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Curriculum Vitae (Full)

Contact

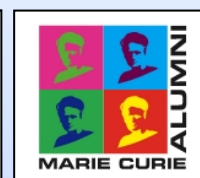
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Web of Science - Clarivate: <https://www.webofscience.com/wos/author/record/1475344>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=35228969700>

Name: Platon Gkamaletsos (a.k.a. Platon Gamaletsos)

Father Name: Nikolaos Gkamaletsos [Rear Admiral (Ret.) / Ex Inspector General of the Hellenic Navy]

Mother Name: Argyroula Paparizou [Commander (Ret.) of the Hellenic Navy]

Birth: 04 Oct 1973

Citizen / Nationality: Greek / Hellenic

Marital status: Married

Languages: Greek (mother tongue); English (professional working proficiency); Danish (basic knowledge)

Biographical information

Dr. Platon N. Gkamaletsos / PNG (a.k.a. Platon Gamaletsos; Scopus ID: 35228969700 | ORCID: 0000-0002-1171-9032 | Web of Science ResearcherID: N-2459-2018) a member of Marie Curie Alumni Association (MCCA) is an Associate Professor of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC (Chania, Greece). He is specialized in the (nano)-mineralogy/-geochemistry of various geomaterials. He received his PhD in the field of (nano)-mineralogy/-geochemistry of ore deposits and their metallurgical residues (2014). Over the last years -among others- he was a research associate (i.e., Marie Curie post-doc as part of the EU-funded project HC Ørsted Postdoc programme) at the DTU Nanolab - National Centre for Nanofabrication and Characterization (ex "Center for Electron Nanoscopy / CEN") of the Technical University of Denmark / DTU. During his post-doc at DTU, he studied the nature of strategic metals (such as REEs etc.) and actinide elements (such as Th) in various geomaterials (incl. mining/metallurgical materials) by means of electron microscopic (SEM & HRTEM) and spectroscopic techniques. Afterwards, he was a postdoc researcher (research associate) at the Department of Materials Engineering, KU Leuven (Belgium) and, later, at the Institute of Nuclear & Radiological Sciences and Technology, Energy & Safety of NCSR "Demokritos" (Greece). PNG is an advanced user at the SUL-X Beamline of the "Synchrotron Laboratory for Environmental Studies" of the Institute for Synchrotron Radiation and Photon Science (IPS) at the KIT Light Source (KIT, Karlsruhe, Germany). He is also a user of the DIFFABS beamline of the Synchrotron SOLEIL (Saint-Aubin, France). He is a reviewer in journals. He has several publications in international peer-reviewed journals, while has attended numerous international conferences presenting his research activities. He has also been involved in several research programs supported by European Union. He is a member of the Geochemical Society.

Academic/Research Skills & Competences

- ❖ *Materials Characterization*
- ❖ *Combination of Conventional & Advanced Techniques/Methods for Qualitative/Quantitative Materials Characterization*
- ❖ *Design of Materials Characterization Techniques*
- ❖ *Sample Preparation*
- ❖ *Data Processing – Evaluation – Interpretation*
- ❖ *Teaching*
- ❖ *Mentoring/Coaching*
- ❖ *Synergy & Collaboration*
- ❖ *Brainstorming & Inspiration – Golden Circle: Why-How-What*

Keywords / tags

Nanogeosciences; (nano)-mineralogy; (bio)-mineralogy; (nano)-geochemistry; isotope geochemistry; (geo)-materials; petrology; electron microscopy; X-ray absorption spectroscopy; SEM; TEM; (μ)-XANES/-EXAFS; mineral resources; ore deposits; metallurgical residues; mineral waste streams; metallurgical slags; industrial wastes; industrial sludges; incineration ashes; sustainability; recovery; base metals; strategic metals; critical metals; noble metals; heavy metals; hazardous (toxic/radioactive) elements; bonus & penalty elements.

Current status

- ✓ **Associate Professor** of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC (Chania, Greece)
- ✓ **Member of the Marie Curie Alumni Association (MCCA)** - GLOBAL NETWORK OF MSCA ALUMNI is an international non-profit organization established and supported by the European Commission.

Other activities – skills

- **Scuba diving (Open Water Diver – PADI)**
- **Ultra-light & Light Aircrafts**
- **Tennis**
- **Basketball**

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1 SCIENTIFIC & RESEARCH EXPERIENCE / CARIER

Professor Positions	
2025 – present	Associate Professor of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC (Chania, Greece).
2024 – 2025	Assistant Professor of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC (Chania, Greece).
2020 – 2024	Tenured Assistant Professor of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC (Chania, Greece).
Other Academic Positions	
2023 – present	Instructor of the Lifelong Learning Center (KE.ΔI.BI.M.) of thee Agricultural University of Athens (AUA). Decision made by the Council of the Lifelong Learning Center (KE.ΔI.BI.M.) of AUA (17.10.2023).
2021 – present	Remote Evaluator at Horizon Europe - EIC Pathfinder OPEN.
2018 – present	Member of the Marie Curie Alumni Association (MCCA) - GLOBAL NETWORK OF MSCA ALUMNI is an international non-profit organization established and supported by the European Commission (https://www.mariecuriealumni.eu).
2020 – 2021	Visiting Research Associate (external co-worker at KU Leuven) at the Sustainable Metals Processing and Recycling Unit, Department of Materials Engineering (MTM), KU Leuven, Belgium.
2020 – 2021	Visiting Professor at the Environmental Research Laboratory (EREL), Institute of Nuclear & Radiological Sciences and Technology, Energy & Safety (INRASTES), National Centre of Scientific Research “Demokritos” (NCSR “Demokritos”, Agia Paraskevi, Athens, Greece).
2019 – 2020	Remote Evaluator at H2020 FETOPEN-01-2018-2019-2020: FET-Open Challenging Current Thinking, which is part of the Future and Emerging Technologies (FET) programme / Research and Innovation Actions (RIA).
2019 – 2020	Researcher at the Environmental Research Laboratory (EREL), Institute of Nuclear & Radiological Sciences and Technology, Energy & Safety (INRASTES), National Centre of Scientific Research “Demokritos” (NCSR “Demokritos”, Agia Paraskevi, Athens, Greece). The subject of the research is related to the characterization of ore deposits and metallurgical residues as well as to the strategic metals’ utilization in energy applications.

2019 – 2020	<p>Postdoctoral Researcher (Research associate) at the Sustainable Metals Processing and Recycling Unit, Department of Materials Engineering, KU Leuven, Belgium:</p> <p>(i) <u>Quality Assurance Specialist</u> of the Sustainable Resources for Engineered Materials / SReMat (https://www.mtm.kuleuven.be/Onderzoek/sremat) of the SReMat Innovation Society</p> <p>(https://www.mtm.kuleuven.be/Onderzoek/sremat/centre)</p> <p>(ii) <u>Power User</u> of the “SReDat” Secondary Resource database:</p> <p>http://www.sreway.info/sredat/http://www.sreway.info/sredat/)</p>
2018	<p>Visiting researcher fellow at the Center for Electron Nanoscopy (CEN) of the Technical University of Denmark (DTU). The subject of the research was related to mineralogical and geochemical investigation of ore deposits and other mineral resources.</p>
2015 – 2018	<p>Postdoctoral Researcher at the Center for Electron Nanoscopy (CEN) of the Technical University of Denmark (DTU) awarded by a Marie Curie Fellowship as part of the EU-funded project HC Ørsted Postdoc, cofunded by Marie Curie Actions (COFUNDPostdocDTU). Supervisor: Senior Researcher Dr. Takeshi Kasama. The project entitled as “Nanoscale electron microscopic investigation of strategic & hazardous elements in critical raw materials and metallurgical residues” was related to mineralogical and geochemical investigation of ore deposits and other mineral resources. I used various nanoscale characterization techniques such as scanning electron microscopy, transmission electron microscopy and synchrotron radiation-based X-ray spectroscopy as well as other conventional bulk analytical techniques (XRD, ICP-MS, etc.).</p>
2015	<p>Visiting Fellow at the Faculty of Engineering Science (Department of Materials Engineering / MTM) of the KU Leuven, Belgium.</p>
2015 – 2015	<p>Research scholarships 12 months – IKYDA: “<i>Biogenic Sulfur Minerals in the Shallow–Submarine Environment of the Hellenic Volcanic Arc</i>”. The Hellenic State Scholarships Foundation (IKY) and the German Society for Academic Exchanges (DAAD) have been running the IKYDA program based on a bilateral agreement to further promote the scientific cooperation of the Tertiary Education Institutes, as well as the research institutes, in Greece and Germany. IKYDA grants Prof. Dr. Athanasios Godelitsas’ group to study the biogenic sulfur minerals in the shallow-submarine environment of the Hellenic Volcanic Arc (HVA) focusing on the shallow-sea sediments off Milos Island (Aegean Sea, Greece) in close collaboration with the SUL-X beamline for environmental studies of the ANKA Synchrotron Radiation Facility (2015). For the</p>

	<p>research purposes, many analytical techniques and methods had been used. Among others, SEM/TEM, XAFS, XRD, ICPMS and FTIR had been utilized.</p> <p>Project Leader: Professor Dr. Athanasios Godelitsas.</p>
2014 – 2015	<p>Research Associate at the Laboratory of Metallurgy (Prof. Dr. D. Panias group), School of Mining & Metallurgical Engineering of the National Technical University of Athens (NTUA). The subject of the research was related to mineralogical and geochemical investigation of bauxite deposits and their metallurgical residues.</p>
2014 – 2016	<p>Research Associate at the Material and Environmental Isotope Geochemistry Project (Dr. E. Dotsika group) of the Institute of Nanoscience and Nanotechnology (INN) of the NCSR "Demokritos" (Greece). The subject of the research was related to isotope geochemistry of bauxite deposits from Parnassos-Ghiona area (Greece).</p>
2014	<p>Researcher at the Material and Environmental Isotope Geochemistry Project of the Institute of Nanoscience and Nanotechnology (INN) of the NCSR "Demokritos" (Greece).</p>
2006 – 2014* <i>*PhD defense date: 19.09.2014</i> <i>*PhD graduation ceremony (oath taking) date: 11.12.2014</i>	<p>Researcher in the frame of PhD Thesis entitled as <i>"Mineralogy and geochemistry of bauxites from Parnassos-Ghiona mines and the impact on the origin of the deposits"</i> (in English), mainly using Large Scale Facilities (all the aspects of X-rays), and nanoscale methods, in collaboration with mining industry in Southeastern Europe (Greece, Balkans, Hungary). The PhD Thesis focused on the investigation of Al ore deposits (bauxites) and their metallurgical residues (red mud). Supervisor: Professor Dr. Athanasios Godelitsas.</p>
2013	<p>Assistant researcher at the Laboratory of Nuclear Physics, Department of Nuclear & Particle Physics, Faculty of Physics, University of Athens (Greece).</p>
2012	<p>Assistant Beamline Scientist (Research Fellow) at SUL-X beamline of ANKA Synchrotron Radiation Facility of the Institute for Photon Science and Synchrotron Radiation (IPS), KIT (Germany).</p>
2007	<p>Researcher at the Laboratory of Mineralogy of the Institute of Geology & Mineral Exploration (Athens, Greece).</p>

