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## Curriculum Vitae (Full)

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**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 (a.k.a. Platon Gamaletsos; Scopus ID: 35228969700 | ORCID: 0000-0002-1171-9032 | Web of Science ResearcherID: N-2459-2018) is an Asst. Professor of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering, Technical University of Crete / TUC (Chania, Greece). He is specialized in various primary and secondary mineral resources (e.g., ore deposits, byproducts, mineral waste streams, etc.) with more experience in metal/mineral characterization of disciplinary mining & metallurgical fields. 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 various strategic metals (such as REEs etc.) and actinide elements (such as Th) by means of SEM & HR-TEM 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 (Karlsruhe, Germany). He is also a member of the Topics & Reviewer Boards and 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 member of the Geochemical Society and the Marie Curie Alumni Association.*

## **Keywords / tags**

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; nanogeoscience; (nano)-mineralogy; (nano)-geochemistry; (geo)-materials; electron microscopy; X-ray absorption spectroscopy; SEM; TEM; ( $\mu$ )-XAFS.

## **Current status**

- ✓ **Asst. Professor** of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering, Technical University of Crete (Chania, Greece)

## **Other activities – skills**

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

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## 1 SCIENTIFIC & RESEARCH EXPERIENCE / CARIER

<b>2020 – present</b>	Asst. Professor of Applied Mineralogy-Petrology at the School of Mineral Resources Engineering, Technical University of Crete (Chania, Greece).
<b>2019 – present</b>	Expert 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)
<b>2020 – 2021</b>	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).
<b>2020 – 2021</b>	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.
<b>2019 – 2020</b>	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.
<b>2019 – 2020</b>	Postdoctoral Researcher (Research associate) at the Sustainable Metals Processing and Recycling Unit, Department of Materials Engineering, KU Leuven, Belgium: (i) <u>Quality Assurance Specialist</u> of the Sustainable Resources for Engineered Materials / <b>SReMat</b> ( <a href="https://www.mtm.kuleuven.be/Onderzoek/sremat">https://www.mtm.kuleuven.be/Onderzoek/sremat</a> ) of the <b>SReMat Innovation Society</b> ( <a href="https://www.mtm.kuleuven.be/Onderzoek/sremat/centre">https://www.mtm.kuleuven.be/Onderzoek/sremat/centre</a> ) (ii) <u>Power User</u> of the “ <b>SReDat</b> ” Secondary Resource database: <a href="http://www.sreway.info/sredat/http://www.sreway.info/sredat/">http://www.sreway.info/sredat/http://www.sreway.info/sredat/</a> )
<b>2018</b>	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.
<b>2015 – 2018</b>	Postdoctoral Researcher at the Center for Electron Nanoscopy (CEN) of the Technical University of Denmark (DTU) awarded by a <b>Marie Curie Fellowship</b> as part of the

	<p>EU-funded project HC Ørsted Postdoc, cofunded by Marie Curie Actions (COFUNDPostdocDTU). <b>Supervisor:</b> Senior Researcher Dr. Takeshi Kasama. The project entitled as “Nanoscale electron microscopic investigation of strategic &amp; 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>
<b>2015</b>	<p>Visiting Fellow at the Faculty of Engineering Science (Department of Materials Engineering / MTM) of the KU Leuven, Belgium.</p>
<b>2015 – 2015</b>	<p>Research scholarships 12 months – <b>IKYDA:</b> “<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 research purposes, many analytical techniques and methods had been used. Among others, SEM/TEM, XAFS, XRD, ICPMS and FTIR had been utilized.</p> <p><b>Project Leader:</b> Professor Dr. Athanasios Godelitsas.</p>
<b>2014 – 2015</b>	<p>Research Associate at the Laboratory of Metallurgy (Prof. Dr. D. Panias group), School of Mining &amp; 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>
<b>2014 – 2016</b>	<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>
<b>2014</b>	<p>Researcher at the Material and Environmental Isotope Geochemistry Project of the Institute of Nanoscience and Nanotechnology (INN) of the NCSR "Demokritos" (Greece).</p>

<p><b>2006 – 2014*</b></p> <p><i>*PhD defense date: 19.09.2014</i></p> <p><i>*PhD graduation ceremony (oath taking) date: 11.12.2014</i></p>	<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). <b>Supervisor:</b> Professor Dr. Athanasios Godelitsas.</p>
<p><b>2013</b></p>	<p>Asstant researcher at the Laboratory of Nuclear Physics, Department of Nuclear &amp; Particle Physics, Faculty of Physics, University of Athens (Greece).</p>
<p><b>2012</b></p>	<p>Asstant 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>
<p><b>2007</b></p>	<p>Researcher at the Laboratory of Mineralogy of the Institute of Geology &amp; 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)
- ◆ **11<sup>th</sup> 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 G<sup>2</sup> FEG TEM operated at 200 kV. Experienced in TEM instrument operation and day-to-day maintenance/optimization of TEM condition (FEI Tecnai T20 G<sup>2</sup> 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

- 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.
- **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 - 16<sup>th</sup> 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 Asstant 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 projects as principal investigator (PI)

- **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. The project was entitled as “*Nanoscale electron microscopic investigation of strategic & hazardous elements in critical raw materials and metallurgical residues*”. This project received the EU funds\* upon Dr. Platon Gamaletsos’ proposal in February of 2015.

