Teaching Assistant Petrounias Petros

Personal Information
Orcid ID: orcid.org/0000-0002-9725-3973,
Teaching Assistant Member
Department of Geology
University of Patras, 26504 Rio Campus, Patras, Greece.
Office: +30 2610 997588
E-mail: petrounias@upatras.gr

Education

2013-2019: Ph.D. in Geology *at the Department of Geology of the University of Patras, Greece. Thesis entitled:* **Estimation of the effect of the mineralogical and petrographic characteristics of igneous rocks from central Macedonia on their physicomechanical properties. Evaluation of their behaviour as aggregates in construction and environmental applications**
2011-2013: MSc. in Geology *at the Department of Geology of the University of Patras, Greece. Entitled: "Geosciences and Environment" in the section Mineral Raw Materials and the Environment"*
2006-2010: Degree in Geology *at the Department of Geology of the University of Patras, Greece*

Professional experience

1. ***Teaching and other experience***

Modules taught at the undergraduate course (Dept. of Geology, University of Patras, Greece):

- ***Nanogeosciences***
- ***Marbles and aggregate rocks***
- ***Mineralogy***
- ***Igneous Petrography***
- ***Environmental Uses of Minerals Raw Materials***
- ***Minerals raw materials and Sustainable development***

1.1 Researcher Experience:

01/09/2020 – 01/09/2022: Postdoc researcher in the institute Center of *Research* and Technology Hellas (CERTH). The research program funded by European Union from Research Fund for Coal and Steel.

Publications overview-author evaluation-awards

Summary of Scientific Production and Impact:
h-index: 13/14 (Scopus / Google Scholar),
Publications : Scientific Papers in international Journals: 45,
Citations: 407, Other Publications: 2,
Abstracts in congresses: 19,
Reviewer statistics: 54 reviews (verified reviews from Publons).

2. ***Selected Publications:***

2.1.1 ROGKALA, A., **PETROUNIAS, P**., TSIKOURAS, B., HATZIPANAGIOTOU, K., (2017). New occurrence of pyroxenites in the Veria-Naousa ophiolite: implications on their origin and petrogenetic evolution. Geosciences 7 (4), 92.

2.1.2 NIKOLAKOPOULOS K.G., LAMPROPOULOU P., PAPOULIS D., ROGKALA A., GIANNAKOPOULOU P. P., **PETROUNIAS P.** (2018). Combined Use of Remote Sensing Data, Mineralogical Analyses, Microstructure Studies and Geographic Information System for Geological Mapping of Antiparos Island (Greece). Geosciences. 8 (96), 2–16. **https://doi.org/10.3390/geosciences8030096**.

2.1.3 PETROUNIAS P., GIANNAKOPOULOU P.P., ROGKALA A., LAMPROPOULOU P., KOUTSOPOULOU E., PAPOULIS D., TSIKOURAS B., HATZIPANAGIOTOU K. (2018). The impact of secondary phyllosilicate minerals on the engineering properties of various igneous aggregates from Greece. Minerals. 8(329). **https://doi.org:10.3390/min8080329.**

2.1.4 PETROUNIAS P., GIANNAKOPOULOU P.P., ROGKALA A., STAMATIS P.M., TSIKOURAS B., PAPOULIS D., LAMPROPOULOU P., HATZIPANAGIOTOU K. (2018). The Influence of Alteration of Aggregates on the Quality of the Concrete: A Case Study from Serpentinites and Andesites from Central Macedonia (North Greece). Geosciences. 8 (115), 2- 17. **https://doi.org/10.3390/geosciences8040115**.

2.1.5 GIANNAKOPOULOU, P.P., **PETROUNIAS, P.,** ROGKALA, A., TSIKOURAS, B., STAMATIS, P.M., POMONIS, P., HATZIPANAGIOTOU, K., (2018). The Influence of the Mineralogical Composition of Ultramafic Rocks on Their Engineering Performance: A Case Study from the Veria-Naousa and Gerania Ophiolite Complexes (Greece). Geosciences 8 (7), 251.

2.1.6 PETROUNIAS, P., GIANNAKOPOULOU, P.P., ROGKALA, A., STAMATIS, P.M., LAMPROPOULOU, P., TSIKOURAS, B., HATZIPANAGIOTOU, K., (2018). The Effect of Petrographic Characteristics and Physico-Mechanical Properties of Aggregates on the Quality of Concrete. Minerals 8 (12), 577.