2 ACADEMIC & RESEARCH QUALIFICATIONS/SKILLS

2.1 Education / academic qualifications

- ❖ **Postdoctoral Researcher** in (nano)-mineralogy & chemistry in various metallurgical residues and materials characterization / materials science (supervisor Assoc. Prof. Dr. Yiannis Pontikes), Department of Materials Engineering, KU Leuven, Βέλγιο (2019 – 2020)
- ❖ **Postdoctoral Researcher** in (nano)-mineralogy/-geochemistry of various ore deposits and metallurgical residues (supervisor Senior Researcher Dr. Takeshi Kasama), Center for Electron Nanoscopy (CEN), Technical University of Denmark (DTU), Denmark (2015 – 2018)
- ❖ **PhD** in (nano)-mineralogy/-geochemistry of ore deposits and metallurgical residues (supervisor Prof. Dr. Athanasios Godelitsas), Faculty of Geology & Geoenvironment, School of Science, National and Kapodistrian University of Athens / NKUA, Greece (2006 – 2014)
- ❖ **BSc** in Geology & Geoenvironment, Faculty of Geology & Geoenvironment, School of Science, National and Kapodistrian University of Athens / NKUA, Athens, Greece (2005)
- ❖ Graduated from Private School “I.M.Panagiotopoulos”, Palaeo Psychiko, Athens, Greece (1991)

2.2 Specialized courses / schools / workshops / seminars – attended

- ◆ **Oxford Instruments Seminar on High resolution and light elemental analysis in TEM & SEM**, Center for Electron Nanoscopy (CEN), Technical University of Denmark (DTU), Kongens-Lyngby, Copenhagen, Denmark (March 6, 2017)
- ◆ **Electron microscopy for the characterization of advanced materials (10250)**, Center for Electron Nanoscopy (CEN), Technical University of Denmark (DTU), Kongens-Lyngby, Copenhagen, Denmark (August - November, 2016)
- ◆ **11th School on the Physics and Chemistry of the Actinides (11th SPCA)**, European Photon and Neutron (EPN) Science Campus, Grenoble, France (March 13-16, 2016)
- ◆ **Electron Microscopy and techniques for imaging and analysis on the micro- and nano-scale**, Technical University of Denmark, Kongens Lyngby, Copenhagen, Denmark (February 2, 2016)
- ◆ **XANES and EXAFS analysis using the IFEFFIT program package** with Bruce Ravel (NSLS, USA) as guest lecturer. The lecture was part of the course “EXAFS and related techniques in catalysis” at the Institute for Chemical Technology and Polymer Chemistry (ITCP), the Institute for Catalysis Research and

Technology (IKFT), the Institute for Photon Science and Synchrotron Radiation (IPS) and the ANKA Synchrotron Radiation Facility, KIT Campus South, Karlsruhe, Germany, September 10-14, 2012.

- ◆ **XAFS spectroscopy: Introduction, measurement, data evaluation**, KIT Campus North, Synchrotron Radiation Source ANKA, Karlsruhe, Germany, November 23-25, 2010 (a grant by Deutsche Mineralogische Gesellschaft – DMG).
- ◆ **Clay minerals characterization course**, Laboratory of Geochemistry, Department of Mineralogy-Petrology-Economic Geology, School of Geology, Aristotle University of Thessaloniki (Thessaloniki, Greece).

2.3 Featured analytical skills

- **SEM-EDS/-WDS, STEM mode on SEM:** Research and hands-on operation experiences in various FEI, Jeol & Philips SEM instruments with emphasis to FEI Inspect S (especially for WDS), FEI Quanta 200 FEG SEM, Jeol JSM5400, Jeol JSM5600 and Philips XL30 FEG.
- **TEM/HRTEM in TEM mode (BF, DP, SAED, and EDX):** Research and hands-on operation experiences in a FEI Tecnai T20 G² FEG TEM operated at 200 kV. Experienced in TEM instrument operation and day-to-day maintenance/optimization of TEM condition (FEI Tecnai T20 G² FEG TEM and TEM CM-200 FEG Philips). User of a FEI Titan Analytical 80-300ST FEG TEM operated at 300 kV.
- **TEM-EELS:** Basics in EELS measurements and spectral evaluation using a FEI Titan Analytical 80-300ST FEG TEM operated at 300 kV.
- **SEM & TEM data analysis:** Data analysis using relevant software packages such as WinCasino, SRIM, Crystal Diffract, Single Crystal, Crystal Maker, Gatan Digital Micrograph, INCA, Aztec, EDAX-Ametek and Esprit.
- **Sample preparation for TEM observation** (including the conventional preparation methods):
 - Ar ion milling* (advanced user)
 - SEM-FIB* (only basics)
 - NanoMill TEM specimen preparation after FIB* (advanced user)
- **XANES/EXAFS:** Experienced in spectral evaluation and interpretation using Athena & Artemis as well as IGOR Pro, PyMca and Origin Pro software packages.
- **PXRD:** Experienced in powdered samples measurements and PXRD data evaluation using the EDA (Bruker), the HighScore Plus (PANalytical) and the TOPAS (Bruker; for quantification and refinement parameters) software packages.

- **Optical Microscope:** Experienced in the study of various samples using the Zeiss Axio Imager.Z1m (with AXIOVISION 4.7 software) motorized optical microscope in transmitted and reflected light.

3 ACADEMIC FELLOWSHIPS/AWARDS and RESEARCH & FUNDED PROJECTS

3.1 Fellowships – Grants – Honors – Awards – Invited Speaker

- Our paper *“Structural state of rare earth elements in eudialyte-group minerals”* (by Anouk M. Borst, Adrian A. Finch, Henrik Friis, Nicola J. Horsburgh, Platon N. Gamaletsos, Joerg Goettlicher, Ralph Steininger and Kalotina Geraki) **awarded the 2021 Howie Award** (Best Paper) of the Mineralogical Society. This paper was one of a group selected by the editors of the two Society journals with the winner chosen by the Society’s Awards Panel. Scoring was based on the following criteria: novelty, interdisciplinarity, applicability, and how the science is advanced by the new work.
- As an **invited speaker** at the symposium of the American Chemical Society (ACS Spring 2020) *“Impact of Engineered & Natural Nanomaterials on the Environment: A symposium in Honor of Dr. Michael F. Hochella”*, I gave an oral presentation about the significance of nanogeoscience in ore and raw materials research (please see: conference publication #45). **That symposium was held to honor Emeritus Professor Dr. Michael F. Hochella.**
- **Visiting Fellow at the KU Leuven** to conduct research at the Faculty of Engineering Science (Department of Materials Engineering / MTM), Leuven, Belgium, 2015.
- **Grant by International Union of Crystallography (IUCR), International X-ray Absorption Society (IXAS), Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) and American Physical Society (APS)** for participation in the “XAFS16 - 16th International Conference on X-ray Absorption Fine Structure”, Karlsruhe, Germany, August 23-28, 2015.
- **Research scholarships – IKYDA: “Biogenic Sulfur Minerals in the Shallow–Submarine Environment of the Hellenic Volcanic Arc”.** The Hellenic State Scholarships Foundation (IKY) and the German Society for Academic Exchanges (DAAD) have been running the IKYDA program based on a bilateral agreement to further promote the scientific cooperation of the Tertiary Education Institutes, as well as the research institutes, in Greece and Germany. IKYDA grants our group to study the biogenic sulfur minerals in the shallow-submarine environment of the Hellenic Volcanic Arc (HVA) focusing on the shallow-sea sediments off Milos Island (Aegean Sea, Greece) in close collaboration with the SUL-X beamline for environmental studies of the ANKA Synchrotron Radiation Facility (2015).
- **Grant of Fellowship by KIT/ANKA** as Assistant Beamline Scientist at SUL-X Beamline of ANKA Synchrotron Radiation Facility of the Institute for Photon Science and Synchrotron Radiation (IPS), Karlsruhe Institute of Technology, Karlsruhe, Germany (2012).

- **ANKA Synchrotron Highlights 2010/2011** (*The nature of thorium in Greek aluminium ores and their residues*).
- **Grant by Deutsche Mineralogische Gesellschaft – DMG** for participation in the Course “XAFS spectroscopy: Introduction, measurement, data evaluation”, ANKA Synchrotron Radiation Facility, Karlsruhe Institute of Technology, Karlsruhe, Germany (2010).

3.2 Funding Projects

3.2.1 Funding research projects

- **Marie Curie Fellowship as part of the EU-funded project HC Ørsted Postdoc, cofunded by Marie Curie Actions (COFUNDPostdocDTU)** at the Center for Electron Nanoscopy (CEN), Technical University of Denmark (DTU), 2015-2018.

Project title: “Nanoscale electron microscopic investigation of strategic & hazardous elements in critical raw materials and metallurgical residues”

Principal investigator (PI): Dr. Platon N. Gamaletsos

Funder: European Union. This project received the EU funds upon PNG proposal in February of 2015. H.C. Ørsted fellowship programme funding by the European Union's Seventh Framework Programme and Horizon 2020 Research and Innovation Programme under Marie Skłodowska-Curie Actions grant no. 609405 (FP7) and 713683 (H2020): https://cordis.europa.eu/project/rcn/185528_en.html

Budget: 1,125,000.00 DKK

- **Removing the waste streams from the primary Aluminium production and other metal sectors in Europe / Acronym: RemovAL (3E180673)** at the Department of Materials Engineering (MTM), KU Leuven, Belgium, 2019-2020.

