# Name: Dr. Paraskevi Lamropoulou

#### **Education**

2003 - PhD in Geology, Dept of Geology, University of Patras, Greece in collaboration with Materials and Metallurgy laboratory of Chemical Engineering Department and VIOMAGN INDUSTRY),; Thesis Title: «Mineralogical study and properties of basic refractories and new synthesized magnesia-spinel compositions derived from magnesite of N. Evia, Greece».

1997 - Department of Geology, University of Patras, Greece

## **Professional experience**

<u>10/2022 - present</u> Assistant Professor of Applied Mineralogy-Petrology and teaching at Dept. of Geology, University of Patras, Greece at both undergraduate and postgraduate level. Lessons: Industrial Minerals, Mineralogy II , Instrumental Methods of the analysis of Earth Materials, Advanced topics in Mineralogy/Petrology/Ore Geology, Field Exercises V, Basic computer applications in Geology

<u>06/2014-09/2022</u> Lab faculty member of Department of Geology, University of Patras, Greece, coteaching and laboratory exercises teaching. Lessons: Materials of Earth I, II (Mineralogy I, II), Petrography I, II, Instrumental Methods of the analysis of Earth Materials, Advanced topics in Mineralogy/Petrology/Ore Geology

<u>2003-2006</u> Adjunct lecturer (P.D. 407/80) of Geology Dept., University of Patras in the lessons of Materials of Earth I: Crystals Structure and mineral properties and Materials of Earth II: Crystals chemistry and systematic of minerals

<u>2003-2005</u> Adjunct Teaching Assistant in Technical Geology lesson in the Dept. of Civil Engineering of the Technological Educational Institute of Patras.

#### **Scientific achievements**

She has more than 40 publications (>35independent) in journals, h=11 (Google Scholar), h=11 (Scopus) Total Citations=480 (Google Scholar), 357 (Scopus), more than 10 full articles in Proceedings of International and National Conferences, more than 20 abstracts in National and International Conferences

Scopus ID: 7801591575, Google scholar account:

https://scholar.google.gr/citations?user=ldk2Zg4AAAAJ&hl=el Total Scientific published work

Articles in journals of SCI 39

Articles in national or international journals excluded of SCI 3

Articles in national and international conference proceedings 14

Abstracts/Extended abstracts with presentations in conferences >20

Co-author of book (By DISIGMA PUBLISHER )

Mineralogical mobile application (for i-phone and Android) 1

She is reviewer for (up to 15) International Journals (up to 40 reviews the last 2 years (2020 – 2022) Representative Journals:

Arabian Journal of Geosciences, Buildings, Case studies in Construction materials, Ceramics, Clean Technologies and Recycling Materials, Energies, Geosciences, Materials, Minerals Sustainability, Land

### Field Research /Laboratory experience

Main research experience in the Applied Mineralogy-Petrology:

Mineralogical-petrographic characterization of geomaterials and uses. Development of compositions such as inorganic geopolymers, ceramic structural compositions and other materials with wide application and industrial demand, eg in environmental applications, in the cement industry, in the building brick-tile industry and in general construction materials. Correlation of mineralogy- petrography with remote sensing

methods, e.g geological mapping, beach rocks

Significant laboratory analytical experience on XRD analyses, SEM EDX/WDX analyses, optical microscopy, chemical analyses with AAC, Laser Raman, thermal analyses, grain-size analyses, beneficiation of materials, calculations of thermo-physicomechanical properties (porosity, density, cold crushing strength, coefficient of expansion), characterization of watery solutions, CL, preparation of thin sections for microscopy analyses.

## Participation in projects

She has participation in 20 scientific national and international projects (in 2 of them as Scientific Responsible) and she has obtained a lot of experience on the preparation, submission and administration of Recearch proposals/projects. She has collaborations with industries such as LARCO, ALUMINUM of Greece (MYTILINAIOS), VIOMAGN, FIBRAN, Panagiotopoulos S.A. Public Power Cooperation, the research center ELKEME, Smelterry of Epirus ABEE, MECHANICAL AE., T.EΠI.KAT.EΠE, Mining Company of Kozani, Greece, AEIFOROS, WUSCO Coatings, either in common research projects or in consulting services/studies.

## Representative projects

«Utilization of red mud in the cement and ceramic industries», Funding: General Secretariat of Research and Technology.

«Mineralogical, petrographic and geochemical study of different slags», Funding: WUSCO COATINGS EUROPE B.V.

«Development of high technology's and friendly to the environment new products derived from basic materials, Funding: General Secretariat of Research and Technology.

«Mineralogical analyses, grain size analyses and microstructure characterization of raw materials of metamorphic and igneous rocks, bauxite, dolomite, calcite and Aluminum byproducts (ALUFLUX) and their stone wool products. Sub Project of «Development of a new stone wool product with special requirements and low iron and Nickel content using Aluminum byproducts (ALUFLUX)» 914-BET-2013.

«A metallurgical technology development for the Greek Bauxite», Funding: General Secretariat of Research and Technology.

«Smelting of R/K gas – cleaning systems Nickel-bearing dust and sludge in 125t DC-HEP of GMH», Funding: GMbH.

«In situ quick sensing system for measurements of process-critical components in steelmaking slags (INQUISS)», Funding: EU

«Development method for the recovery of V, Ni from the solid residuals of crude oil combustion.»Funding: Public Power Corporation of Greece.

## Representative papers

- New periclase- magnesium aluminate spinel refractories from sintered high purity dead burned magnesite and new various presynthesized spinel- based compositions (I): Study in terms of mineralogical composition, microstructure, thermal expansion and cold crushing strength, Lampropoulou P., Katagas C., Iliopoulos I., Papoulis D. Refractories and Industrial Ceramics.53, 5, 310-316, 2013, https://doi.org:10.1007/s11148-013-9517-7
- Combined Use of Remote Sensing Data, Mineralogical Analyses, Microstructure Studies and Geographic Information System for Geological Mapping of Antiparos Island (Greece). Nikolakopoulos, K.G., Lampropoulou, P., Papoulis, D., Rogkala, A., Giannakopoulou, P.P., Petrounias, P. Geosciences. 8, 96. 2018. https://doi.org/10.3390/geosciences8030096
- Synergistic Use of UAV and USV Data and Petrographic Analyses for the Investigation of Beachrock Formations: A Case Study from Syros island, Aegean Sea, Greece. Nikolakopoulos K., Lampropoulou P.,

- Fakiris E., Sardelianos D., Papatheodorou G. Minerals.8,(11), 534, 2018, https://doi.org/10.3390/min8110534
- Petrogeochemical approaches to the characterization of obsidian derived from Nychia area (Milos Island, Greece) using combined methods. Lampropoulou, P., Laskaris, N., Petrounias, P., Giannakopoulou, P.P., Rogkala, A., Kalampounias, A.G., Tsigrou, P., Katagas, C.G., Iliopoulos, I. Microchemical Journal, 156, 104843. 2020. https://doi.org/10.1016/j.microc.2020.104843.
- The Effect of Chemical Composition of Ultramafic and Mafic Aggregates on Their Physicomechanical Properties as well as on the Produced Concrete Strength. Lampropoulou, P., Petrounias, P., Giannakopoulou, P.P., Rogkala, A., Koukouzas, N., Tsikouras, B., Hatzipanagiotou, K. Minerals, 10, 406. 2020. https://doi.org/10.3390/min10050406
- Valorization of slags produced by smelting of metallurgical dusts and lateritic ore fines in manufacturing of slag cements. Tzevelekou, T., Lampropoulou, P., Giannakopouloul, P.P., Rogkala, A., Koutsovitis, P., Koukouzas, N., Petrounias, P. Applied Sciences 10 (13), 4670. 2020. https://doi.org/10.3390/app10134670
- Increase of frost resistance capacity of clay roofing tiles with boron waste addition, Christogerou A., Lampropoulou P., Panagiotopoulos E., Construction and Building Materials 280, 2021, https://doi.org/10.1016/j.conbuildmat.2021.122493
- Feasibility study on the potential replacement of primary raw materials in heavy clay ceramics by clayey overburden sterile from Prosilio Region (Western Macedonia, Greece), Christogerou A., Lampropoulou P., Papoulis D. Angelopoulos G. N, Minerals, 11(9),961, 2021, 10.3390/min11090961
- Halloysite in different ceramic products: A review, Lampropoulou P., Papoulis D., Applied Clay Sciences, Materials 14(19),5501, 2021, 10.3390/ma14195501
- The role of the aggregate shape on the compressive strength of concrete using a new micro geoinformatics methodology, Petrounias, P., Rogkala, A.; Giannakopoulou, P. P; Kalpogiannaki, M.; Laskaris, N., Lampropoulou, P.; MICRON, ISSN 0968-4328, 2022, https://doi.org/10.1016/j.micron.2022.103333
- Utilization of Industrial Ferronickel Slags as Recycled Concrete Aggregates. PETROUNIAS, P.; ROGKALA,
  A.; GIANNAKOPOULOU, P.P.; CHRISTOGEROU, A.; LAMPROPOULOU, P.; LIOGRIS, S.; KOUTSOVITIS, P.;
  KOUKOUZAS, N. Appl. Sci., 12, 2231., 2022, https://doi.org/10.3390/app12042231
- Sustainable removal of uranium from acidic wastewater using various mineral raw materials, P
  Petrounias, A Rogkala, PP Giannakopoulou, K Pyrgaki, P. Lampropoulou, P.Koutsovitis, H. Tsikos, P.
  Pomonis, N. Koukouzas, Journal of Environmental Management, 2023,330, 117159
- Microstructural and Microbiological Properties of Peloids and Clay Materials from Lixouri (Kefalonia Island, Greece) Used in Pelotherapy, Lampropoulou, P. Petrounias, P., Rogkala, A., Giannakopoulou, P.P., Gianni, E. Mantzoukas, S., Lagogiannis, I., Koukouzas, N., Hatziantoniou, S., Papoulis D. Appl. Sci., 2023, 13(9), 5772