2.1.7 GIANNAKOPOULOU, P.P., **PETROUNIAS, P.,** TSIKOURAS, B., KALAITZIDIS, S., ROGKALA, A., HATZIPANAGIOTOU, K., (2018). Using Factor Analysis to Determine the Interrelationships between the Engineering Properties of Aggregates from Igneous Rocks in Greece. Minerals 8 (12), 580.

2.1.8 ROGKALA, A., **PETROUNIAS, P.,** TSIKOURAS, B., GIANNAKOPOULOU, P.P., HATZIPANAGIOTOU, K., (2019). Mineralogical Evidence for Partial Melting and Melt-Rock Interaction Processes in the Mantle Peridotites of Edessa Ophiolite (North Greece). Minerals 9 (2), 120.

2.1.9 PETROUNIAS, P., ROGKALA, A., GIANNAKOPOULOU, P.P., TSIKOURAS, B., LAMPROPOULOU, P., KALAITZIDIS, S., HATZIPANAGIOTOU, K., LAMBRAKIS, N., CHRISTOPOULOU, M.A., (2019). An Experimental Study for the Remediation of Industrial Waste Water Using a Combination of Low Cost Mineral Raw Materials. Minerals 9 (4), 207.

2.1.10 PETROUNIAS, P., GIANNAKOPOULOU, P.P., ROGKALA, A., LAMPROPOULOU, P., TSIKOURAS, B., RIGOPOULOS, I., HATZIPANAGIOTOU, K., (2019). Petrographic and Mechanical Characteristics of Concrete Produced by Different Type of Recycled materials. Geosciences 9 (6), 264.

2.1.11 PETROUNIAS, P., GIANNAKOPOULOU, P.P., ROGKALA, A., MARIA KALPOGIANNAKI , PETROS KOUTSOVITIS , MARIA-ELLI DAMOULIANOU, NIKOLAOS KOUKOUZAS., (2020). Petrographic Characteristics of Sandstones as a Basis to Evaluate their Suitability in Construction and Energy Storage Applications. A Case Study from Klepa Nafpaktias (Central Western Greece). Energies 2020,13,1119.

2.1.12 LAMPROPOULOU, P, NIKOLAOS LASKARIS, **PETROUNIAS, P.,** GIANNAKOPOULOU, P.P.,

ROGKALA, A., ANGELOS G. KALAMPOUNIAS, PANAGIOTA TSIGROU, C. KATAGAS, IOANNIS ILIOPOULOS. (2020). Petrogeochemical Approaches To The Characterization Of Obsidian Derived From Nychia Area (Milos Island, Greece) Using Combined Methods. Microchemical Journal.

2.1.13 GIANNAKOPOULOU, P.P., **PETROUNIAS, P.,** ROGKALA, A., LAMPROPOULOU, P., GIANNI, E., PAPOULIS, D., KOUTSOVITIS, P., TSIKOURAS, B., HATZIPANAGIOTOU, K., (2020). Does the Methylene Blue Test Give Equally Satisfactory Results in All Studied Igneous Rocks Relative to the Identification of Swelling Clay Minerals?, Minerals 9 (4)**.**

2.1.14 LAMPROPOULOU, P., **PETROUNIAS**, **P.,** GIANNAKOPOULOU, P.P., ROGKALA, A., KOUKOUZAS, N., TSIKOURAS, B., AND HATZIPANAGIOTOU, K., (2020). The Effect of Chemical Composition of Ultramafic and Mafic Aggregates on Their Physicomechanical Properties as well as on the Produced Concrete Strength. Minerals.

2.1.15 PETROUNIAS, P., ROGKALA, A., GIANNAKOPOULOU P.P., LAMPROPOULOU, P., KOUTSOVITIS, P., KOUKOUZAS, N., LASKARIS, N., POMONIS, P., AND HATZIPANAGIOTOU, K., (2020). Removal of Cu (II) from Industrial Wastewater Using Mechanically Activated Serpentinite. Energies 2020.

2.1.16 BADOUNA, I., KOUTSOVITIS, P., KARKALIS, C., LASKARIDIS, K., KOUKOUZAS N., TYROLOGOU, P., PATRONIS, M., PAPATRECHAS, C., AND **PETROUNIAS, P.,** (2020). Petrological and Geochemical Properties of Greek Carbonate Stones, Associated with Their Physico-Mechanical and Aesthetic Characteristics. Minerals 2020.