Project title: “Removing the waste streams from the primary Aluminium production and other metal sectors in Europe”

Principal investigator (PI): Assoc. Prof. Dr. Yiannis Pontikes (KU Leuven partner)

Funder: European Union. In the frame of the program entitled as “H2020-SC5-Climate action, resources, efficiency and raw materials”. The research has been performed within the **RemovAL** project and received funding from the “European Community’s Horizon 2020 Programme (H2020/2014-2020) under grant agreement n° 776469”:

<https://www.removal-project.com>

<https://www.kuleuven.be/onderzoek/portaal/#/projecten/3E180673>

Budget: 11,481,599.13 €

3.2.2 Science & Technology in Private Sector - Funded Projects for the Provision of Scientific Services & Technical advices

- **Laboratory determination of the physicochemical and mechanical characteristics of building mortars and renders for the preservation and restoration of the Ottoman Mosque Imaret, in Arta, Greece (83278)**, see: <https://efaart.gr/en/mnimeia-imaret-en> (ΚΗΜΔΗΣ: 24SYMV015231133). The research was conducted in the School of Mineral Resources Engineering, Technical University of Crete (2024).

Project title: “Laboratory determination of the physicochemical and mechanical characteristics of building mortars and renders for the preservation and restoration of the Ottoman Mosque Imaret, in Arta, Greece”

Principal investigator (PI): Asst. Prof. Dr. Platon N. Gamaletsos

Funder: Ephorate of Antiquities of Arta

Budget: 4,800.00 € (excl. VAT)

- **Characterization of raw and concentrated samples from Thuddungra mine (Australia) of private company “Young Mining Company Pty Ltd” (83206)**. The research was conducted in the School of Mineral Resources Engineering, Technical University of Crete (2024).

Τίτλος έργου: «Ανάκτηση μαγνησίτη από το λεπτομερές κλάσμα -20mm του μεταλλείου Thuddungra (Αυστραλία)» / Αγγλικός τίτλος: «Recovery of magnesite from the fines -20 mm of Thuddungra Mine NSW Australia»

Principal investigator (PI): Asst. Prof. Dr. Evangelos Petrakis

Funder: Private Company “Young Mining Company Pty Ltd”

Budget: 12.000,00 € (including VAT)

- **Mineralogical & chemical analysis, petrography and physical-mechanical properties of marbles from active quarries from Kavala & Drama area of private company “Dermitzakis Bros S. A. GREEK WHITE MARBLE” (82912)**. The research was conducted in the School of Mineral Resources Engineering, Technical University of Crete (2023-2024).

Project title: “Characterization of Marbles”

Principal investigator (PI): Asst. Prof. Dr. Platon N. Gamaletsos

Funder: Private Company “Dermitzakis Bros S. A. GREEK WHITE MARBLE”

Budget: 6,000.00 € (including VAT)

3.3 Participation in other international research projects

- **Mineralogical characterization of crystalline phases due to calcification onto aortic heart valves** – School of Mineral Resources Engineering (Technical University of Crete, Chania, Greece) in collaboration with the Institute of Geological Sciences of the University of Bern, Switzerland (2025-2026).
- **Synchrotron X-ray absorption (XAS) analyses of calcium-based biominerals** – School of Mineral Resources Engineering (Technical University of Crete, Chania, Greece) in collaboration with the Faculty of Dental Medicine and Oral Health Sciences, McGill University (Montreal, Quebec, Canada) and the Institute of Geological Sciences of the University of Bern, Switzerland (2024).
- **Determination of lattice parameters and crystal chemistry of Ni-stevensite for proposal of a new mineral name of the smectite group** – School of Mineral Resources Engineering, Technical University of Crete (Chania, Greece) in collaboration with French National Synchrotron Facility / SOLEIL, Saint-Aubin, Essonne, France (2023). Project ID: 20230148.
- **Distribution and speciation of rare-earth elements and yttrium (REY) of REY-rich pelagic deep-sea sediments in the northwestern Pacific Ocean by means of electron microscopy and synchrotron radiation techniques** – Center for Electron Nanoscopy / CEN of Technical University of Denmark / DTU (Copenhagen, Denmark), Japan Agency for Marine-Earth Science and Technology / JAMSTEC, University of Tokyo / Todai and Chiba Institute of Technology / CIT (Japan) in collaboration with ANKA Synchrotron Radiation Facility / KIT, Karlsruhe, Germany (2017).
- **Distribution and speciation of REE and thorium in European eudialyte ores and Th,REE-containing metallurgical residues/slugs** – Center for Electron Nanoscopy / CEN of Technical University of Denmark / DTU (Copenhagen, Denmark) in collaboration with University of St. Andrews (UK) and the Mineral Resources Research Group of the Institute for Geo-Resources and Environment (Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology / AIST, Tsukuba, Japan). Synchrotron radiation measurements have been performed mainly at the ANKA Synchrotron Radiation Facility / KIT, Karlsruhe, Germany (ANKA project ID: A2016-027-011253) and, additionally, at the Diamond Light Source, Oxfordshire, UK (Diamond proposal ID: 15903).
- **Investigation of scandium and lanthanides (REEs) in high-grade karst-type bauxite from Greece** - Center for Electron Nanoscopy / CEN of Technical University of Denmark / DTU (Copenhagen, Denmark) in collaboration with the Department of Electrical and Materials Science and the Ultramicroscopy Research Center at the Kyushu University (Fukuoka, Japan) and the Mineral Resources Research Group of the Institute for Geo-Resources and Environment (Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology / AIST, Tsukuba, Japan).

- **Micro-/nano-scale study of noble metals of mixed sulfide ore deposits** – Center for Electron Nanoscopy / CEN of Technical University of Denmark / DTU (Copenhagen, Denmark) in collaboration with the Laboratory for Biological Geochemistry (LGB) of the École Polytechnique Fédérale de Lausanne / EPFL, Lausanne, Switzerland (2016-2017). This project concerns thorough study of “invisible” gold from mixed sulfide ore deposits by means of electron microscopic techniques (SEM/TEM) along with secondary ion mass spectrometry (NanoSIMS).
- **The nature of thorium in REE-bearing coastal deposits of northern Greece** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility / KIT, Karlsruhe, Germany (2015). Project ID: A2015-025-008636.
- **Speciation of arsenic in Fe-Ni-ores (laterites) from active mining areas (central Greece)** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility / KIT, Karlsruhe, Germany (2014). Measurements have been performed additionally within the A2014-024-006751 project.
- **Biogenic sulfur minerals in the environment of eastern Mediterranean volcanoes: the case of shallow-sea hydrothermal vents off Milos Island (Greece)** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). It will be funded by the European Commission under the Seventh Framework Programme European I3 project CALIPSO (CALIPSO integrated infrastructure initiative, 2014). Project ID: A2014-024-006751.
- **Speciation of iron in Aluminium ores (bauxites) and their residues (red mud) from active mining areas (Greece)** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the Institute for Photon Science and Synchrotron Radiation (IPS) and the ANKA Light Source of KIT, Germany (2012). Measurements have been performed as in-house project of ANKA/SUL-X beamline.
- **Speciation of iron in Cr-spinels from Chromium mines in Northern Greece** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the Institute for Photon Science and Synchrotron Radiation (IPS) and the ANKA Light Source of KIT, Germany (2012). Measurements have been performed as in-house project of ANKA/SUL-X beamline.
- **The nature of uranium in sedimentary rocks of Epirus region (NW Greece)** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the Institute for Photon Science and Synchrotron Radiation (IPS) and the ANKA Light Source of KIT, Germany (2012). Project ANS-114.

- **The nature of silver and gold in mining products of Chalkidiki (northern Greece)** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the Institute for Photon Science and Synchrotron Radiation (IPS) and the ANKA Light Source of KIT, Germany (2012). Project ENV-234.
- **The nature of As-sulfide precipitates of the shallow-sea hydrothermal vents off Milos Island (Hellenic Volcanic Arc)** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the ANKA Synchrotron Light Source of KIT, Germany (2012). Measurements have been performed additionally within the ENV-218 project.
- **The nature of As in hydrothermal vents of Kolumbo shallow-submarine volcano of the Hellenic Volcanic Arc (Santorini, Greece)** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the ANKA Synchrotron Light Source of KIT, Germany (2012). Measurements have been performed additionally within the ENV-218 project.
- **Distribution and speciation of contaminants in bauxite and red mud from Ajka alumina plant, Hungary** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the ANKA Synchrotron Light Source of KIT, Germany (2012). Project ENV-218.
- **Thorium chemistry in Greek bauxites and bauxite-tailings (red mud) using X-ray absorption spectroscopy** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the European Commission: Integrated Infrastructure Initiative (I3) "European Light Sources Activities" (ELISA, 2009). Project ENV-122.
- **Speciation of Cr in natural clays from Crommyonia volcanic area, Greece** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the European Commission: Integrated Infrastructure Initiative (I3) "European Light Sources Activities" (ELISA, 2008). Measurements have been performed additionally within the ENV-111 project.
- **Partitioning and speciation of Cr in high-quality diasporic bauxite from Greece** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the European Commission: Integrated Infrastructure Initiative (I3) "European Light Sources Activities" (ELISA, 2008). Measurements have been performed additionally within the ENV-111 project.

- **Uranium distribution and speciation in carbonate rocks from the greater Attica region, Greece** – Department of Geology and Geoenvironment of University of Athens / UoA (Athens, Greece) in collaboration with ANKA Synchrotron Radiation Facility (KIT, Karlsruhe, Germany). Funded by the European Commission: ENV-111, Integrated Infrastructure Initiative (I3) "European Light Sources Activities" (ELISA, 2008).

4 RESEARCH INTERESTS

My main research interest is related to metal/mineral characterization of disciplinary mining & metallurgical fields. In particular, I thoroughly study metals/minerals from natural mineral resources (such as primary metal ore deposits) as well as from mineral waste streams (such as metallurgical residues, metal slags, incineration ashes, industrial sludges, etc.). My main objective is to assist mining/metallurgical industry and engineers to exploit & recover valuable metals/minerals by a sustainable development of cost-effective metals extraction for industry and society, while reducing a risk to the local communities next to the industrial complexes:

- A. (Nano)-mineralogical and (nano)-geochemical investigation of various mineral resources, such as **ore deposits** and **industrial minerals**, as well as the discovery of supplementary **potential mineral resources**:
 - I. Al-ore deposits “**Bauxites**” from Greece, Balkans and Hungary.
 - II. Ni-Fe-ore deposits “**Laterites**” from Greece.
 - III. Cr-ore deposits “**Chromites**” from Greece.
 - IV. **Mn-ore** deposits from Greece.
 - V. **Au-containing mixed sulfides ore deposits** from Greece.
 - VI. **REE ore deposits** from Nordic region and Greenland.
 - VII. **REY-rich pelagic deep-sea sediments in the northwestern Pacific Ocean***
 - VIII. **Zeolite- & clay-rich** deposits from Greece.
 - IX. Investigation of **coastal sands as promising mineral resources** from Mediterranean region for their potential in **strategic metals**.
- B. Materials characterization of mineral waste streams, such as:
 - i. **Metallurgical residues**, e.g. bauxite metallurgical residue (the so-called “red mud”), etc.
 - ii. **Metallurgical slags** derived from red mud processing
 - iii. **By-products**
 - iv. **Medical/hospital wastes incinerator ashes**

To meet my professional needs, I am focusing on the material investigation at different scales, with emphasis to micro- and nano-scale, mainly using electron microscopic (SEM-EDS/WDS) and nanoscopic (TEM/HRTEM) techniques along with Synchrotron radiation (SR) X-ray absorption spectroscopic methodologies (μ -XRF, μ -XRD and (μ)-XANES/-EXAFS). In addition, I combine Laser-based (Laser micro-Raman, LA-ICP-MS), together with other spectroscopic (NanoSIMS, FTIR, ^{57}Fe Mössbauer), and thermal techniques (TGA-DSC). Simultaneously, gamma-ray spectrometry (HPGe) for the determination of natural

* In collaboration with Japanese Universities/Institutes (i.e., Japan Agency for Marine-Earth Science and Technology / JAMSTEC, University of Tokyo / Todai and Chiba Institute of Technology / CIT) and, particularly, with Chief Scientist Dr. Junichiro Ohta at the Chiba Institute of Technology / CIT (Japan), who is member of Professor Yasuhiro Kato's group of University of Tokyo / Todai.

radioactivity for various (geo)-materials is utilized. To sum up, I apply advanced and sophisticated techniques and state-of-the-art combinatorial methodologies in order to understand the nature of basic, strategic, critical and noble metals (e.g., Al, Fe, Cr, Pb, Zn, Sb, Ti, Ga, REEs, Ag, Au, etc.) as well as potential hazardous elements (e.g., Th, U, As, V, etc.) for mining/metallurgical industry and society, which are in low concentration and are localized at the micro-/nano-meter in ores, metallurgical residues and other mineral waste streams. I, therefore, join forces with engineers for a near-zero-waste processes afterward a development of a cost-effective metal recovery ending to a final polymer-bonded composite or other building materials. The research and development of innovative and sustainable processes for industry and society striving towards to waste recycling by valuable metal recovery ending to high quality building materials production (circular economy) is the vital expectation.

Nevertheless, I am also interested to conduct research in the field of isotopic geochemistry, focusing on the isotopic study of various geo-materials including carbonates (e.g., marbles, limestones, speleothems, etc.), ancient/historic structural materials (e.g., glass, mortars, etc.) and biogenic carbonate materials (e.g., biological residues of human tissue, etc.). The variation of stable isotopes (such as $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$) in various carbonates, as also in biogenic carbonate materials, constitute trustworthy proxies of the change of the natural conditions.

5 TEACHING – RESEARCH – ADMINISTRATIVE EXPERIENCE

5.1 Teaching experience

5.1.1 Undergraduate courses

Teaching the following undergraduate courses at the School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece (in Greek):

Course	Code	Semester	Course Responsible Teacher	Period
Mineralogy (Principles & Methods)	ΜΟΠ102	1 st	Gamaletsos	2020 – present
Systematic Mineralogy	ΜΟΠ201	2 nd	Gamaletsos	2020 – present
Petrology	ΜΟΠ202	3 rd	Christidis	2020 – present
Field Trip II	ΜΟΠ704	5 th	Gamaletsos	2020 – 2025 *
Instrumental Methods in Mineralogy & Petrology	ΜΟΠ422	8 th	Gamaletsos	2020 – 2025 *
* Course has been terminated due to New Undergraduate Programme according to 15 th General Assembly (11/6/2025)				

5.1.2 Postgraduate courses

Teaching the following postgraduate courses under the Postgraduate Program (PGP) at the School of Mineral Resources Engineering / SMRE (Technical University of Crete / TUC, Chania, Greece):

- ◆ **2024 – present: Sustainable processing of ores, by-products and critical raw materials:** Code ST212 (1st winter semester / in English)
- ◆ **2020 – 2023: Instrumental Methods in Mineral-Chemistry of Various Mineral Resources & Related Engineered Materials:** Code ΜΟΠ312 (2nd spring semester / In Greek)

5.2 Advisor/Supervisor of BSc & MSc Theses

- #10.** Ms. Efstathia Papakonstantinou **BSc Thesis** entitled «*Mineralogical characterization and determination of physico-mechanical properties of building mortars and renders from the Ottoman Mosque Imaret, in Arta, Greece*» (ongoing). Examination Committee: Associate Prof. Dr. Platon Gamaletsos (supervisor), Asst. Prof. Dr. George Xiroudakis, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #09.** Mr. George-Marios Andreosatos **BSc Thesis** entitled «*Shock effects in ordinary chondrite meteorites - Migration and redistribution of elements and implications on potential asteroid mining*» (ongoing). Examination Committee: Associate Prof. Dr. Platon Gamaletsos (supervisor), Associate Prof. Dr. Ioannis Baziotis (Agricultural University of Athens, Greece), Dr. Ludovic Ferrière (Natural History Museum Vienna, Vienna, Austria).
- During his BSc Thesis, G.M. Andreosatos participated at the **ERASMUS+ Student Mobility for Traineeships**, in order to carry out his traineeship at the Department of Mineralogy and Petrography of the National History Museum Vienna (Vienna, Austria). The responsible person from the National History Museum Vienna was Dr. Ludovic Ferrière.
 - Preliminary results have been presented in the 86th Annual Meeting of the Meteoritical Society (<https://metsoc2023-la.com>). He received the **Macovich Collection Awards grant** (<https://meteoritical.org/news/sixty-one-members-receive-travel-awards-annual-meteoritical-society-meeting>).
- #08.** Mr. Athanasios Valaouras **BSc Thesis** entitled «*Sustainable practices of human resource management in a metallurgical industry*» (ongoing). Examination Committee: Associate Prof. Dr. Platon Gamaletsos (supervisor), Prof. Dr. Konstantinos Zopounidis (School of Production Engineering and Management, Technical University of Crete), Dr. Marios Menexiadis (Aegean Airlines SA).
- #07.** Mr. Grigorios Alkis Dimoulis **BSc Thesis** entitled «*Non-energy mineral resources in Greece: A Review*» (ongoing). Examination Committee: Associate Prof. Dr. Platon Gamaletsos (supervisor), Asst. Prof. Dr. Grigorios-Aarne Sakellaris (School of Geology, Aristotle University of Thessaloniki), Prof. Dr. Athanasios Godelitsas (Department of Geology and Geoenvironment, National and Kapodistrian University of Athens).
- #06.** Mr. George Kolaitis **BSc Thesis** entitled «*Investigation of natural radionuclides in potential REE-rich ore deposits from Greenland*» (ongoing). Examination Committee: Associate Prof. Dr. Platon Gamaletsos (supervisor), Prof. Dr. Nikos Kallithrakas-Kontos (School of Mineral Resources Engineering, Technical University of Crete), Assoc. Prof. Dr. Stelios Xanthos (Department of Production Engineering and Management, International University of Greece).

#05. Ms. Konstantina-Maria Bekiari **BSc Thesis** entitled «Exploring the potential of Hospital Medical Waste Incinerator (HMWI) bottom ash (BASH) as a promising raw material for the production of autoclaved bricks» (2025). Examination Committee: Associate Prof. Dr. Platon Gamaletsos (supervisor), Asst. Prof. Dr. Evangelos Petrakis (SMRE, TUC), Associate Professor Dr. Yiannis Pontikes (Department of Materials Engineering, Sustainable Materials Processing and Recycling / SeMPeR, KU Leuven, Belgium).

- During her BSc Thesis, K.-M. Bekiari participated at the **ERASMUS+ Student Mobility for Traineeships**, in order to carry out his traineeship at the Department of Materials Engineering, KU Leuven (Leuven, Belgium). The responsible person from the Department of Materials Engineering was Associate Professor Dr. Yiannis Pontikes.

#04. Mr. George Papoutsis **BSc Thesis** entitled «*Mineralogical-petrographic characterization and determination of physico-mechanical properties of marble samples from an active quarry of Kavala*» (2024). Examination Committee: Asst. Prof. Dr. Platon Gamaletsos (supervisor), Asst. Prof. Dr. George Xiroudakis, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.

#03. Ms. Myrto Simopoulou **BSc Thesis** entitled «*Mineralogical and spectroscopical study of ordinary chondrites and implications on potential asteroid mining*» (2024). Examination Committee: Asst. Prof. Dr. Platon Gamaletsos (supervisor), Associate Prof. Dr. Ioannis Baziotis (Agricultural University of Athens, Greece), Dr. Dimitrios Palles (National Hellenic Research Foundation, Athens, Greece).

- During her BSc Thesis, M. Simopoulou participated at the **ERASMUS+ Student Mobility for Traineeships**, in order to carry out his traineeship at the Department of Mineralogy and Petrography of the National History Museum Vienna (Vienna, Austria). The responsible person from the National History Museum Vienna was Dr. Ludovic Ferrière.
- Preliminary results have been presented in the 86th Annual Meeting of the Meteoritical Society (<https://metsoc2023-la.com>).
- Preliminary results have been presented in the 16th International GeoRAMAN Conference (<https://georaman2024.ntua.gr>).

#02. Ms. Aimilia Konstantopoulou **BSc Thesis** entitled «*Assessment of marl sediments from Neogene basin of Crete towards natural cement production*» (2022). Examination Committee: Asst. Prof. Dr. Platon Gamaletsos (supervisor), Prof. Dr. George Christidis, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.

#01. Mr. Athanasios Chytas **BSc Thesis** entitled «*Sound practices of human resources management in a mining industry*» (2022). Examination Committee: Asst. Prof. Dr. Platon Gamaletsos (supervisor), Prof. Dr. Konstantinos Zopounidis (School of Production Engineering and Management, Technical University

of Crete), Dr. Marios Menexiadis (School of Production Engineering and Management & Aegean Airlines SA).

5.3 Member of Examination Committees of BSc & MSc Theses

- #20.** Mr. Christos Touligkos **BSc Thesis** entitled «*Study of the influence of parent rock chemistry on the geochemical characteristics of bentonite deposits*» (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. Pagona Makri, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #19.** Mr. Vasileios Ntalios **BSc Thesis** entitled “*Optimization of amorphous matter quantification in Portland cement clinker by the Rietveld method*” (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #18.** Ms. Anastasia Kechagia **BSc Thesis** entitled «*Study of mineralogical and chemical characteristics of a bentonite deposit of Aghia Irini, Milos Island*» (ongoing). Examination Committee: Asst. Prof. Dr. Evangelos Petrakis (supervisor), Prof. Dr. Konstantinos Komnitsas, Associate Prof. Dr. Platon Gamaletsos, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece. This thesis is a collaboration between SMRE and the Department of Mineralogy-Petrology-Economic Geology (GMO) of the School of Geology at Aristotle University of Thessaloniki.
- #17.** Ms. Nikoletta Giannakari **BSc Thesis** entitled «*Study of mineralogical and chemical characteristics of a bentonite deposit of Aghia Irini, Milos Island*» (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. Pagona Makri, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #16.** Mr. Alexandros Nanos **BSc Thesis** entitled “*Effect of chemical and physical properties of lime products on carbonation*” (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece
- #15.** Ms. Theodosia Zacharioudaki **BSc Thesis** entitled “*Assessment of kaolin clays to be used for fillers*” (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. Pagona Makri, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #14.** Mr. Athanasios Chliaras **BSc Thesis** entitled «*Determination of adsorption capacity of bentonites by means of plate test method*» (ongoing). Examination Committee: Prof. Dr. George Christidis

(supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.

- #13.** Mr. Anestis Nerantzakis **BSc Thesis** entitled «*Investigation of clays from the Neogene basin of Heraklion (Crete Island, Greece) towards the production of building ceramics*» (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #12.** Mr. Stefanos Chamakos **BSc Thesis** entitled «*Mechanical and mineralogical characterization of marble from Gortyni Municipality*» (2025). Examination Committee: Asst. Prof. Dr. George Xiroudakis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #11.** Mr. Gerasimos Aggelatos-Raftopoulos **BSc Thesis** entitled «*Mineralogical-petrographic characterization and determination of physico-mechanical properties of marble samples from an active quarry of Drama*» (2025). Examination Committee: Asst. Prof. Dr. George Xiroudakis (supervisor), Associate Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #10.** Ms. Christina Kousoulou-Mpairami **BSc Thesis** entitled «*Sustainable human resources management practices in an airline based on GRI standards*» (2025). Examination Committee: Prof. Dr. Konstantinos Zopounidis (supervisor – School of Production Engineering and Management, Technical University of Crete), Asst. Prof. Dr. Platon Gamaletsos (School of Mineral Resources Engineering / SMRE, Technical University of Crete / TUC), Associate Prof. Dr. George Atsalakis (School of Production Engineering and Management, Technical University of Crete). The Diploma thesis was done in collaboration with Dr. Marios Menexiadis (Aegean Airlines SA), who was an official member of the Examination Committee. Dr. Menexiadis was replaced by Dr. Atsalakis just before the defense of the BSc thesis.
- #09.** Ms. Georgina-Nikolina Theodoridou **BSc Thesis** entitled «*Distribution of smectite layer charge in a bentonite of Milos*» (2024). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. Pagona Makri, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #08.** Ms. Eleftheria Vlachaki **BSc Thesis** entitled «*Mineral chemistry of Li-containing phases in Greek fly ash from lignite*» (2023). Examination Committee: Asst. Prof. Dr. Despoina entari (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. Antonios Stratakis, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Greece.
- #07.** Ms. Olga Tsiapali **BSc Thesis** entitled «*Evaluation of talc samples from Greece and Egypt for use in cosmetology*» (2023). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr.

Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Greece.

- #06.** Mr. Olympios Nikolopoulos **MSc Thesis** entitled «*Effect of temperature on the strength of pozzolanic cement with fine-grained perlite*» (2023). Examination Committee: Prof. Dr. George Christidis (supervisor), Prof. Dr. Michael Galetakis, Asst. Prof. Dr. Platon Gamaletsos, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #05.** Ms. Afroditi Kakaraki **BSc Thesis** entitled “Influence of temperature on the mineralogy and pozzolanic activity of illite and kaolinite” (2022). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #04.** Ms. Georgia Grypaiou-Iskenteridou **BSc Thesis** entitled “*Determination of adsorption capacity of bentonites by means of ceramic plate and methylene blue methods*” (2022). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #03.** Ms. Ntania-Maria Fragkia **BSc Thesis** entitled “*Determination of physicochemical and mechanical properties of mortars and building stones from the Medieval Wall of Thiva town*” (2022). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #02.** Ms. Ioanna Papageorgiou **BSc Thesis** entitled “*Assessment of a magnesite from N. Euboea for the production of caustic calcined magnesia*” (2021). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.
- #01.** Ms. Maria Dimitriadi **BSc Thesis** entitled “*Quantitative analysis of Portland cement clinker and determination of amorphous matter with the Rietveld method*” (2021). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece.

5.4 Supervisor & Co-Supervisor of Doctoral Dissertations (PhD Theses) / Member of Advisory Committees

- #04 Doctoral Dissertation (PhD Thesis)** by Mr. Nikolaos Athanasakis entitled “*Microwave-assisted reduction of mechanically pre-reduced iron ores using H_2 as a reduction medium*” at the Department of Materials Engineering (MTM), KU Leuven, Belgium (2024 – in progress). The Thesis deals with direct reduction of

primary iron ores (e.g., hematite) and secondary iron-bearing residues (e.g., bauxite residue) using novel microwave assisted reduction with hydrogen in order to extract metallic iron and reducing CO₂ emission. According to the Belgian legislation and KU Leuven regulation the five-member doctoral supervisory committee consists of the team of supervisors and at least two other members (assessors). The team of supervisors consists of Associate Prof. Dr. Yiannis Pontikes (corresponding supervisor; internal member; MTM, KU Leuven), **Associate Prof. Dr. Platon Gamaletsos (co-supervisor;** external member; SMRE, TUC) and Asst. Prof. Dr. Efthymios Balomenos (co-supervisor; external member; School of Mining and Metallurgical Engineering, National Technical University of Athens / NTUA). This doctoral thesis has been planned and is being elaborated within the framework of Cluster 4 “Digital, Industry and Space” of the HORIZON EUROPE research and innovation funding programme (Research project acronym: ZEROSTEEL; project code: 3E241057; project title: “Decarbonized Steel Production with Novel Processes”; promotor of ZEROSTEEL: Assoc. Prof. Dr. Yiannis Pontikes / KU Leuven).

#03. Doctoral Dissertation (PhD Thesis) by Mr. Pavlos Meratzis entitled “*Bridging stable isotope study of various carbonate deposits & (bio)-materials with geostatistical modelling: A contribution to the paleoclimate reconstruction of Greece over of the last 4000 years*” at the School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC), Chania, Greece (2024 – in progress). Three-member Advisory Committee: **Associate Prof. Dr. Platon Gamaletsos (supervisor;** SMRE, TUC), Dr. Elissavet Dotsika (external member; Research Director of the Material & Environmental Isotope Geochemistry Laboratory at the Institute of Nanoscience and Nanotechnology (INN) of the National Center for Scientific Research “Demokritos”), Asst. Prof. Dr. Emmanouil Varouchakis (internal member; SMRE, TUC).

#02 Doctoral Dissertation (PhD Thesis) by Ms. Myrto Simopoulou entitled “*Study of shock metamorphism and mesoscale hydrocode modeling of ordinary chondrites*” at the Department of Natural Resources Development and Agricultural Engineering belongs of the School of Environment and Agricultural Engineering, Agricultural University of Athens / AUA / Greece (2024 – in progress). Three-member Advisory Committee: Associate Prof. Dr. Ioannis Baziotis (supervisor; Dep. of Natural Resources Development and Agricultural Engineering, AUA), Dr. Ludovic Ferrière (external member; Natural History Museum Vienna at Vienna of Austria & Natural History Museum Abu Dhabi at Abu Dhabi of United Arab Emirates), **Associate Prof. Dr. Platon Gamaletsos** (external member; SMRE, TUC).

#01 Doctoral Dissertation (PhD Thesis) by Mr. Christos Traikoudis entitled “*Management of hazardous materials in metal waste and mixed metal packaging*” at the Department of Industrial Engineering and Management of the International Hellenic University / IHU (2024 – in progress). Three-member Advisory Committee: Prof. Dr. Stelios Xanthos (supervisor; Dep. of Industrial Engineering and Management, IHU), Prof. Dr. Apostolos Tsagaris (internal member; Dep. of Industrial Engineering and Management, IHU), **Associate Prof. Dr. Platon Gamaletsos** (external member; SMRE, TUC).

5.5 Contribution in postgraduate research

During my research carrier in academia, I contributed in research performed in the frame of several MSc, PhD Thesis and postdoc research programs established at the National & Kapodistrian University of Athens / NKUA and Aristotle University of Thessaloniki / AUTH (Greece):

- ✓ Ms. Dafni Petarouda **MSc Thesis** entitled “*REE geochemistry of Parnassos-Giona zone bauxites (Giona Area)*” (ongoing). Supervisor: Prof. Dr. Antonios Koronaivos, Faculty of Geology, Aristotle University of Thessaloniki, Greece.
- ✓ Ms. Sofia Kalatha **PhD Thesis** entitled “*Metallogenetic processes associated with the formation of bauxitic laterites and Ni-laterites – enrichment of rare earth elements*” (2017). Supervisor: Prof. Dr. Maria Economou-Eliopoulos, Faculty of Geology & Geoenvironment, NKUA, Greece.
- ✓ Mr. Evangelos Tzamos **PhD Thesis** entitled “*Mineralogy, Petrology and ore geology of the Xerolivado Ophiolites (Vourinos, Western Macedonia, Greece)*” (2016). Supervisor: Prof. Dr. Anestis Filippidis, AUTH, Greece.
- ✓ Ms. Mika Gousgouni **MSc Thesis** entitled “*Antimony fixation in solid phases at the Hydrothermal Field of Kolumbo Submarine Arc-Volcano (Santorini): Deposition model and environmental implications*” (2014). Supervisor: Professor Dr. Stephanos Kiliass, Faculty of Geology & Geoenvironment, NKUA, Greece.

5.6 Participation of PNG students in ERASMUS+ programs

- #04.** Ms. Dimitra Anastou participated at the ERASMUS+ Student Mobility for Traineeships, in order to carry out his traineeship at the Department of Materials Engineering / MTM (KU Leuven, Leuven, Belgium). The object of her traineeship focused on “sustainable materials processing and recycling with emphasis on the valorization of metallurgical residues towards the production of engineered materials”. The responsible person from the MTM of KU Leuven was Assoc. Prof. Dr. Yiannis Pontikes.
- #03.** Ms. Myrto Simopoulou participated at the ERASMUS+ Student Mobility for Traineeships, in order to carry out his traineeship at the Department of Mineralogy and Petrography of the National History Museum Vienna (Vienna, Austria). The object of his traineeship focused on “the mineralogical and petrographic study of of specific meteorites (e.g., ordinary chondrites) using e-microscopes (SEM and/or EPMA)”. The responsible person from the National History Museum Vienna was Dr. Ludovic Ferrière.
- #02.** Ms. Konstantina Maria Bekiari participated at the ERASMUS+ Student Mobility for Traineeships, in order to carry out his traineeship at the Department of Materials Engineering / MTM (KU Leuven, Leuven, Belgium). The object of her traineeship focused on “sustainable materials processing and recycling

with emphasis on the valorization of metallurgical residues towards the production of engineered materials". The responsible person from the MTM of KU Leuven was Assoc. Prof. Dr. Yiannis Pontikes.

#01. Mr. George-Marios Andreosatos participated at the ERASMUS+ Student Mobility for Traineeships, in order to carry out his traineeship at the Department of Mineralogy and Petrography of the National History Museum Vienna (Vienna, Austria). The object of his traineeship focused on "the study of the petrography, mineralogy and mineral chemistry of specific meteorites (e.g., ordinary chondrites)". The responsible person from the National History Museum Vienna was Dr. Ludovic Ferrière.

5.7 Administrative experience

2025 – present	Deputy Member (of the President) of the Electronic Tender Committee (via Electronic Tendering Procedures via NEPPS Goods & Services) for the supply of an electronic microscope (ID: Ψ3X0469B6N-YETH) following the decision of the Governing Board of the Technical University of Crete (Meeting 57th/16.06.2025).
2024 – present	Member of the Internship Evaluation Committee at the School of Mineral Resources Engineering (SMRE) of the Technical University of Crete (decision of the 7 th General Assembly of the School / 18.12.2024).
2023 – present	Member of the Council of the Lifelong Learning Center (KE.ΔI.BI.M.) of the Technical University of Crete (TUC) representing the School of Mineral Resources Engineering.
2023 – present	Member of the project team for the recognition of professional rights of the graduate Oil and Natural Gas engineers from the Technological Educational Institutes (T.E. & T.E.I.), according to a Joint Ministerial Decision (ΑΔΑ: ΨΒΥΧ465ΧΘΞΙΤ).
2021 – present	Member of the Commission on Sustainable Development (CSD) of the Technical University of Crete / TUC.
2021 – present	Member of the Committee of Postgraduate Program (PGP), School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC.
2022 – 2024	Member of the Internal Evaluation Group (OMEA) of the School of Mineral Resources Engineering (SMRE), Technical University of Crete (TUC). OMEA follows the National Framework of Higher Education Qualifications according to the Hellenic Authority for Higher Education (ΕΘΑΕΕ).
2024 – 2025	Member of the group to which the institutional proposal was assigned for the supply and installation of electron microscopes (SEM & TEM) in the context of the invitation of the Region of Crete to submit proposals under the "Crete" Program in Action: 1.1.4 "Network of Local Research Infrastructures".
2023 – 2024	Academic Advisor in the 1 st year of undergraduate studies at the School of Mineral Resources Engineering (SMRE) of the Technical University of Crete (decision of the 18 th General Assembly of the School / 05.07.2023).
2023 – 2023	Participation in School in Quality Assurance Training, Technical University of Crete (TUC)
2022 – 2023	Vice Member of the Council of the Lifelong Learning Center (KE.ΔI.BI.M.) of the Technical University of Crete (TUC) substituting the Vice Dean of the School of Mineral Resources Engineering (SMRE).

2021 – 2023	Member of the Dean's Council of the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC (1 st of Sep 2021 – 26 th of September 2023).
2021 – 2022	Vice Member of the Council of the Lifelong Learning Center (KE.ΔI.BI.M.) of the Technical University of Crete (TUC) substituting the Dean of the School of Mineral Resources Engineering (SMRE).
2021 – 2022	Vice Member of the Internal Evaluation Team (OMEA) of the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC.
2021 – 2022	Member of Tender/Acceptance Committee, School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC.
2022	Member of the Assessment Committee for the evaluation of a Teaching position of English Language for the School of Mineral Resources Engineering (SMRE) & the School of Electronic and Computer Engineering (SECE), Technical University of Crete / TUC.
2021	Member of the Board of Trustees (Election Committee) of the Election of the Dean of the School of Mineral Resources Engineering (SMRE), Technical University of Crete / TUC.
2021	Member of the Assessment Committee for the evaluation of a Teaching position of English Language for the School of Mineral Resources Engineering (SMRE) & the School of Electronic and Computer Engineering (SECE), Technical University of Crete / TUC.

5.8 Member of an evaluation committee or as an elector - election and advancement of faculty members of all ranks & establishment of tenured Assistant Professors

2025	<p>Full Member (as an external elector) of the Special Electoral Committee for the establishment of tenured Assistant Professor Dr. Paraskevi Lampropoulou by discipline "Applied Mineralogy-Petrology" (APELLA code: APP48392) at the Department of Geology, University of Patras (General Assembly of the Department of Geology, No 26/26.06.2025).</p> <p>1st Member of the Evaluation Committee for the tenure of Dr. Paraskevi Lampropoulou (APEFLA code: APP48392), Assistant Professor, Department of Geology, University of Patras (Electoral College Meeting, No 01/10.07.2025).</p>
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2025 – 2026	5th Substitute Member (as an external elector) of the Special Electoral Committee for the establishment of a non-tenured Assistant Professor (new) position by discipline "Mineral Resources and Sustainable Development" (code APP47394) at the Department of Geology, University of Patras (General Assembly of the Department of Geology, No 27/16.07.2025).
2024 – 2025	1st Substitute Member (as an external elector) of the Special Electoral Committee for the establishment of tenured Assistant Professor Dr. Gregorios Arne Sakellaris by discipline "Ore Geology" (code APP42535) at the Department of Geology, Aristotle University of Thessaloniki (General Assembly of the Department of Geology in No. 663/06.12.2024).

5.9 Member of topics & reviewer boards of peer-reviewed scientific journals

- Geosciences – MDPI (Topical Advisory Panel) 2020 – 2023
- Minerals – MDPI (Reviewer Board) 2019 – 2023

5.10 Reviewer in peer-reviewed scientific journals

(See also my profile at Publons: <https://publons.com/a/1524577>)

- Chemical Geology
- Canadian Mineralogist
- Economic Geology
- Geofluids
- G-Cubed (Geochemistry, Geophysics, Geosystems)
- International Journal of Environmental Analytical Chemistry
- International Water Technology Journal
- Journal of Geochemical Exploration
- Journal of Porous Materials
- Journal of Sustainable Metallurgy
- Journal of Metallurgical and Materials Transactions B
- Minerals
- Ore Geology Reviews

5.11 Guest Editor in Special Issues

- Guest Editor (GE) of the Special Issue (SI) named “Trends in Modern Mineral Processing and Recovery Techniques toward the Energy Transition” of Materials MDPI (ISSN 1996-1944). This special issue belongs to the section “Energy Materials”:

https://www.mdpi.com/journal/materials/special_issues/26AZXB0459

5.12 Member of organizing & scientific committee of international conferences

- **Global Stone Congress 2025 (GSC 2025)**, Member of International Scientific Committee, Drama, Greece, 16 – 20 June, 2025
- **RawMat2023 – 2nd International Conference on Raw Materials and Circular Economy**, Member of International Scientific Committee, Athens, Greece, 28 August – 02 September, 2023
- **BR2022 – 4th International Bauxite Residue Valorisation and Best Practices Conference**, Member of International Scientific Committee, Virtual Event - Belgium, 11 – 14 Oct, 2022
- **RawMat2021 – International Conference on Raw Materials and Circular Economy**, Member of International Organizing & Scientific Committee, Athens, Greece, 05 – 09 September, 2021
- **BR2020 – 3rd International Bauxite Residue Valorisation and Best Practices Conference**, Member of International Scientific Committee, Constanta, Romania, 11 – 15 May, 2020
- **BR2018 – 2nd International Bauxite Residue Valorisation and Best Practices Conference**, Member of International Scientific Committee, Athens, Greece, 07 – 10 May, 2018.
- **ERES 2017 – 2nd conference on European Rare Earth Resources**, Member of International Scientific Committee, Santorini, Greece, 28 – 31 May, 2017.

5.13 Member of scientific associations

- Geochemical Society: <https://www.geochemsoc.org/>
- Marie Curie Alumni Association: <https://www.mariecuriealumni.eu/>

5.14 Military service

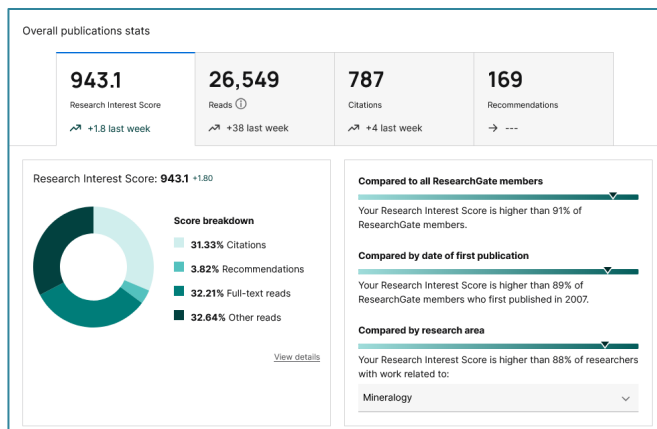
2001 - 2002: Military service in the Greek Naval Forces

6 PUBLICATION LIST

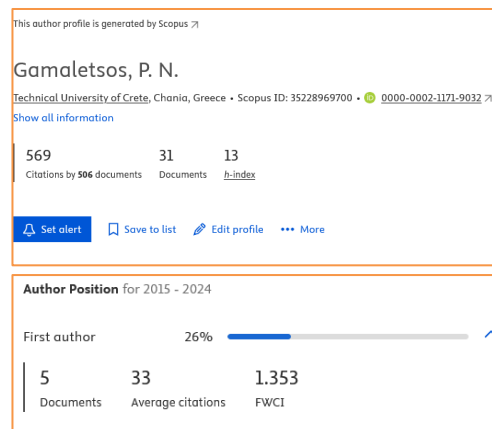
PhD Thesis (December 2014) entitled as “*Mineralogy and geochemistry of bauxites from Parnassos-Ghiona mines and the impact on the origin of the deposits*” (in English). The PhD Thesis focused on the mineralogical and geochemical investigation of Al ore deposits (bauxites) and their metallurgical residues (red mud) and its impact on the origin of the deposits. Supervisor: Prof. Dr. Athanasios Godelitsas.

Read online: <https://www.didaktorika.gr/eadd/handle/10442/42199?locale=en>

- ❖ **Citations = 18** (based on Google Scholar)
- ✓ **Research Interest Score = 943.1** (σύμφωνα με ResearchGate)
- ✓ **h-index = 17** (based on Google Scholar)
13 (based on Scopus)
- ✓ **i10-index = 28** (based on Google Scholar)
- ✓ **Citations = 878** (based on Google Scholar)
569 citations by 506 documents (based on Scopus)
- ✓ **Average Impact Factor (I.F.) = 3.4**
- ✓ **Highest I.F. = 11.3**
- ✓ **Sum I.F. = 95.4**
- ✓ **Publications in Q1, Q2, Q3 & Q4 journals** (based on Journals Quartile Rankings by SJR / Scimago Journal & Country Rank)
 - **Q1 Journals = 13** (3 out of 13 as first/corresponding author)
 - **Q2 Journals = 13** (1 out of 13 as first/corresponding author)
 - **Q3 Journal = 2** (1 out of 2 as first/corresponding author)
- ✓ **ORCID: 0000-0002-1171-9032**
- ✓ **Scopus ID: 35228969700**



ResearchGate



Scopus

See also:

- <https://publons.com/researcher/1524577/platon-gamaletsos>
- <https://scholar.google.com/citations?user=CazWQV8AAAAJ&hl=en>
- <http://orcid.org/0000-0002-1171-9032>
- https://www.researchgate.net/profile/Platon_Gamaletsos
- <http://publicationslist.org/platon.gamaletsos>
- <http://gr.linkedin.com/in/platongamaletsos>

6.1 Chapters in SCI- & Scopus-indexed Books

#01. P. Gamaletsos, A. Godelitsas, E. Dotsika, E. Tzamos, Jörg Göttlicher and A. Filippidis: Geological sources of As in the environment of Greece: a review, In: the volume **“Threats to the Quality of Groundwater Resources: Prevention and Control”** (A. Scozzari and E. Dotsika, Eds), Springer’s review series **“The Handbook of Environmental Chemistry”**, (2013) 77-113.

6.2 Peer-reviewed Articles in SCI- & Scopus-indexed Journals

#XX. P. Meratzis, E. Dotsika, **P.N. Gamaletsos**, A.E. Poutouki, D. Kyropoulou, A. Chrysostomou, P. Karalis: Novel insights into both ancient mobility and migration: ^{34}S as a novel environmental tracer, (2025 – Under Review).

#28. E. Petrakis, G. Xiroudakis, M. Samouhos and **P.N. Gamaletsos**: Modeling development for the prediction of the particle size distribution and energy consumption of the crushing products: A first approach, *Minerals Engineering* 233 (2025) 109669.

#27. M. Giels, T. Hertel, **P.N. Gamaletsos**, Vincent Hallet and Y. Pontikes: Reactive precursors for inorganic polymers and blended cements from vitrified bauxite residue. A case study for Europe, *Construction and Building Materials* 491 (2025) 142459.

#26. M. Simopoulou, I. Baziotis, L. Ferrière, J. Hu, C. Sanchez-Valle, **P.N. Gamaletsos**, D. Palles, J. Berndt, C. Ma, S. Klemme and P.D. Asimow: Raman study of the Slobodka ordinary chondrite, *Journal of Raman Spectroscopy* (2025) 0:1-16.

#25. P. Karalis, E. Dotsika, A.E. Poutouki, G. Diamantopoulos, L. Gkelou, D. Kyropoulou, S. Bellas and **P.N. Gamaletsos**: Isotopic analysis ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, and $\delta^{34}\text{S}$) of modern terrestrial, marine, and freshwater ecosystems in Greece: Filling the knowledge gap for better understanding of sulfur isotope imprints – Providing insights for the paleo diet, paleomobility, and paleoecology reconstructions, *Applied Sciences* 15 (2025) 4351.

#24. S. Kapelari, **P.N. Gamaletsos**, G. Pilla, Y. Pontikes and B. Blanpain: Developing a low-temperature, carbon-lean hybrid valorisation process for bauxite residue (red mud) towards metallic Fe and Al recovery, *Journal of Sustainable Metallurgy* 9 (2023) 578-587.

#23. E. Kotopoulou, A. Godelitsas, J. Göttlicher, R. Steininger, R. Price, D.A. Fike, J.P. Amend, W.P. Gilhooly, G. Druschell, P. Nomikou, **P.N. Gamaletsos** and S. Lozios: Metastable iron (mono)sulfides in the shallow-sea hydrothermal sediments of Milos, Greece, *ACS Earth and Space Chemistry* 6 (2022) 920-931.

- #22. A. Rassios, E. Tzamos, Y. Dilek, M. Bussolesi, G. Grieco, A. Batsi and **P.N. Gamaletsos**: A Structural approach to the genesis of chrome ores within the Vourinos Ophiolite (Greece): Significance of ductile and brittle deformation processes in the formation of economic ore bodies in oceanic upper mantle peridotites, *Ore Geology Reviews* **125** (2020) 103684.
- #21. E. Tzamos, **P.N. Gamaletsos**, G. Grieco, M. Bussolesi, A. Xenidis, A. Zouboulis, D. Dimitriadis, Y. Pontikes and A. Godelitsas: New insights into the mineralogy and geochemistry of Sb ores from Greece, *Minerals* **10** (2020) 236-252.
- #20. A.M. Borst, A.A. Finch, H. Friis, N.J. Horsburgh, **P.N. Gamaletsos**, J. Goettlicher, R. Steininger and K. Geraki: Structural State of Rare Earth Elements in Eudialyte-Group Minerals, *Mineralogical Magazine* **84** (2020) 19-34.
- #19. M. Samouhos, A. Godelitsas, Chr. Nomikou, M. Taxiarchou, P. Tsakiridis, J. Zavašnik, **P.N. Gamaletsos** and A. Apostolikas: New insights into nanomineralogy and geochemistry of Ni-laterite ores from Central Greece (Larymna and Evia deposits), *Chemie Der Erde – Geochemistry* **79** (2019) 268-279.
- #18. I.T. Tzifas, A. Papadopoulos, P. Misaelides, A. Godelitsas, J. Göttlicher, H. Tsikos, **P.N. Gamaletsos**, G. Luvizotto, A.G. Karydas, M. Petrelli, F. Noli, V. Kantarelou, A. Kontofakas and A. Hatzidimitriou: New insights into the mineralogy, geochemistry and economic significance of an allanite-bearing Mediterranean coastal placer deposit (Kavala, N. Greece), *Chemie Der Erde – Geochemistry* **79** (2019) 247-267.
- #17. **P.N. Gamaletsos**, A. Godelitsas, A. Filippidis and Y. Pontikes: The rare earth elements potential of Greek bauxite active mines in the light of a sustainable REE demand, *Journal of Sustainable Metallurgy* **5** (2019) 20-47.
- #16. **P.N. Gamaletsos**, S. Kalatha, A. Godelitsas, M. Economou-Eliopoulos, J. Göttlicher and R. Steininger: Arsenic distribution and speciation in the bauxitic Fe-Ni-laterite ore deposit of the Patitira mine, Lokris area (Greece), *Journal of Geochemical Exploration* **194** (2018) 189-197.
- #15. I. Mitsis, A. Godelitsas, J. Göttlicher, R. Steininger, **P.N. Gamaletsos**, M. Perraki, M.M. Abad-Ortega and M. Stamatakis: Chromium-bearing clays in altered ophiolitic rocks from Crommyonia (Soussaki) volcanic area, Attica, Greece, *Applied Clay Science* **162** (2018) 362-374.
- #14. I.T. Tzifas, P. Misaelides, A. Godelitsas, **P.N. Gamaletsos**, P. Nomikou, A.G. Karydas, V. Kantarelou and A. Papadopoulos: Geochemistry of coastal sands of Eastern Mediterranean: The case of Nisyros volcanic materials, *Chemie Der Erde – Geochemistry* **77** (2017) 487-501.
- #13. E. Tzamos, A. Kapsiotis, A. Filippidis, A. Koroneos, G. Grieco, A. Ewing Rassios, N. Kantiranis, A. Papadopoulos, **P.N. Gamaletsos** and A. Godelitsas: Metallogeny of the Chrome Ores of the Xerolivado-Skoumtsa Mine, Vourinos Ophiolite, Greece: Implications on the genesis of IPGE-bearing high-Cr

chromitites within a heterogeneously depleted mantle section, *Special Issue about Chromites Petrogenesis, Ore Geology Reviews* **90** (2017) 226-242.

- #12. **P.N. Gamaletsos**, A. Godelitsas, T. Kasama, N.S. Church, A.P. Douvalis, J. Göttlicher, R. Steininger, A. Boubnov, Y. Pontikes, E. Tzamos, T. Bakas and A. Filippidis: Nano-mineralogy and -geochemistry of high-grade diasporic karst-type bauxite from Parnassos-Ghiona mines, Greece, *Ore Geology Reviews* **84** (2017) 228-244.
- #11. I.T. Tzifas, U.A. Glasmacher, P. Misaelides, A. Godelitsas, **P.N. Gamaletsos**, J. Goettlicher and D.F. Godoy: Uranium-bearing francolites present in organic-rich limestones of NW Greece: A preliminary study using synchrotron radiation and fission track technique, *Journal of Radioanalytical and Nuclear Chemistry* **311** (2017) 465-472.
- #10. A. Filippidis, E. Tziritis, N. Kantiranis, E. Tzamos, **P. Gamaletsos**, G. Papastergios and S. Filippidis: Application of Hellenic natural zeolite in Thessaloniki industrial area wastewater treatment, *Desalination and Water Treatment* **57** (2016) 19702-19712.
- #09. E. Tzamos, A. Filippidis, A. Rassios, G. Grieco, K. Michailidis, A. Koroneos, K. Stamoulis, M. Pedrotti and **P.N. Gamaletsos**: Major and minor element geochemistry of chromite from the Xerolivado-Skoumtsa mine, Southern Vourinos: Implications for chrome ore exploration, *Journal of Geochemical Exploration* **165** (2016) 81-93.
- #08. **P.N. Gamaletsos**, A. Godelitsas, T. Kasama, A. Kuzmin, M. Lagos, T.J. Mertzimekis, J. Göttlicher, R. Steininger, S. Xanthos, Y. Pontikes, G.N. Angelopoulos, C. Zarkadas, A. Komelkov, E. Tzamos and A. Filippidis: The role of nano-perovskite in the negligible thorium release in seawater from Greek bauxite residue (red mud), *Scientific Reports* **6**: 21737 (2016) 1-13.
- #07. A. Godelitsas, R.E. Price, T. Pichler, J. Amend, **P. Gamaletsos** and J. Göttlicher: Amorphous As-sulfide precipitates from the shallow-water hydrothermal vents off Milos Island (Greece), *Marine Chemistry* **177** (2015) 687-696.
- #06. S.P. Kiliyas, P. Nomikou, D. Papanikolaou, P.N. Polymenakou, A. Godelitsas, A. Argyraki, S. Carey, **P. Gamaletsos**, T.J. Mertzimekis, E. Stathopoulou, J. Goettlicher, R. Steininger, K. Bejelou, I. Livanos, C. Christakis, C.B. Croff and M. Scoullou: New insights into hydrothermal vent processes in the unique shallow-submarine arc-volcano Kolumbo, Santorini, *Scientific Reports* **3**: 2421 (2013) 1-13.
- #05. A.M. Muftah, P. Pavlakis, A. Godelitsas, **P. Gamaletsos** and N. Boaz: Paleogeography of the Eosahabi River in Libya: New Insights into the Mineralogy, Geochemistry and Paleontology of Member U1 of the Sahabi Formation, Northeastern Libya, *Journal of African Earth Science* **78** (2013) 86-96.
- #04. **P. Gamaletsos**, A. Godelitsas, T.J. Mertzimekis, J. Göttlicher, R. Steininger, S. Xanthos, J. Berndt, S. Klemme and G. Bárdossy: Thorium partitioning in Greek industrial bauxite investigated by synchrotron

radiation and laser-ablation techniques, *Nuclear Instruments and Methods in Physics Research B* **269** (2011) 3067-3073.

- #03. I. Kougemitrou, A. Godelitsas, C. Tsabaris, V. Stathopoulos, A. Papandreou, **P. Gamaletsos**, G. Economou and D. Papadopoulos: Characterisation and management of ash produced in the hospital waste incinerator of Athens, Greece, *Journal of Hazardous Materials* **187** (2011) 421-432.
- #02. A. Godelitsas, **P. Gamaletsos** and M. Roussos-Kotsis: Mordenite-bearing tuffs from Prassa quarry, Kimolos Island, Greece, *European Journal of Mineralogy* **22/6** (2010) 797-811.
- #01. E. Dotsika, D. Psomiadis, D. Poutoukis, B. Raco and **P. Gamaletsos**: Isotopic analysis for degradation diagnosis of calcite matrix in mortar and plaster, *Analytical and Bioanalytical Chemistry* **395** (2009) 2227-2234.

6.3 Publications in Peer-reviewed Conferences: Abstracts, Proceedings, Conference Papers

- #57. D. Kyropoulou, A.E. Poutouki, P. Karalis, **P.N. Gamaletsos**, M. Chalabalaki, Ch. Proestos, L. Leodiadis, P. Meratzis, E. Dotsika: Geographical tracing of agroproducts: An isotope and analytical finger-printing approach, In: Proceedings of the “**5th Mediterranean Geosciences Union (MedGU)**”, Athens, Greece, November 10-13, 2025. (Scopus-Indexed Conference Proceeding)
- #56. G. Xiroudakis, **P.N. Gamaletsos**, G. Triantafyllou, S. Mavrigiannakis, P. Liolios and E. Petrakis: Examining Uniaxial Compression Strength for Greek Marbles, In: Proceedings of the “**8th Global Stone Congress**”, Drama, Greece, June 16-20, 2025. (Conference Extended Abstract)
- #55. A.E. Poutouki, **P.N. Gamaletsos**, P. Karalis, D. Kyropoulou, M. Chalabalaki, Ch. Proestos, L. Leodiadis and E. Dotsika: ^{13}C and ^{18}O as authenticity tracers to detect olive oil fraud, In: Proceedings of the “**International Conference on Environment and Natural Science (ICENS - 2025)**”, Chiang Mai, Thailand, 21-22 January, 2025. (Conference Proceeding)
- #54. **P.N. Gamaletsos**, A.E. Poutouki, D. Kyropoulou, P. Karalis, M. Chalabalaki, Ch. Proestos, L. Leodiadis and E. Dotsika: Stable isotope analysis in wine and vinegar as a tool to determine food adulteration, In: Proceedings of the “**International Conference on Environment and Natural Science (ICENS - 2025)**”, Chiang Mai, Thailand, 21-22 January, 2025. (Conference Proceeding)
- #53. E. Dotsika, **P.N. Gamaletsos**, D. Kyropoulou, P. Karalis, A.E. Poutouki, M. Chalabalaki, Ch. Proestos and L. Leodiadis: Isotopic tracers ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^{18}\text{O}$) to define the authenticity of raw materials in bread products, In: Proceedings of the “**4th Mediterranean Geosciences Union (MedGU)**”, Barcelona, Spain, November 25-28, 2024. (Scopus-Indexed Conference Proceeding)

- #52. M. Simopoulou, I. Baziotis, L. Ferrière, C. Sanchez-Valle, S. Klemme, J. Berndt, E. Kakaratza, D. Palles, **P.N. Gamaletsos** and P.D. Asimow: Raman Spectroscopy of the Slobodka Meteorite, In: Proceedings of the “**16th International GeoRAMAN Conference**”, Rhodes, Greece, September 24-27, 2024. (Conference Extended Abstract)
- #51. M. Simopoulou, I. Baziotis, L. Ferrière, C. Sanchez-Valle, D. Palles, **P.N. Gamaletsos** and P.D. Asimow: Re-classification, shock stage determination, and high-pressure polymorphs in the SLOBODKA ordinary chondrite, In: Proceedings of the “**86th Annual Meeting of the Meteoritical Society**”, Los Angeles, USA, August 13-18, 2023. (Conference Abstract)
- #50. G.M. Andreosatos, L. Ferrière, I. Baziotis, C. Ma, **P.N. Gamaletsos** and P.D. Asimow: Discovery of albitic jadeite in the historical MOCS ordinary chondrite, In: Proceedings of the “**86th Annual Meeting of the Meteoritical Society**”, Los Angeles, USA, August 13-18, 2023. (Conference Abstract)
- #49. A. Godelitsas, S. Xanthos, S. Kousaris, O. Dimopoulos, S. Andronikidis, G. Kyritsis, **P.N. Gamaletsos**, J. Göttlicher, R. Steininger, Y. Kon, M. Kokkoris, S. Karavoltos and A. Douvalis: Actinides in crystals of critical minerals, In: Proceedings of the “**38th International Conference on Geochemistry and Health**”, Athens, Greece, September 02-06, 2023. (Conference Abstract)
- #48. S. Kapelari, **P.N. Gamaletsos**, Y. Pontikes and B. Blanpain: H₂-based processes for Fe and Al recovery from bauxite residue (red mud): comparing the options, *Materials Proceedings* **5, 45 (2021) 1-7**. In: *Proceedings of the “1st International Conference on Raw Materials and Mineral Wealth / RawMat2021”*, Athens, Greece, September 05-09, 2021. (Conference Paper)
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