison of innovative metal(loid) nanosorbents in smelter-polluted soils: Geochemical and ecotoxicological benchmarks. Project no: 21-23794J, Czech Science Foundation (2021–2023).

Principal investigator in project: Sewage sludge for sustainable brownfield reclamation: exploring the mineralogy behind the sludge UGC, CZU, Ministry of Education of the Czech Republic (2021–2022).

Team member in project: Environmental aspects of soil amendments derived from organic waste: implications for sustainable soil remediation. GA FZP, (2020-2021).

Team member in project: Innovative use of nanoiron-modified biochar: advanced geochemical testing for metal(loid) stabilisation in soils. Project no: 18-24782Y, Czech Science Foundation (2018–2020).

Principal investigator in project: Characterisation and testing of novel composites for metal/metalloid stabilisation in contaminated soils. GA FZP (2018 – 2020).

Team member in project: Phytoremediation of contaminated soils using nanoparticles: implications for rhizosphere. Project no: 17-25536Y, Czech Science Foundation (2017–2019).

Workshops

European funding opportunities for junior scientists (tutor: Nikolaos Floratos, 2023).

MINTEQ geochemical modelling (tutor: Juan Antelo, 2022).

Interactive workshop on Marie Skłodowska-Curie Actions, feedback from successful candidates and project evaluators (CZU, Prague, 2022).

Recent developments and applications in Earth sciences of electron probe microanalysis (Agricultural University of Athens, 2021).

Geochemical modelling using PHREEQC code (tutor: Rémi Marsac, 2019).

Awards

Nominated for the Award of the Minister of Agriculture for Young Scientists for the publication "Pyrolysed sewage sludge for metal(loid) removal and immobilisation in contrasting soils: exploring variety of risk elements across contamination levels" (2024).

Rektor's prize for the best PhD students' publications (2020; 2023).

Teaching activities

Waste Geochemistry and Management

Environmental Soil Chemistry

Seminar for Environmental Geochemistry Studies I and II

Field practice for Environmental Geochemistry Studies

Laboratory training of Bachelor and Master students

Co-supervisor of one Master diploma thesis

Others

Member of the organising team of the 1st joint conference ICOBTE/ICHMET (Wuppertal, 2023).