2.1.17 TZEVELEKOU, T., LAMPROPOULOU, P., GIANNAKOPOULOU, P.P., ROGKALA, A., KOUTSOVITIS, P., KOUKOUZAS N., **PETROUNIAS, P.,** (2020). Valorization of slags produced by smelting of metallurgical dusts and lateritic ore fines in manufacturing of slag cements. Applied sciences 2020.

2.1.18 PETROUNIAS, P., ROGKALA, A., GIANNAKOPOULOU, P.P., LAMPROPOULOU, P., XANTHOPOULOU, V., KOUTSOVITIS, P., KOUKOUZAS, N., LAGOGIANNIS, I., LYKOKANELLOS, G., GOLFINOPOULOS, A., (2021). An Innovative Experimental Petrographic Study of Concrete Produced by Animal Bones and Human Hair Fibers. *Sustainability* **2021**, *13*, 8107. https://doi.org/10.3390/su13148107.

2.1.19 GIANNAKOPOULOU PP, ROGKALA A, LAMPROPOULOU P, KALPOGIANNAKI M, **PETROUNIAS P**. (2021). Evaluation of Cement Performance Using Industrial Byproducts Such as Nano MgO and Fly Ash from Greece. *Applied Sciences*. 2021; 11(24):11601. https://doi.org/10.3390/app112411601.

2.1.20 PYRGAKI, K., GEMENI, V., KARKALIS, C., KOUKOUZAS, N., KOUTSOVITIS, P., **PETROUNIAS, P**., (2021). Geochemical Occurrence of Rare Earth Elements in Mining Waste and Mine Water: A Review. *Minerals* **2021**, *11*, 860. https://doi.org/10.3390/min11080860.

2.1.21 LAMPROPOULOU, P., XANTHOPOULOU, V., WOJTASZEK-KALAITZIDI, M., **PETROUNIAS, P**., ZOUMPOULI, E., ILIOPOULOS, G., KALAITZIDIS, S., (2022). Characterization of Siliceous Nodules in Western Kefalonia Island Greece: An Initial Approach to Their Formation and Diagenetic

Characteristics. *Minerals* 2022, *12*, 101. https://doi.org/10.3390/min12010101.

2.1.22 PETROUNIAS, P., ROGKALA, A., GIANNAKOPOULOU, P.P., CHRISTOGEROU, A., LAMPROPOULOU, P., LIOGRIS, S., KOUTSOVITIS, P., KOUKOUZAS, N., (2022). Utilization of Industrial Ferronickel Slags as Recycled Concrete Aggregates. *Appl. Sci.* 2022, *12*, 2231. https://doi.org/10.3390/app12042231.

2.1.23 ROGKALA, A., **PETROUNIAS, P**., KOUTSOVITIS, P., GIANNAKOPOULOU, P. P., POMONIS, P., LAMPROPOULOU, P., & HATZIPANAGIOTOU, K. (2022). Rodingites from the Veria-Naousa ophiolite (Greece): Mineralogical evolution, metasomatism and petrogenetic processes. *Geochemistry*, 125860.

2.1.24 CHRISTOPOULOU, M.A., KOUTSOVITIS, P., KOSTOGLOU, N., PARASKEVOPOULOU, C., SIDERIDIS, A., **PETROUNIAS, P**., ROGKALA, A., STOCK, S., KOUKOUZAS, N. (2022). Evaluation of the co_2 storage capacity in sandstone formations from the southeast mesohellenic trough (Greece). *ENERGIES* 2022, *15*, 3491. HTTPS://DOI.ORG/10.3390/EN15103491.

2.1.25 GIAMAS, V., KOUTSOVITIS, P., SIDERIDIS, A., TURBERG, P., GRAMMATIKOPOULOS, T. A., **PETROUNIAS, P.,** GIANNAKOPOULOU, P. P., KOUKOUZAS, N.; HATZIPANAGIOTOU, K. (2022). Effectiveness of x-ray micro-ct applications upon mafic and ultramafic ophiolitic rocks. *MICRON, 158* DOI:10.1016/J.MICRON.2022.103292.