The frame-budget was as follows:

**Total: 1,125,000.00 kr. (~150,000 euros)**

### 3.2.2 Funding projects as participant (employment status)

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

Funder: European Union

Program: H2020-SC5-Climate action, resources, efficiency and raw materials

Promotor (from the KU Leuven partner)<sup>‡</sup>: Prof. Dr. Yiannis Pontikes

The frame-budget was as follows:

**RemovAL** has been granted a total budget of **11,481,599.13 euros**.

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\* H.C. Ørsted fellowship programme Funding from 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](https://cordis.europa.eu/project/rcn/185528_en.html)

<sup>†</sup> The research leading to these results 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/>

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

### 3.3 Participation in research projects

- **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 – Short STATEMENT of RESEARCH

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 ( $\mu$ -XRF,  $\mu$ -XRD and ( $\mu$ )-XANES/-EXAFS). In addition, I combine Laser-based (Laser micro-Raman, LA-ICP-MS), together with other spectroscopic (NanoSIMS, FTIR,  $^{57}\text{Fe}$  Mössbauer), and thermal techniques (TGA-DSC). Simultaneously, gamma-ray spectrometry (HPGe) for the determination of natural

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\* 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.



## 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, Technical University of Crete, Chania, Greece (2020 – present):

- ◆ **Mineralogy (Principles & Methods):** Code ΜΟΠ102 (1<sup>st</sup> winter semester | In Greek)
- ◆ **Systematic Mineralogy:** Code ΜΟΠ201 (2<sup>nd</sup> spring semester | In Greek)
- ◆ **Petrology:** Code ΜΟΠ202 (3<sup>rd</sup> winter semester / In Greek)
- ◆ **Field Trip II:** Code ΜΟΠ704 (5<sup>th</sup> winter semester / In Greek)
- ◆ **Instrumental Methods in Mineralogy and Petrology:** Code ΜΟΠ422 (8<sup>th</sup> spring semester | In Greek)

#### 5.1.2 Postgraduate courses

Teaching the following postgraduate courses at the School of Mineral Resources Engineering (Technical University of Crete, Chania, Greece):

- ◆ **2020 – 2023: Instrumental Methods in Mineral-Chemistry of Various Mineral Resources & Related Engineered Materials:** Code ΜΟΠ312 (2<sup>nd</sup> spring semester / In Greek)
- ◆ **From 10/2023: Sustainable processing of ores, by-products and critical raw materials:** Code ST212 (1<sup>st</sup> winter semester / in English)

## 5.2 BSc – MSc – PhD Thesis supervision

- #08.** Ms. Myrto Simopoulou **BSc Thesis** entitled «*Mineralogical and spectroscopical study of ordinary chondrites and implications on potential asteroid mining*» (ongoing). Examination Committee: Asst. Prof. Dr. Platon Gamaletsos (supervisor), Asst. Prof. Dr. Ioannis Baziotis (Agricultural University of Athens, Greece), Dr. Dimitrios Palles (National Hellenic Research Foundation, Athens, Greece).
- 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 86<sup>th</sup> Annual Meeting of the Meteoritical Society (<https://metsoc2023-la.com>).
- #07.** 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: Asst. Prof. Dr. Platon Gamaletsos (supervisor), Asst. 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 86<sup>th</sup> Annual Meeting of the Meteoritical Society (<https://metsoc2023-la.com>).
- #06.** Mr. Athanasios Valaouras **BSc Thesis** entitled «*Sustainable practices of human resource management in a metallurgical industry*» (ongoing). 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 (Aegean SA).
- #05.** Mr. Grigorios Alkis Dimoulis **BSc Thesis** entitled «*Non-energy mineral resources in Greece: A Review*» (ongoing). Examination Committee: Asst. 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).
- #04.** Mr. George Kolaitis **BSc Thesis** entitled «*Investigation of natural radionuclides in potential REE-rich ore deposits from Greenland*» (ongoing). Examination Committee: Asst. 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).

- #03.** Mr. Dimitrios Zotos **BSc Thesis** entitled “*Mineralogy and chemical analysis of pumiceous tuffs in Santorini Island*” (ongoing). Examination Committee: Asst. Prof. Dr. Platon Gamaletsos (supervisor), Dr. Pagoni Makri, Dr. George Triantafyllou, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece.
- #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, Technical University of Crete, 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 SA).

### 5.3 Examination committee membership at BSc – MSc – PhD Thesis

- #13.** Ms. Georgina-Nikolina Theodoridou **BSc Thesis** entitled «*Distribution of the heterogeneity of layer charge of smectites in a bentonite deposit of Milos*» (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. Pagona Makri, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece.
- #12.** Ms. Olga Tsiapali **BSc Thesis** entitled “*Evaluation of talc samples from Greece and Egypt for use in cosmetology*” (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece.
- #11.** 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), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece
- #10.** Ms. Theodosia Zacharioudaki **BSc Thesis** entitled “*Assessment of kaolin clays to be used for fillers*” (ongoing). Examination Committee: Prof. Dr. George Christidis (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. Pagona Makri, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece.

- #09.** 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), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece.
- #08.** 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), Asst. Prof. Dr. Platon Gamaletsos, Dr. George Triantafyllou, School of Mineral Resources Engineering, Technical University of Crete, Chania, Greece.
- #07.** Ms. Eleftheria Vlachaki **BSc Thesis** entitled “*Mineral chemistry of Li-containing phases in Greek fly ash from lignite*” (ongoing). Examination Committee: Asst. Prof. Dr. Despoina entari (supervisor), Asst. Prof. Dr. Platon Gamaletsos, Dr. Antonios Stratakis, School of Mineral Resources Engineering, Technical University of Crete, Chania, 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, Technical University of Crete, 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, Technical University of Crete, 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, Technical University of Crete, 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, Technical University of Crete, 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, Technical University of Crete, 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, Technical University of Crete, Chania, Greece.

## 5.4 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. 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.

## 5.5 Participation of PNG students in ERASMUS+ programs

**#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.

## 5.6 Administrative experience

<b>2023 – present</b>	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.
<b>2023 – present</b>	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: ΨΒΥΧ465ΧΘΞΞΙΤ).
<b>2022 – present</b>	Member of the Internal Evaluation Team (OMEA) of the School of Mineral Resources Engineering, Technical University of Crete / TUC.
<b>2021 – present</b>	Member of the Dean’s Council of the School of Mineral Resources Engineering, Technical University of Crete / TUC (1 <sup>st</sup> of Sep 2021 – 31 <sup>st</sup> of August 2024).
<b>2021 – present</b>	Member of Committee of Postgraduate Program, School of Mineral Resources Engineering, Technical University of Crete / TUC.
<b>2021 – present</b>	Member of Sustainability Committee of the Technical University of Crete / TUC.
<b>2023 – 2023</b>	Participation in School in Quality Assurance Training, Technical University of Crete / TUC
<b>2022 – 2023</b>	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.
<b>2021 – 2022</b>	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.
<b>2021 – 2022</b>	Vice Member of the Internal Evaluation Team (OMEA) of the School of Mineral Resources Engineering, Technical University of Crete / TUC.
<b>2021 – 2022</b>	Member of Tender/Acceptance Committee, School of Mineral Resources Engineering, Technical University of Crete / TUC.
<b>2022</b>	Member of the Assessment Committee for the evaluation of a Teaching position of English Language for the School of Mineral Resources Engineering & the School of Electronic and Computer Engineering, Technical University of Crete / TUC.
<b>2021</b>	Member of the Board of Trustees (Election Committee) of the Election of the Dean of the School of Mineral Resources Engineering, Technical University of Crete / TUC.

<b>2021</b>	Member of the Assessment Committee for the evaluation of a Teaching position of English Language for the School of Mineral Resources Engineering & the School of Electronic and Computer Engineering, Technical University of Crete / TUC.
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## 5.7 Member of topics & reviewer boards of peer-reviewed scientific journals

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

## 5.8 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
- Minerals
- Ore Geology Reviews

## 5.9 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](https://www.mdpi.com/journal/materials/special_issues/26AZXB0459)

## 5.10 Member of organizing & scientific committee of international conferences

- **RawMat2023 – 2<sup>nd</sup> International Conference on Raw Materials and Circular Economy**, Member of International Scientific Committee, Athens, Greece, 28 August – 02 September, 2023
- **BR2022 – 4<sup>th</sup> 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 – 3<sup>rd</sup> International Bauxite Residue Valorisation and Best Practices Conference**, Member of International Scientific Committee, Constanta, Romania, 11 – 15 May, 2020
- **BR2018 – 2<sup>nd</sup> International Bauxite Residue Valorisation and Best Practices Conference**, Member of International Scientific Committee, Athens, Greece, 07 – 10 May, 2018.
- **ERES 2017 – 2<sup>nd</sup> conference on European Rare Earth Resources**, Member of International Scientific Committee, Santorini, Greece, 28 – 31 May, 2017.

## 5.11 Member of scientific associations

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

## 5.12 Military service

**2001 - 2002: Military service in the Greek Naval Forces**

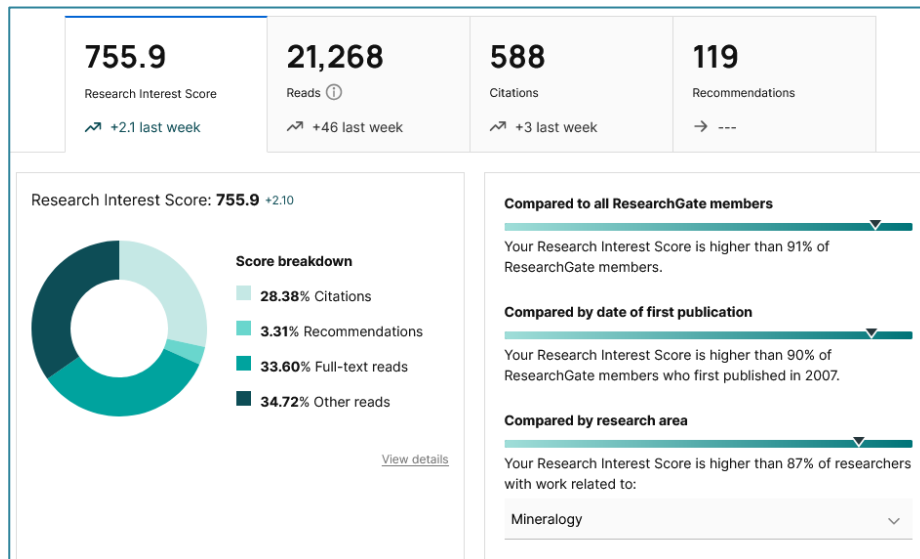


## 6 PUBLICATION LIST

**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>

- ✓ **Research Interest Score = 755.9** (ResearchGate – see image below)
- ✓ **h-index = 14** (based on Google Scholar)
- ✓ **i10-index = 20** (based on Google Scholar)
- ✓ **Citations = 655** (based on Google Scholar)
- ✓ **Average Impact Factor (I.F.) = 3.95**
- ✓ **Highest I.F. = 14.224**
- ✓ **Sum I.F. = 94.814**
- ✓ **ORCID: 0000-0002-1171-9032**
- ✓ **Scopus ID: 35228969700**



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](https://www.researchgate.net/profile/Platon_Gamaletsos)  
<http://publicationslist.org/platon.gamaletsos>  
<http://gr.linkedin.com/in/platongamaletsos>

1. **Chapter in Books: 1**
2. **Peer-reviewed Articles: 25**
3. **Conference Abstracts & Chapters in Proceedings: 51**
4. **Large-Scale Facilities Reports: 6**

## 6.1 Chapters in 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

#XX. M. Giels, T. Hertel, P.N. Gamaletsos and Y. Pontikes: Alkali-activated binders from bauxite residue. Is vitrification a feasible valorisation option in Europe? *Journal of Cleaner production* or *Cement and concrete research* (To be submitted).

#25. 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* (2023 – In Press).

#24. 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.

#23. S. Kapelari, P.N. Gamaletsos, T. Van Der Donck, Y. Pontikes and B. Blanpain: H<sub>2</sub>-based processes for Fe and Al recovery from bauxite residue (red mud): comparing the options, *Materials Proceedings* 5, 45 (2021) 1-7.

#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. Scoullas: 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 Conference Abstracts & Chapters in Proceedings

- #51. Myrto Simopoulou, I. Baziotis, L. Ferrière, C. Sanchez-Valle, D. Palles, **P.N. Gamaletsos**, P.D. Asimow: Re-classification, shock stage determination, and high-pressure polymorphs in the SLOBODKA ordinary chondrite, In: Proceedings of the “**86<sup>th</sup> 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**, P.D. Asimow: Discovery of albitic jadeite in the historical MOCS ordinary chondrite, In: Proceedings of the “**86<sup>th</sup> 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. Karavoltsos, A. Douvalis: Actinides in crystals of critical minerals, In: Proceedings of the “**38<sup>th</sup> 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: H<sub>2</sub>-based processes for Fe and Al recovery from bauxite residue (red mud): comparing the options, In: *Proceedings of the “1<sup>st</sup> International Conference on Raw Materials and Mineral Wealth / RawMat2021”*, Athens, Greece, September 05-09, 2021. (Conference Abstract)
- #47. M. Giels, T. Hertel, **P.N. Gamaletsos** and Y. Pontikes: Transforming bauxite residue into high performance inorganic polymers: A feasible solution for all European refineries?, In: *Proceedings of the “3<sup>rd</sup> International Bauxite Residue Valorisation and Best Practices Conference / BR2020”*, Constanta, Romania, September 28 – October 02, 2020. (Chapter in Conference Proceedings)
- #46. **P.N. Gamaletsos**, C.R. Borra, A. Godelitsas, E. Tzamos, A. Stubos and Y. Pontikes: Bauxite residue valorization towards an REE- & Th-rich byproduct, In: *Proceedings of the “3<sup>rd</sup> International Bauxite Residue Valorisation and Best Practices Conference / BR2020”*, Constanta, Romania, September 28 – October 02, 2020. (Conference Abstract)
- #45. **P.N. Gamaletsos**, A. Godelitsas and Y. Pontikes: Nanogeoscience in ore and raw materials research, In: *Proceedings 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”*, Philadelphia, USA, May 22-26, 2020. (Invited Speaker - Conference Abstract)  
<https://doi.org/10.1021/scimeetings.0c03661>
- #44. A.M. Borst, A.A. Finch, H. Friis, N.J. Horsburgh, **P.N. Gamaletsos**, J. Goettlicher, R. Steininger and K. Geraki: Structural State of REE in Eudialyte-Hosted Critical Metal Deposits, In: *Proceedings of the “29<sup>th</sup> Annual V.M. Goldschmidt Conference”*, Goldschmidt 2019 – Barcelona, Spain, August 18-23, 2019. (Conference Abstract)

- #43.** P.N. Gamaletsos, A.M. Borst, T. Kasama, A.A. Finch, A. Godelitsas, I.T. Tzifas, Y. Pontikes, A. Filippidis: Studying the Local Distribution of Thorium in Eudialyte Deposits Associated with Peralkaline Igneous Rocks (Greenland) by Electron Microscopy & Spectroscopic Techniques, In: *Proceedings of the: "15<sup>th</sup> International Congress of the Geological Society of Greece*, Athens, Greece, May 22-24, 2019 (Extended Abstract)
- #42.** I.T. Tzifas, P.N. Gamaletsos, A. Papadopoulos, A. Godelitsas, N. Kantiranis, P. Misaelides, A. Filippidis: Actinides and Rare Earth Elements (REE) in Sedimentary Formations of Greece: A Review, In: *Proceedings of the: "15<sup>th</sup> International Congress of the Geological Society of Greece*, Athens, Greece, May 22-24, 2019 (Extended Abstract)
- #41.** E. Tzamos, G. Grieco, M. Bussolesi, A. Papadopoulos, S. Stoulos, E. Daftsis, D. Dimitriadis, P.N. Gamaletsos, A. Godelitsas, A. Filippidis: Mineral chemistry of sulphide minerals in concentrates of the Kassandra mines (Chalkidiki, Greece), In: *Proceedings of the: "XXI International Congress of the Carpathian-Balkan Geological Association (CBGA)"* – Salzburg, Austria, September 10-13, 2018. (Conference Abstract)
- #40.** T. Kasama, P.N. Gamaletsos, S. Escrig, Y. Kon, T.B. Zunic, B. Wenzell, L.H.S. Jensen, A. Meibom, T. Takagi, D. Dimitriadis and A. Godelitsas: Quantitative microscopic characterisation of natural 'invisible' gold, In: *Proceedings of the: "69<sup>th</sup> Annual Conference of the Nordic Microscopy Society (SCANDEM 2018)"* – Copenhagen Greater Area, Kgs. Lyngby, Denmark, June 25-28, 2018. (Conference Abstract)
- #39.** A.M. Borst, A.A. Finch, H. Friis, N.J. Horsburgh, P.N. Gamaletsos, J. Goettlicher, R. Steininger and T. Geraki: The structural state of Y and Nd in eudialyte and related REE minerals using X-ray absorption spectroscopy, In: *Proceedings of the "Mineral Deposits Studies Group Annual General Meeting 2017-18"*, MDSG2018 – Brighton, UK, January 3-5, 2018. (Conference Abstract)
- #38.** P.N. Gamaletsos, A.M. Borst, T. Kasama, A.A. Finch, J. Goettlicher, R. Steininger, B. Wenzell, Z.I. Balogh and A. Godelitsas: Th in eudialyte ore deposits from Greenland studied by synchrotron radiation ( $\mu$ -XRF/-XAFS) and electron microscopic techniques (SEM, TEM), In: *Proceedings of the "33<sup>rd</sup> Nordic Geological Winter Meeting 2018"*, NGWM18 – Copenhagen, Denmark, January 10-12, 2018. (Conference Abstract)
- #37.** T. Kasama, P.N. Gamaletsos, S. Escrig, B. Wenzell, L.H.S. Jensen, A. Meibom, D. Sokaras, T.-C. Weng, D. Dimitriadis and A. Godelitsas: Nanoscale observations of "invisible gold" from the Olympias mine, Greece, In: *Proceedings of the "33<sup>rd</sup> Nordic Geological Winter Meeting 2018"*, NGWM18 – Copenhagen, Denmark, January 10-12, 2018. (Conference Abstract)
- #36.** A.M. Borst, P.N. Gamaletsos, A.A. Finch, H. Friis, T. Kasama, J. Goettlicher, R. Steininger and T. Geraki: Probing the structural state of Y and Nd in eudialyte using X-ray absorption spectroscopy, In:

*Proceedings of the "33<sup>rd</sup> Nordic Geological Winter Meeting 2018"*, NGWM18 – Copenhagen, Denmark, January 10-12, 2018. (Conference Abstract)

- #35. A. Godelitsas, M. Schindler, **P.N. Gamaletsos** and J. Göttlicher: Critical and hazardous metals and metalloids in Mn-oxide ore from Thessaly, Greece, In: *Proceedings of the "27<sup>th</sup> Annual V.M. Goldschmidt Conference"*, Goldschmidt 2017 – Paris, France, August 13-18, 2017. (Conference Abstract)
- #34. **P.N. Gamaletsos**, A. Godelitsas, T. Kasama, E.M. Fiordaliso, J. Göttlicher and R. Steininger: Vanadium in Al-ore (bauxite) from mines of central Greece, In: *Proceedings of the "27<sup>th</sup> Annual V.M. Goldschmidt Conference"*, Goldschmidt 2017 – Paris, France, August 13-18, 2017. (Conference Abstract)
- #33. T. Kasama, **P.N. Gamaletsos** and A. Godelitsas: TEM study on the localisation of Th in an Al-ore industrial residue, In: *Proceedings of the "26<sup>th</sup> Annual V.M. Goldschmidt Conference"*, Goldschmidt 2016 – Yokohama, Japan, June 26 – July 1, 2016. (Conference Abstract)
- #32. **P.N. Gamaletsos**, A. Godelitsas, T. Kasama, J. Göttlicher and R. Steininger: Nano-mineralogy & -geochemistry of karst bauxites (Greece): Implications of the origin of the deposits, In: *Proceedings of the "26<sup>th</sup> Annual V.M. Goldschmidt Conference"*, Goldschmidt 2016 – Yokohama, Japan, June 26 – July 1, 2016. (Conference Abstract)
- #31. S.P. Kiliyas, M. Gousgouni, A. Godelitsas, **P.N. Gamaletsos**, T.J. Mertzimekis, P. Nomikou, A. Argyraki, J. Goettlicher, R. Steininger and D. Papanikolaou: Antimony fixation in solid phases at the hydrothermal field of Kolumbo submarine arc-volcano (Santorini): deposition model and environmental implications, *Bulletin of Geological Society of Greece* 50 (2016) 2200-2209 (Chapter in Conference Proceedings)
- #30. **P. Gamaletsos**, A. Godelitsas, T. Kasama, T.J. Mertzimekis, A. Kuzmin, J. Göttlicher, R. Steininger and Y. Pontikes: The nature of thorium in bauxite and bauxite residue from Greece, In: *Proceedings of the "Bauxite Residue Valorisation and Best Practices Conference"* – Leuven, Belgium, October 5-7, 2015 – Book of Proceedings, 317-322. (Conference Extended Abstract)
- #29. **P. Gamaletsos**, A. Boubnov, A. Godelitsas, T.J. Mertzimekis, J. Göttlicher and R. Steininger: Fe K-edge XAFS study of Greek bauxites and their metallurgical residues (red mud), In: *Proceedings of the "XAFS16 - 16<sup>th</sup> International Conference on X-ray Absorption Fine Structure"*, Karlsruhe, Germany, August 23-28, 2015. (Conference Abstract)
- #28. A. Godelitsas, E. Tzamos, A. Filippidis, D. Sokaras, T.-C. Weng, G. Griego, A. Papadopoulos, S. Stoulos, **P. Gamaletsos**, T.J. Mertzimekis, E. Daftsis and D. Dimitriadis: New insights into the mineral chemistry of Au-bearing pyrite/As-pyrite/arsenopyrite concentrate from Olympias deposit, Cassandra mines (Chalkidiki, Greece), In: *Proceedings of the "25<sup>th</sup> Annual V.M. Goldschmidt Conference"*, Goldschmidt 2015 – Prague, Czech Republic, August 16-21, 2015. (Conference Abstract)

- #27. I. Kotopoulou, A. Godelitsas, J. Göttlicher, R. Steininger, R. Price, D.A. Fike, J.P. Amend, W.P. Gilhooly, G.K. Druschel, T.J. Mertzimekis, **P. Gamaletsos** and F.-C. Kafantaris: Sulfur mineralogy and speciation in the shallow-sea hydrothermal sediments off Milos island (Greece), In: *Proceedings of the “25<sup>th</sup> Annual V.M. Goldschmidt Conference”*, Goldschmidt 2015 – Prague, Czech Republic, August 16-21, 2015. (Conference Abstract)
- #26. A. Godelitsas, I.Tr. Tzifas, **P. Gamaletsos**, G. Economou, P. Megalovasilis and P. Nomikou: Rare earth elements and strategic metals mineralogy and geochemistry of coastal black sands in islands from Hellenic Volcanic Arc: The case of Nisyros, In: *Proceedings of the “ERES 2014 – The 1<sup>st</sup> conference on European Rare Earth Resources”*, Milos Island, Greece, September 4-6, 2014 – Book of Proceedings, 348-362. (Chapter in Conference Proceedings)
- #25. A. Godelitsas, I.Tr. Tzifas, **P. Gamaletsos**, T.J. Mertzimekis, J. Goettlicher and R. Steininger: Uranium distribution and speciation in phosphatized limestones of NW Greece, In: *Proceedings of the “Uranium Mining and Hydrogeology 2014 International Conference and UMREG 2014 | UMH VII”*, Freiberg, Saxony, Germany, September 21-25, 2014. (Conference Abstract)
- #24. A. Godelitsas, G. Stamatakis, **P. Gamaletsos** and M. Stamatakis: Occurrence, properties and uses of mordenite-bearing tuffs from Milos-Kimolos-Polyegos volcanic field (Greece): A review, In: *Proceedings of the “9<sup>th</sup> International Conference on the Occurrence, Properties, and Utilization of Natural Zeolites – Zeolite 2014”*, Belgrade, Serbia, June 8-13, 2014. (Conference Extended Abstract)
- #23. A. Filippidis, A. Godelitsas, N. Kantiranis, **P. Gamaletsos**, E. Tzamos and S. Filippidis: Neutralization of sludge and purification of wastewater from Sindos industrial area of Thessaloniki (Greece) using natural zeolite, In: *Proceedings of the “13<sup>th</sup> International Congress of the Geological Society of Greece: Exploration & Exploitation of Mineral Resources”*, Chania, Crete, Greece, September 5-8, 2013 – *Bulletin of Geological Society of Greece* XLVII 2013 920-926. (Chapter in Conference Proceedings)
- #22. S.P. Kiliyas, A. Godelitsas, **P. Gamaletsos**, T.J. Mertzimekis, P. Nomikou, J. Goettlicher, R. Steininger, A. Argyraki, M. Gousgouni and D. Papanikolaou: Antimony in hydrothermal chimneys of Kolumbo shallow-submarine vent (Santorini, Greece), In: *Proceedings of the “23<sup>rd</sup> Annual V.M. Goldschmidt Conference”*, Florence, Italy, August 25-30, 2013. *Mineralogical Magazine*, **77 (5)**, 1459.
- #21. **P. Gamaletsos**, A. Godelitsas, A. Kuzmin, M. Lagos, S. Xanthos, T.J. Mertzimekis, J. Goettlicher, R. Steininger, C. Zarkadas, A. Komelkov, Y. Pontikes and G.N. Angelopoulos: New insights into environmental characterization of bauxite residues (red mud) from Greece, In: *Proceedings of the “23<sup>rd</sup> Annual V.M. Goldschmidt Conference”*, Florence, Italy, August 25-30, 2013, *Mineralogical Magazine*, **77 (5)**, 1136.
- #20. N. Chatzikonstantinou, T.J. Mertzimekis, A. Godelitsas, **P. Gamaletsos**, J. Goettlicher and R. Steininger: Using synchrotron radiation to study iron phases in Saharan dust samples from Athens skies, In:



*Proceedings of the "22<sup>nd</sup> Symposium of the Hellenic Nuclear Physics Society - HNPS 2013"*, Athens, Greece, 31.05 – 01.06, 2013, 48. (Conference Abstract)

- #19.** N. Moraitis, K. Vassalos, T.J. Mertzimekis, A. Godelitsas, **P. Gamaletsos**, J. Goettlicher and R. Steininger: Detailed Spectroscopic Studies in the Aquatic Environment using Synchrotron Radiation, In: *Proceedings of the "22<sup>nd</sup> Symposium of the Hellenic Nuclear Physics Society - HNPS 2013"*, Athens, Greece, 31.05 – 01.06, 2013, 66. (Conference Abstract)
- #18.** A. Filippidis, A. Godelitsas, E. Tzamos, **P. Gamaletsos** and S. Filippidis: Production of odorless-cohesive zeo-sewage sludge using natural zeolites, In: *Proceedings of the 4<sup>th</sup> International Conference on "Solid waste management in crisis: New Challenges and Perspectives"* – Hellenic Solid Waste Management Association (HSWMA) & National Technical University (NTUA), Athens, Greece, 30.11 – 01.12, 2012. (Chapter in Proceedings)
- #17.** P. Nomikou, S. Carey, S. Kiliias, K. Croff Bell, A. Godelitsas, A. Argyraki, P. Polymenakou, E. Stathopoulou, C. Roman, K. Bejelou, K. Cartner, I. Livanos, **P. Gamaletsos** and T.J. Mertzimekis: New insights into the Kolumbo unique geobiological system, In: *"International Conference: Volcanism of the Southern Aegean, in the frame of the broader Mediterranean area – Past volcanic history, present geohazards and future perspectives & opportunities"*, Santorini, Greece, October 10-12, 2012. (Conference Abstract)
- #16.** A. Godelitsas, T.J. Mertzimekis, **P. Gamaletsos**, F. Botsou, N. Chatzikonstantinou, E. Tzamos, I. Tzifas, J. Göttlicher, R. Steininger and R. Simon: Activities of the University of Athens at SUL-X & FLUO beamlines of the ANKA Synchrotron facility in Earth & Environmental Sciences, In: *Proceedings of the 4<sup>th</sup> ANKA / KNMF Annual Users Meeting*, Karlsruhe, Germany, October 10-11, 2012. (Conference Abstract)
- #15.** A. Godelitsas, T.J. Mertzimekis, **P. Gamaletsos**, N. Chatzikonstantinou, J. Göttlicher, R. Steininger and R. Simon: Activities of the University of Athens at SUL-X and FLUO beamlines of ANKA Synchrotron facility (KIT, Germany) in Earth & Environmental Sciences, In: *Proceedings of the "21<sup>st</sup> Symposium of the Hellenic Nuclear Physics Society - HNPS 2012"*, Athens, Greece, May 25-26, 2012, 29. (Conference Abstract)
- #14.** P. Nomikou, S. Kiliias, S. Carey, A. Godelitsas, K. Croff Bell, P. Polymenakou, **P. Gamaletsos** and K. Bejelou: New geological, mineralogical and microbiological data of the Kolumbo shallow submarine volcano, NE of Santorini Caldera, Greece, In: *Proceedings of the "The Deep-Sea & Sub-Seafloor Frontiers Conference 2012"*, Sitges (Barcelona), Spain, March 11-14, 2012, (Conference Abstract)
- #13.** J. Goettlicher, R. Steininger, **P. Gamaletsos**, A. Godelitsas, M. Kersten, J. Majzlan, F. Meirer, T.J. Mertzimekis, B. Pemmer, G. Pepponi, P. Roschger, G. Schmidt, C. Strelt, P. Wobrauschek and N. Zoeger: Environmental Research at the SUL-X Beamline of the Synchrotron Radiation Source ANKA, In:

**Mineralogical Society's Annual Conference 2011 "Frontiers in Environmental Geoscience"**, Wales, UK, June 21-24, 2011, (Conference Abstract)

- #12. P. Gamaletsos**, A. Godelitsas, T.J. Mertzimekis, J. Göttlicher, R. Steininger, S. Xanthos, S. Klemme and G. Bárdossy: Spectroscopic investigation of thorium in Greek bauxite, In: *Proceedings of the "ECAART10 – 10<sup>th</sup> European Conference on Accelerators in Applied Research and Technology"*, Athens, Greece, September 13-17, 2010. (Conference Abstract)
- #11. P. Gamaletsos**, A. Godelitsas, A.P. Douvalis, T. Kasama, R.E. Dunin-Borkowski, J. Göttlicher, N. Church, G. Economou and T. Bakas: Spectroscopic and microscopic study of high-quality diasporic Greek bauxite, **1<sup>st</sup> ANKA / KNMF Annual Users Meeting**, Karlsruhe, Germany, October 8-9, 2009. (Conference Abstract)
- #10. J. Göttlicher**, A. Godelitsas, **P. Gamaletsos**, F. Kafandaris and R. Steininger: A  $\mu$ -XRF and  $\mu$ -XANES spectroscopy study to characterize Uranium in Greek limestones, **1<sup>st</sup> ANKA / KNMF Annual Users Meeting**, Karlsruhe, Germany, October 8-9, 2009. (Conference Abstract)
- #09. I. Mitsis**, A. Godelitsas, J. Göttlicher, R. Steininger, **P. Gamaletsos**, M. Perraki and M. Stamatakis: Natural Chromium-bearing clays, Greece, **1<sup>st</sup> ANKA / KNMF Annual Users Meeting**, Karlsruhe, Germany, October 8-9, 2009. (Conference Abstract)
- #08. P. Gamaletsos**, A. Godelitsas, A.P. Douvalis, J. Göttlicher, T. Zorba, K. Chrissafis, K.M. Paraskevopoulos and T. Bakas: Spectroscopic (Mössbauer, XANES and FTIR) and thermal investigation of Greek bauxites from the Parnassos-Ghiona active mining area, In: *Proceedings of the "XXV Panhellenic Conference on Solid State Physics and Materials Science"*, Thessaloniki, Greece, September 20-23, 2009, 355. (Conference Extended Abstract)
- #07. P. Gamaletsos**, A. Godelitsas, A.P. Douvalis, T. Kasama, R.E. Dunin-Borkowski, J. Göttlicher, N. Church, G. Economou and T. Bakas: Partitioning and speciation of Fe, Ti and Cr in high-quality diasporic bauxite from Greece, In: *Proceedings of the "19<sup>th</sup> Annual V.M. Goldschmidt Conference"*, Davos, Switzerland, June 21-26, 2009 – ***Geochimica et Cosmochimica Acta 73 (2009) Suppl.1, S. A409.***
- #06. J. Göttlicher**, A. Godelitsas, **P. Gamaletsos**, F. Kafantaris and R. Steininger: Uranium distribution and speciation in Tethyan limestones from Greece using SR  $\mu$ -XRF and  $\mu$ -XANES spectroscopy, In: *Proceedings of the "19<sup>th</sup> Annual V.M. Goldschmidt Conference"*, Davos, Switzerland, June 21-26, 2009 – ***Geochimica et Cosmochimica Acta 73 (2009) Suppl.1, S. A457.***
- #05. A. Godelitsas**, **P. Gamaletsos** and M. Roussos-Kotsis: Geochemical characteristics and physicochemical properties of industrial minerals from Kimolos island, Greece, In: *Proceedings of the "14<sup>th</sup> International Clay Conference, Italy"*, Castellaneta Marina, Italy, June 14-20, 2009, 531. (Conference Abstract)

- #04. I. Mitsis, A. Godelitsas, J. Göttlicher, R. Steininger, **P. Gamaletsos**, M. Perraki and M. Stamatakis: Chromium bearing clays from Crommyonia volcanic area, Greece, In: *Proceedings of the "14<sup>th</sup> International Clay Conference, Italy"*, Castellaneta Marina, Italy, June 14-20, 2009, 491. (Conference Abstract)
- #03. E. Dotsika, V. Malama, D. Psomiadis, N. Zisi, D. Poutoukis and **P. Gamaletsos**: Determination of the origin of carbonate material from ancient tesserae by isotopic and mineralogical techniques, In: *Proceedings of the "Technart 2009: Non-destructive and Microanalytical Techniques in Art and Cultural Heritage"*, Athens, Greece, April 27-30, 2009, 190. (Conference Abstract)
- #02. E. Dotsika, A. Pantelidou, D. Psomiadis, N. Zisi, D. Poutoukis and **P. Gamaletsos**: Detection of degradation origin in carbonate material by isotopic and mineralogical techniques, In: *Proceedings of the "Technart 2009: Non-destructive and Microanalytical Techniques in Art and Cultural Heritage"*, Athens, Greece, April 27-30, 2009, 189. (Conference Abstract)
- #01. **P. Gamaletsos**, A. Godelitsas, E. Chatzitheodoridis and D. Kostopoulos: Laser  $\mu$ -Raman investigation of Greek bauxites from the Parnassos-Ghiona active mining area, In: *Proceedings of the "11<sup>th</sup> International Conference of the Geological Society of Greece: Geoenvironment – Past – Present – Future"*, Athens, Greece, May 24-26, 2007 – *Bulletin of Geological Society of Greece* XXXX (2007) 736-747. (Chapter in Conference Proceedings)

## 6.4 Large-Scale Facilities Reports

- #06. A. Godelitsas, T.J. Mertzimekis, **P. Gamaletsos**, J. Göttlicher and R. Steininger: The nature of uranium in sedimentary rocks of Epirus region (NW Greece), **Karlsruhe Institute of Technology, ANKA Synchrotron Radiation Facility** - ANKA User Reports 2012/2013 16-17.
- #05. A. Godelitsas, **P. Gamaletsos**, T.J. Mertzimekis, J. Göttlicher, R. Steininger and G. Bárdossy: Distribution and speciation of contaminants in bauxite and red mud from Ajka alumina plant, Hungary, **Karlsruhe Institute of Technology, ANKA Synchrotron Radiation Facility**, Annual Report 2012 (Submitted).
- #04. A. Godelitsas, **P. Gamaletsos**, T.J. Mertzimekis, J. Göttlicher and R. Steininger: The nature of thorium in Greek aluminium ores and their residues, **Karlsruhe Institute of Technology, ANKA Synchrotron Radiation Facility** - Annual Report 2010 / **ANKA Highlights2010/2011**, 10-12.
- #03. **P. Gamaletsos**, A. Godelitsas, J. Göttlicher and R. Steininger: Partitioning and speciation of Cr in high-quality diasporic bauxite from Greece, **Karlsruhe Institute of Technology, ANKA Synchrotron Radiation Facility** - Annual Report 2009 S. 184-86.

- #02.** A. Godelitsas, **P. Gamaletsos**, J. Göttlicher and R. Steininger: Uranium distribution and speciation in Tethyan carbonate rocks from Greece, **Karlsruhe Institute of Technology, ANKA Synchrotron Radiation Facility** - Annual Report 2009 S. 172-73.
- #01.** A. Godelitsas, I. Mitsis, J. Göttlicher, **P. Gamaletsos** and R. Steininger: Speciation of Cr in natural clays from Crommyonia volcanic area, Greece, **Karlsruhe Institute of Technology, ANKA Synchrotron Radiation Facility** - Annual Report 2009 S. 187-89.