2.1.26 PETROUNIAS, P., GIANNAKOPOULOU, P.P., ROGKALA, A., SIDERIDIS, A., KOUTSOVITIS, P., LAMPROPOULOU, P., KOUKOUZAS, N., POMONIS, P., HATZIPANAGIOTOU, K. (2022). Influence of petrogenesis on the engineering properties of ultramafic aggregates and on their suitability in concrete. *APPL. SCI.* **2022**, *12*, 3990. HTTPS://DOI.ORG/10.3390/APP12083990.

2.1.27 PETROUNIAS, P., GIANNAKOPOULOU, P.P., ROGKALA, A., KALPOGIANNAKI, M., LASKARIS, N., LAMPROPOULOU, P., MOUZAKIS, P., PANAGIOTARAS, D., KOUKOUZAS, N. (2022). Sustainable use of by-products and wastes from Greece to produce innovative eco-friendly pervious concrete. APPL. SCI. 2022, 12, 5861. HTTPS://DOI.ORG/10.3390/APP12125861.

2.1.28 PETROUNIAS, P., ROGKALA, A.; GIANNAKOPOULOU, P. P; KALPOGIANNAKI, M.; LASKARIS, N., LAMPROPOULOU, P., (2022). The role of the aggregate shape on the compressive strength of concrete using a new micro geo-informatics methodology, *MICRON,* ISSN 0968-4328, https://doi.org/10.1016/j.micron.2022.103333.

2.1.29 KOUKOUZAS, N., CHRISTOPOULOU, M., GIANNAKOPOULOU, P.P., ROGKALA, A., GIANNI, E., KARKALIS, C., PYRGAKI, K., KRASSAKIS, P., KOUTSOVITIS, P., PANAGIOTARAS, D. **PETROUNIAS, P**., (2022). Current CO2 Capture and Storage Trends in Europe in a View of Social Knowledge and Acceptance. A Short Review. *Energies* 2022, *15*, 5716. https://doi.org/10.3390/en15155716.

2.1.30 ZARONIKOLA, N., DEBAILLE, V., ROGKALA, A., **PETROUNIAS, P**., R. MATHUR, R., DECRÉE, S., POMONIS, P., HATZIPANAGIOTOU, K., TSIKOURAS, B., (2022). Investigation of metasomatism using

Cu, Zn and Fe stable isotopes: Rodingitization of mafic and ultramafic rocks in ophiolites from northern Greece. **LITHOS (LITHOS 10573R3 - Editor Decision – accepted 10/11/2022 (**https://doi.org/10.1016/j.lithos.2022.106945**).**

Selected Articles in Refereed Conference

ROGKALA, A., **PETROUNIAS, P.,** TSIKOURAS, B., HATZIPANAGIOTOU, K., (2016). Petrogenetic significance of spinels from serpentinised peridotites from the Veria- Naousa ophiolite.-Bulletin of the Geological Society of Greece, Proceedings 14th International Congress of the Geological Society of Greece, Thessaloniki, Greece, 25-27/5/2016, 50, 1999-2008.

PETROUNIAS, P., ROGKALA, A., KALPOGIANNAKI, M., TSIKOURAS, B., HATZIPANAGIOTOU, K., (2016). Comparative study of physico-mechanical properties of ultrabasic rocks (Veria-Naousa ophiolite) and andesites from central Macedonia (Greece).-Bulletin of the Geological Society of Greece, Proceedings 14th International Congress of the Geological Society of Greece, Thessaloniki, Greece, 25-27/5/2016, 50, 1989-1998.

KALPOGIANNAKI, M., POMONIS, P., **PETROUNIAS, P.,** GIANNAKOPOULOU, P.P., ROGKALA, A., KOUKOUZAS, N. & HATZIPANAGIOTOU, K. (2022). The key role of the applied petrology in Recycling Materials for a More Sustainable Society. 1st International Cement Based Composites Congress (online), 29-30 June 2022, Turkey, Abstract Book, Special publication, 1, 16-22.

KALPOGIANNAKI, M., POMONIS, P**., PETROUNIAS, P.,** GIANNAKOPOULOU, P.P., ROGKALA, A., CHRISTOPOULOU, M.A., KOUKOUZAS, N. & HATZIPANAGIOTOU, K. (2022). Applied Petrography in Concrete: A short Review. 1st International Cement Based Composites Congress (online), 29-30 June 2022, Turkey, Abstract Book, Special publication, 1, 46-50.

For more publications check in my Google Scholar ID (https://scholar.google.gr/citations?user=XNTI7DkAAAAJ&hl=el) linked with the QR-code below: