

**Dr. VASILIOS MELFOS**  
**Professor**  
**in Economic Geology - Geochemistry**

**CURRICULUM VITAE**

- ✓ **PERSONNEL INFORMATION**
  - ✓ **EDUCATION**
- ✓ **TEACHING EXPERIENCE**
  - ✓ **RESEARCH**
  - ✓ **PUBLICATIONS**



**THESSALONIKI 2024**

## CONTENTS

<b>1. PERSONAL DETAILS-EDUCATION .....</b>	<b>1</b>
1.1. Personnel Details .....	1
1.2. Education .....	1
1.3. Positions Held .....	1
1.4. Scholarships .....	2
1.5. Awards - Distinctions .....	2
<b>2. TEACHING EXPERIENCE .....</b>	<b>3</b>
2.1. Courses Taught .....	3
2.1.1. Aristotle University of Thessaloniki .....	3
2.1.2. Democritus University of Thrace (Xanthi) .....	5
2.1.3. University of Thessaly (Volos) .....	6
2.1.4. Institute of Vocational Training (Thessaloniki) .....	6
2.1.5. List of trainers S.E.K. ....	6
2.2. Student Supervision .....	6
2.2.1. Diploma Theses .....	6
2.2.2. Master Theses .....	6
2.2.3. Doctorate Theses .....	6
2.2.4. Participation in examination committees for doctoral theses .....	7
2.2.5. Post-Doc research supervision .....	8
2.3. Training notes .....	8
2.4. Educational material of the Laboratory of Ore Microscopy .....	9
2.5. Academic Advisor of the AUTH SEG Student Chapter .....	9
<b>3. UNIVERSITY COMMITTEES .....</b>	<b>9</b>
<b>4. RESEARCH.....</b>	<b>10</b>
4.1. Research Interests.....	10
4.2. Scientific - Laboratory Training .....	11
4.3. Participation in Research Projects .....	11
4.4. Scientific collaborations with Research Groups .....	15
4.5. Congresses and Meetings .....	16
4.5.1. International Congresses .....	16
4.5.2. National Congresses .....	18
4.5.3. Meetings .....	19
4.5.4. Participation at Training Courses-Workshops .....	20
4.6. Stay at European Institutes and Universities for analytical methods training .....	20
4.7. Participation in Electoral Committees for Faculty members.....	21
4.8. Reviewer in published works .....	21
4.8.1. International and National Journals Reviewer .....	21
4.8.2. Conference Proceedings Reviewer .....	22
4.8.3. Books and Special Volumes Reviewer .....	22
4.9. External reviewer in Research Proposals .....	23
4.10. Editing .....	23
4.11. Invited Lectures given at Seminars, Workshops and Summer schools .....	24

4.12. Invited talks and speeches .....	27
4.13. Participation in the Organization of Conferences-Meetings-Lectures .....	31
4.14. Participation in the Organization of Field Trips .....	33
4.15. Classification and organizing the collection of minerals and rocks, AUTH.....	33
4.16. Participation at Exhibitions of Minerals and Material from Ancient Quarries and Classification and Organization of Mineral Exhibitions .....	33
4.17. Professional Memberships .....	34
<b>5. PUBLICATIONS.....</b>	<b>36</b>
5.1. Theses .....	36
5.2. Papers in refereed international Journals .....	36
5.2.1. Papers in international Volumes and Books.....	43
5.3. Papers in refereed national Journals and Special Volumes.....	44
5.4. Papers in refereed international Conference Proceedings .....	46
5.4.1. Extended Abstracts in Special Volumes of International Conferences .....	50
5.5. Papers in refereed national Conference Proceedings .....	51
5.6. Abstracts in international Conference Proceedings .....	53
5.7. Abstracts in national Conference Proceedings.....	59
5.8. Books.....	61
5.9. Non refereed Journals .....	61
5.10. Non refereed field trip guides.....	61

## 1. PERSONAL DETAILS-EDUCATION

### 1.1. Personnel Details

FIRST & LAST NAME Vasilios Melfos  
NAME OF FATHER Ioannis  
DATE OF BIRTH 8<sup>th</sup> May 1964  
PLACE OF BIRTH Thessaloniki  
FAMILY STATE Married, with 2 childrens  
NATIONALITY Greek  
WORK ADDRESS Department of Mineralogy-Petrology-Economic Geology,  
Faculty of Geology, Aristotle University of Thessaloniki, GR-  
54124, Thessaloniki, Greece  
TEL ++ 30 2310 998539  
E-MAIL melfosv@geo.auth.gr  
URL <https://people.auth.gr/melfosv/?lang=en>

CURRENT POSITION

- Professor in Economic Geology - Geochemistry, at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, School of Sciences, Aristotle University of Thessaloniki
- Head of the Department of Mineralogy-Petrology-Economic Geology

Scopus Author <https://www.scopus.com/authid/detail.uri?authorId=6506728374>  
Web of Science <https://www.webofscience.com/wos/author/record/G-9559-2015>  
ORCID iD <http://orcid.org/0000-0002-2887-424X>  
Google Scholar [https://scholar.google.gr/citations?user=R\\_QpzcMAAAAJ&hl=en](https://scholar.google.gr/citations?user=R_QpzcMAAAAJ&hl=en)  
Academia <https://auth.academia.edu/VasiliosMelfos>  
ResearchGate <https://www.researchgate.net/profile/Vasilios-Melfos>  
Publons <https://www.webofscience.com/wos/op/peer-reviews/summary>

### 1.2. Education

1989-1995 PhD in Economic Geology at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.

1983-1988 B.Sc. in Geology, University of Thessaloniki.

### 1.3. Positions Held

2022-present Professor at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.

2018-2022 Associate Professor at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.

2014-2018 Assistant Professor at the Department of Mineralogy-Petrology-Economic

Geology, Faculty of Geology, Aristotle University of Thessaloniki.

- 2010-2014 Lecturer at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.
- 2002-2010 Teaching and Research Assistant at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.
- 2001-2005 Assistant Professor at the Laboratory of Mineralogy, Petrology and Geochemistry, Department of Agriculture, Crop and Animal Production, University of Thessaly (Volos), contract 407/80.
- 1997-1999 Postdoctoral Research at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.
- 1995-2004 Participation at Research Projects of the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.

#### **1.4. Scholarships**

- 1997-1999 Scholarship for Postdoctoral Research in Economic Geology and Geochemistry at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, Aristotle University of Thessaloniki.
- 1989-1992 Postgraduate scholarship by the State Scholarships Foundation as PhD student

#### **1.5. Awards - Distinctions**

- 2022 School of Sciences, Aristotle University of Thessaloniki: Award of Social Impact.
- 2019 Aristotle University of Thessaloniki: Award of Excellence.
- 2018 The Award "Konstantinos Ktenas" of the Academy of Athens for 2018 was awarded to Vasilios Melfos (Department of Geology, AUTH) and Panagiotis Voudouris (Department of Geology and Geoenvironment, EKPA) for their original publication "Melfos V. and Voudouris P. (2017). Cenozoic metallogeny of Greece and potential for precious, critical and rare metals exploration. Ore Geology Reviews, 89, 1030-1057.
- 2016 Chair of the Session "Tethyan Tectonics and Metallogeny" at the SEG 2016 Conference: Tethyan Tectonics and Metallogeny of the Society of Economic Geologists, Çeşme, 25-28 September. Session 3a: Tethyan Tectonics and Metallogeny. Chairs: Vasilios Melfos and Vertrees Canby
- 2013-2019 Editorial Board of the Romanian Journal of Mineral Deposits

## **2. TEACHING EXPERIENCE**

### **2.1. Courses Taught**

#### **2.1.1. Aristotle University of Thessaloniki**

##### **Undergraduate - Courses**

- 2011-2024 Teaching "Economic Geology", Faculty of Geology, 8<sup>th</sup> semester.
- 2011-2014 Co-teaching "Applied-Environmental Geochemistry", Faculty of Geology, 6<sup>th</sup>  
2020-2022 semester.
- 2012 Co-teaching "Foreign language geological terminology I", 5<sup>th</sup> semester and  
2017-2024 "Foreign language geological terminology II", 6<sup>th</sup> semester, Faculty of Geology.
- 2011-2015 Co-teaching "Geochemistry", School of Chemistry, 8<sup>th</sup> semester.
- 2015-2023 Co-teaching "Geology-Geochemistry", School of Chemistry, 4<sup>th</sup> semester.
- 2013-2016 Co-teaching "Geochronology", Faculty of Geology, 5<sup>th</sup> semester.  
2018-2019
- 2015-2024 Co-teaching "Ore Deposits", Faculty of Geology, 5<sup>th</sup> semester.
- 2020-2022 Teaching "Ore Deposits II", Faculty of Geology, 6<sup>th</sup> semester.
- 2023 Teaching "Ore Deposits of Greece", Faculty of Geology, 6<sup>th</sup> semester.
- 2017-2024 Co-teaching "Educational Applications of Digital Technologies in Geology",  
Faculty of Geology, 8<sup>th</sup> semester.
- 2020-2022 Co-teaching "Gemology", Faculty of Geology, 8<sup>th</sup> semester.

##### **Undergraduate - Training in microscopy**

- 1989-1994 Assisting at training of the students in microscopy, as PhD candidate:
1. Ore Deposits
  2. Ore Deposits II
  3. Mineralogy
  4. Rock-forming minerals
  5. Sedimentary petrology.
- 1995-2009 Assisting at training of the students in microscopy:
1. Ore Deposits
  2. Ore Deposits II

2010-2024 Co-teaching at training of the students in microscopy:  
1. Ore Deposits  
2. Ore Deposits II / Ore Deposits of Greece

2014 Co-teaching at training of the students in:  
1. Crystallography  
2. Mineralogy

### **Undergraduate - Field Trips**

2010-2023 Co-teaching at the field trips of the Department of Mineralogy-Petrology-Economic Geology.

### **Postgraduate**

2005-2006 Co-teaching "Economic Geology" at the Postgraduate Program "Geology and Geoenvironment" at the Faculty of Geology, University of Thessaloniki.

2005-2024 Co-teaching "Laboratory-Analytical Methods" at the Postgraduate Program "Geology and Geoenvironment" at the Faculty of Geology, University of Thessaloniki.

2006-2014 Co-teaching "Methods of Prospecting of Mineral Resources" at the Postgraduate Program "Geology and Geoenvironment" at the Faculty of Geology, University of Thessaloniki.

2010-2014 Co-teaching "Environmental Geochemistry" at the Postgraduate Program "Geology and Geoenvironment" at the Faculty of Geology, University of Thessaloniki.

2014-2018 Co-teaching "Applied and Environmental Geochemistry" at the Postgraduate Program "Applied and Environmental Geology" at the Faculty of Geology, University of Thessaloniki.

2014-2018 Co-teaching "Tectonics and Metallogenesis" at the Postgraduate Program "Applied and Environmental Geology" at the Faculty of Geology, University of Thessaloniki.

2014-2024 Co-teaching "Ore Deposits and Ore Microscopy" at the Postgraduate Program "Applied and Environmental Geology" at the Faculty of Geology, University of Thessaloniki.

2018-2022 Co-teaching "Geochemical Data Processing - Reserves Evaluation of Mineral Resources" at the Postgraduate Program "Applied and Environmental Geology" at the Faculty of Geology, University of Thessaloniki.

2020-2022 Co-teaching "Design and Restoration of Mines and Quarries - Remote Sensing"

at the Postgraduate Program “Applied and Environmental Geology” at the Faculty of Geology, University of Thessaloniki.

- 2006-2012 Co-teaching “Field Trips” at the Postgraduate Programs “Geology and Geoenvironment” and “Applied and Environmental Geology” at the Faculty of Geology, University of Thessaloniki.
- 2015-2018 Co-teaching “Sedimentary Basins- Sediment Deposition Processes- Paleogeography-Paleoenvironment” (GMOM 203) of the Cross-Field Postgraduate Program “Hydrocarbon Exploration and Exploitation” at the Faculty of Geology, University of Thessaloniki.
- 2006-2009 Co-teaching “Inorganic Pigments” (A2.13) of the Cross-Field Postgraduate Program: “Preservation And Restoration Of Cultural Monuments”, School of Architecture, University of Thessaloniki.
- 2010-2023 Teaching “Inorganic Pigments” (A2.3) of the Cross-Field Postgraduate Program: “Preservation And Restoration Of Cultural Monuments”, School of Architecture, University of Thessaloniki.
- 2014-2023 Teaching “About Stones” (A2.5) of the Cross-Field Postgraduate Program: “Preservation And Restoration Of Cultural Monuments”, School of Architecture, University of Thessaloniki.
- 2014-2023 Teaching “Theoretical, Practical and Field Seminars on Archaeometry Case Studies II” (ARCH04) of the Erasmus Mundus Master: Archaeological Materials Science (ARCHMAT), School of Chemistry, University of Thessaloniki.
- 2018-2023 Co-teaching “Properties of materials” (MY2) and “Microscopic Methods for the Characterization of Materials. X-ray Diffraction and X-ray Fluorescence” (MY10), of the Cross-Field Postgraduate Program: “Physical and Chemical Methods for Diagnosis of Degradation of Cultural Heritage Materials”, School of Chemistry, University of Thessaloniki.

### **2.1.2. Democritus University of Thrace (Xanthi)**

- 2013-2016 Co-teaching “Technologies associated with the natural resources management legislation III (mineral resources)”, 1<sup>st</sup> Semester and “Technologies associated with the legislation for the preliminary environmental permitting”, “Technologies associated with the legislation of the environmental permitting” and “Case studies presentation” , 2<sup>nd</sup> Semester in the Unit “Natural Resources & Ecosystems Management”, of the Postgraduate Master’s Program “The Technologies of Environmental Legislation”, Department of Environmental Engineering, Democritus University of Thrace.



### **2.1.3. University of Thessaly (Volos)**

- 2001-2003 Teaching “Geology-Mineralogy-Petrology” and “Geochemistry” at the School of Agricultural Sciences, University of Thessaly.
- 2003-2005 Teaching “Geochemistry” at the Faculties of Agriculture Crop Production and Rural Environment and Agriculture Animal Production and Aquatic Environment, University of Thessaly.
- 2004-2005 Teaching “Geochemistry” at the School of Agriculture Animal Production and Aquatic Environment, University of Thessaly.

### **2.1.4. Institute of Vocational Training (Thessaloniki)**

- 2000 “Gemology and alternative materials” at the Institute of Vocational Training “KOSMOS” of Thessaloniki.
- 1998-2002 “Mineralogy-Metallurgy”, “Gemology-Precious Stones” - undergraduate courses at the Institute of Vocational Training of Thessaloniki.

### **2.1.5. List of trainers S.E.K.**

- 2002 List of trainers S.E.K. of the National Accreditation Centre of Vocational Training Structures and Accompanying Support Services (E.KE.PI.S.) in the category of Geologists and Geophysicists (2114).

## **2.2. Student Supervision**

### **2.2.1. Diploma Theses**

Supervisor or co-supervisor at 111 diploma theses.

### **2.2.2. Master Theses**

Supervisor at 26 master theses (7 are in progress) and member of the supervising/examining committee at 27 master theses (10 are in progress).

### **2.2.3. Doctorate Theses**

1. Peristeridou E. (in progress). Metallogenesis of critical and rare metals in the listwanite of Ano Vyrini, Rhodope Massif, NE Greece. Faculty of Geology, University of Thessaloniki (Supervisor).
2. Nikopoulou M. (in progress). Study and identification of precious stones from Museum specimens. Faculty of Geology, University of Thessaloniki (Supervisor).
3. Kyranoudi M. (in progress). Αρχαιομετρική μελέτη των υλικών κατασκευής εντοιχίων ψηφιδωτών από μνημεία της Θεσσαλονίκης Faculty of Physics, University of Thessaloniki (Supervisor).
4. Zaimis S. (in progress). The distribution of critical metals at the Lavrion (Attica, Greece) intrusion-related polymetallic ore system. Fakultät Für Geowissenschaften, Geotechnik

Und Bergbau, Technische Universität Bergakademie Freiberg, Germany (Supervising committee).

5. Lazaridis G. (2024). Formation conditions of hypogene caves in the Greek orogen. Mineralogy, geochemistry, stable isotopes (C, O, S), fluid inclusions. Faculty of Geology, University of Thessaloniki (Supervisor).
6. Stergiou Ch. (2022). Critical and rare metals in Tertiary magmatic-hydrothermal deposits at the Serbo-Macedonian Metallogenic Province in Greece (Vathi, Gerakario, Laodikino, Kolhiko, Aspra Chomata). Faculty of Geology, University of Thessaloniki (Supervisor).
7. Mavrogonatos K. (2021). Mineralogical, petrographic and geochemical study of hydrothermal alteration zones and related porphyry-epithermal mineralization at Sapes-Kirki area, NE Greece. Faculty of Geology and Geoenvironment, National and Kapodistrian University of Athens (Supervising committee).
8. Giouri E. (2021). Mineralogical and geochemical environmental research in the area of Philippi Municipality, Kavala Prefecture. Faculty of Geology, University of Thessaloniki (Supervising committee).
9. Kyropoulou D. (2016). Technological evolution and pathogenesis of historical mortars. Faculty of Geology, University of Thessaloniki (Supervising committee).
10. Zisi N. (2016). Study of bear fossils the Loutra cave in Almopia using isotopic methods and diagenetic indicators: a new approach to palaeoenvironmental conditions. Faculty of Geology, University of Thessaloniki (Supervising committee).

#### **2.2.4. Participation in examination committees for doctoral theses**

1. Tsombanoglou K. (2011). Mineralogical and geochemical study of the suspended particulate matter and the bottom sediments at the northern part of the Thermaikos Gulf. Faculty of Geology, University of Thessaloniki.
2. Papanikolaou E. (2016). Investigation of corrosion factors of the building stones from the temples of Demeter and Asclepius in the Archaeological Site of Dion. Faculty of Geology, University of Thessaloniki.
3. Tzamos E. (2016). Mineralogy, petrology and ore geology of the Xerolivado ophiolites (Vourinos, Western Macedonia, Greece). Faculty of Geology, University of Thessaloniki.
4. Vaxevanopoulos M. (2017). Record and study of the ancient mining activity on Mount Pangaion, E. Macedonia, N. Greece. Faculty of Geology, University of Thessaloniki.
5. Bekiaris T. (2018). Technologies of the ground stones in Neolithics of Northern Greece: The Neolithic settlement of Avgi in Kastoria. School of History and Archaeology, University of Thessaloniki.
6. Arvaniti Th. (2019). Investigation with non-invasive or minimally invasive techniques, of materials and objects found along with bones in burials of eminent persons in ancient Macedonian society: Contribution to the understanding of funerary customs. School of Chemistry, University of Thessaloniki.
7. Emmanouilidis Ch. (2019). Metallogenesis in the area between Veria and Naousa. Faculty of Geology, University of Thessaloniki.

8. Alexandridis I. (2023). Contribution to the understanding of the geological structure and petroleum systems of Epirus with integration of field geology and organic geochemistry methods. Faculty of Geology, University of Thessaloniki.
9. Varnava A. (2023). Architectural structure, deformation kinematics and geotectonic setting of the Mamonia complex and ophiolitic mixtures of SW Cyprus. Faculty of Geology, University of Thessaloniki.
10. Mytigliaki (2023). Genesis of the palygorskite-smectite deposits in the area of Grevena-Kozani. Faculty of Geology, University of Thessaloniki.
11. Myo Thu Aung (2023). Geology and Genesis of the Nwe Yon-Kwinthoneze Gold District, Central Myanmar: Insights from Mineralogical, Fluid Inclusions and (S, C, O, H, Pb) Isotopes. Faculty of Geology, Geophysics and Environmental Protection, AGH University of Science and Technology, Poland.
12. Pantazopoulou Z. (2024). The Contribution of Remote Sensing and GIS to Geological Heritage Management at Different Scales. Faculty of Geology, University of Thessaloniki.

#### **2.2.5. Post-Doc research supervision**

1. Aikaterini Giouri (2021). Study of the Fe- and Mn-oxides composition in stream sediments from the Palaia Kavala district, Northern Greece. Faculty of Geology, University of Thessaloniki (in progress).
2. 2. Stergiou Ch. (2023). Mineralogy and geochemistry of critical metals in magmatic-hydrothermal, lateritic and sedimentary deposits of northern Greece (Vathi, Vermio, Kastoria, Filiates). Faculty of Geology, University of Thessaloniki (in progress).

#### **2.3. Training notes**

- |      |  |
|------|--|
| 2021 | “Gemology” (in Greek) for the students of the Faculty of Geology, University of Thessaloniki.  |
| 2014 | “Rocks as building materials in antiquity” (in Greek) - Postgraduate course of the Cross-Field Postgraduate Program: «Preservation and Restoration Of Cultural Monuments», School of Architecture, University of Thessaloniki. |
| 2014 | “Geochemistry” and “Geology-Geochemistry” (in Greek) as co-writer, for the students of the School of Chemistry, University of Thessaloniki.  |
| 2012 | “English Geological Terminology II” as co-writer, for the students of the Faculty of Geology, University of Thessaloniki.  |
| 2008 | “Inorganic Pigments” (in Greek) - Postgraduate course of the Cross-Field Postgraduate Program: «Preservation And Restoration Of Cultural Monuments», School of Architecture, University of Thessaloniki.                       |
| 1998 | “Mineralogy-Metallurgy-Precious Metals” (in Greek) - Institute of Vocational   |

Training of Thessaloniki.

- 1998 “Gemology-Precious Stones” (in Greek) - Institute of Vocational Training of Thessaloniki.
- 1998 “English Geological Terminology I and II” as co-writer, for the students of the Faculty of Geology, University of Thessaloniki.

#### **2.4. Educational material of the Laboratory of Ore Microscopy**

- 2003-2006 Participation in the re-organization of the educational material of the Laboratory of Ore Microscopy, Faculty of Geology, University of Thessaloniki.

#### **2.5. Academic Advisor of the AUTH SEG Student Chapter**

The Student Chapter of the Society of Economic Geologists (S.E.G) in the Aristotle University of Thessaloniki operates since September 2014, and I serve as the Academic Advisor. The Chapter has 20 members who are also members of the SEG and have a genuine interest in the subjects of Ore Deposits and Economic Geology, as well as in the research, assessment and exploitation of the mineral raw materials. The actions of the Chapter includes presentations with topics of special interest, field trips financed by the SEG and the private sector, seminars, workshops and lectures by geoscientists of the private and academic sectors. An important part of the Student Chapter activities incorporates initiatives to promote and disseminate the importance of Economic Geology to the public. The Student Chapter received from the Rectorate Authorities of the University of Thessaloniki a mention for its actions during the academic year 2015-16 and an Award of Excellence in 2020-21.

### **3. UNIVERSITY COMMITTEES**

- 2003-2023 Member of the committee of the Fluid Inclusions Lab at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology.
- 2003-2024 Member of the committee of the Mineralogical-Petrologic Museum at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology.
- 2007-2024 Member of the committee of the Separation and Rock Fracture Lab at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology.
- 2011-2024 Member of the committee of the Reflected-light Microscopy Lab at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology.
- 2007-2013 Member of the committee of Events and Public Relations at the Faculty of Geology.
- 2013-2016 Member of the committee of Lectures, Seminars, Events and Public Relations at the Faculty of Geology.

- 2016-2024 Member of the committee of Extraversion of the Faculty of Geology.
- 2020-2022 Member of the committee for the Course Program of the Faculty of Geology.
- 2008-2009 Member of the committee of Program of Teaching and Examinations and Classroom Program at the Faculty of Geology.
- 2010-2016 Member of the committee of Library at the Faculty of Geology
- 2011-2016 Member of the committee of Field Trips at the Faculty of Geology.
- 2010-2014 Member of the committee of the coordination of the Postgraduate Program “Mineral Resources-Environment” at the Faculty of Geology.
- 2020-2024 Member of the committee of the coordination of the Postgraduate Program “Applied and Environmental Geology” at the Faculty of Geology.
- 2013-2017 Coordinator of the committee of European Educational Programs at the Faculty of Geology.
- 2015-2016 Member of the committee of Organizing events with students of Secondary level Education at the Faculty of Geology.
- 2016-2017 Member of the planning events committee of the School of Sciences.
- 2016-2018 Member of the planning events committee for the anniversary of 90 years of the School of Sciences.
- 2020-2023 Member of the Committee of the Cross-Field Postgraduate Program: “Physical and Chemical Methods for Diagnosis of Degradation of Cultural Heritage Materials”, School of Chemistry.
- 2022-2024 Member of the Communication Committee of the School of Sciences  
**Coordinator for the academic year 2022-23.**
- 2020-2024 Director of the “Laboratory of Geochemistry” at the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology.
- 2023-2024 Head of the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology.

## 4. RESEARCH

### 4.1. Research Interests

My research activity mainly refers to issues of Economic Geology, Geochemistry,

## Mineralogy and Petrography.

Specifically, my scientific activity includes:

- Geochemical, mineralogical and Fluid inclusion studies of magmatic-hydrothermal, porphyry and epithermal type mineralizations. Ore mineralogical study of rare metal (Re, Mo, Te, Bi) deposits.
- Fluid inclusion research.
- Carbon and oxygen isotopes study of carbonate rocks.
- Provenance determination of the raw materials of white marble archaeological artifacts, based on mineralogy and isotopic geochemistry.
- Geological context for mines in Attica and the ancient world
- Environmental geochemistry and mineralogy in sediments and water streams

### 4.2. Scientific - Laboratory Training

- Microscopy on minerals: reflected light microscope, transmitted light microscope, scanning electron microscopy (SEM) at the University of Thessaloniki.
- X-Ray Diffraction of minerals: X-ray diffractometry (XRD) at the University of Thessaloniki.
- Mineral microprobe analysis at the Institute of Mineralogy and Geochemistry. University of Cologne, Germany.
- Microthermometry for the study of fluid inclusions at the University of Thessaloniki

### 4.3. Participation in Research Projects

1. 2021-2024 “Action for Research and Teaching Mining exploration Inclusive School - ARTeMIS”  
Faculty of Geology AUTH, Faculty of Geology and Geoenvironment EKPA, Friedrich Alexander Universität Erlangen-Nürnberg και Universite De Lorraine, France  
Financing: Erasmus+  
Project Leader: Alexandre Tarantola  
Project Leader at AUTH: V. Melfos
2. 2022-2024 “Targeted investigation of critical metals in vein-hosted gold deposits at the Serbo-Macedonian Metallogenic Province, Northern Greece”  
Faculty of Geology AUTH and Rheinisch-Westfälische Technische Hochschule Aachen  
Financing: Greek State Scholarships Foundation (IKY) and German Society for Academic Exchanges (DAAD)  
Project Leader: G.-A. Sakellaris
3. 2022 “Evaluation of the existing studies for the Sarigiol basin and the expression of a scientific assessment for the origin of the hexavalent chromium in the groundwater of the area”  
Faculty of Geology AUTH  
Financing: Kozani Municipal Water Supply and Sewerage Company (DEYAK)

Project Leader: V. Melfos

4. 2020-2021 "Petrographic study and isotopic analysis of the Leivithra SW wall"  
Faculty of Geology, AUTH  
Financing: Ephorate of Antiquities of Pieria  
Project Leader: V. Melfos
5. 2015-2016 "Provenance study of selected ancient millstones from Thasos island through a mineralogical and geochemical research"  
Faculties of Geology, AUTH and MCF Archéologie Grecque, Université Lille 3, France.  
Financing: CNRS - HALMA-IPEL - Université Lille 3, France  
Project Leader: V. Melfos
6. 2014 "Hydrochemical-Hydrogeological study of the water-supply area of Volos Municipality"  
Faculties of Geology and Chemistry, University of Thessaloniki.  
Financing: Municipal Company For Water Supply And Sewerage Of Greater Volos Area (DEYAMV)  
Project Leaders: K. Voudouris (2013-2014) and I. Stratis (2008-2013).
7. 2013-2016 "Western Tethyan Metallogeny Project"  
Mineral Deposit Research Unit (MDRU), The University of British Columbia (UBC), Vancouver, Canada, Faculties of Geology and Chemistry, University of Thessaloniki.  
Financing: MDRU, UBC, Vancouver, Canada  
Project Leader: Aleksandar Miskovic
8. 2012 "Combined archaeological and petrographic-geochemical study of a newly discovered prehistoric chert quarry in Triadi of Thessaloniki, Central Macedonia, Greece"  
Faculty of Geology, University of Thessaloniki.  
Financing: INSTAP. Project Leaders: V. Melfos and Niels Andreasen
9. 2012 "Mineralogical, petrographic and isotopic (C,O) study of marbles for ancient quarries in Macedonia. Contribution to the determination of marble archaeological implements for preservation or for identification of authenticity"  
Department of Mineralogy-Petrology-Economic Geology, University of Thessaloniki.  
Financing: Research Committee of the University of Thessaloniki. Project Leader: V. Melfos
10. 2011 "Provenance of the raw materials from selected poros samples at the Ancient Theatre of Larisa"  
Project without financing: Scientific Committee of the "Ancient Theatre of Larisa"

Project Leader: V. Melfos

11. 2010 "Provenance of the raw materials from selected marble samples at the Ancient Theatre of Larisa"  
Project without financing: Scientific Committee of the "Ancient Theatre of Larisa"  
Project Leader: V. Melfos
12. 2010-2011 "Organization of a Master Program at the Science of Conservation in Morocco"  
Universities of Fez and Marrakech, Morocco  
Scientific coordinator: E. Varella.  
TEMPUS programs in collaboration with AUTH
13. 2008 "Organization of a Master Program in Conservation Science at the University of Yarmouk, Jordan"  
Yarmouk University, Ibrid, Jordan  
Scientific coordinator: E. Varella.  
TEMPUS program in collaboration with AUTH: Vocational Seminar on Cultural Heritage Preservation
14. 2008 "Conservation, preservation and restoration of cultural monuments"  
Department of Architectural Engineering, AUTH  
Scientific coordinator: Em. Stefanidou.
15. 2006-2007 "Provenance of the raw materials of the chipped-stone artifacts through petrographic and geochemical analyses at the Neolithic excavation in Drakaina Cave, Kefalonia, Western Greece"  
Financing: INSTAP. Project Leader: G. Stratouli.
16. 2005-2006 "Research for the development of the karst caves in the region of N. Perivoli, Larissa"  
Faculty of Geology, University of Thessaloniki.  
Financing: Larisa Prefecture. Project Leader: E. Tsoukala.
17. 2004-2005 "Petrographic and geochemical study of the lithic artifacts from the Neolithic excavation at the Mikro Vouni in Samothraki"  
Department of Mineralogy-Petrology-Economic Geology, University of Thessaloniki  
Financing: INSTAP. Project Leader: M. Vavelidis.
18. 2003-2005 "Characterization of the lithic artifacts from the Neolithic excavations in Drakaina Cave, Kefalonia: a petrographic-geochemical approach for the determination of raw materials and sources"  
Financing: INSTAP. Project Leader: G. Stratouli.
19. 2002-2004 "Identification of sources of gold, silver, lead and copper in Macedonia and



- Thrace in antiquity”  
Faculty of Geology, University of Thessaloniki, in cooperation with the  
Institut für Archäometrie του TU Bergakademie Freiberg Germany.  
Program to promote exchanges and scientific cooperation between Greece  
and Germany IKYDA 2001  
Project Leader: M. Vavelidis.
20. 2002-2003 “Promotion, protection and sustainable use of the cave Polyphemos in  
Maronia, Prefecture of Rhodopi, Thrace”  
Faculty of Geology, University of Thessaloniki.  
Financing: Region of Eastern Macedonia and Thrace.  
Project Leader: S. Pavlides.
21. 2000 “Primary study of the ancient mining and metallurgical works in Kipouristra,  
Olympias, Chalkidiki”  
Department of Mineralogy-Petrology-Economic Geology, University of  
Thessaloniki  
Financing: Ephorate of Prehistoric and Classical Antiquities and Ephorate of  
Byzantine Antiquities of Thessaloniki  
Project Leader: M. Vavelidis.
22. 1999 “Preservation and management of the Rhodope mountain”  
Natural history Museum of Crete  
Financing: University of Crete. Project Leader: M. Mylonas.
23. 1999-2000 “Study of the old quarries in the broader area of Petrota, Evros prefecture.  
The role of the quarries in the preservation of the geological-quarrying and  
cultural heritage”  
Department of Mineralogy-Petrology-Economic Geology, University of  
Thessaloniki  
Financing: Municipality of Trigono. Project Leader: M. Vavelidis.
24. 1999-2000 “ADAPT Lydia Lithos - Strategy project for protection and prediction of the  
industrial changes influence on the employment in the marble production  
industry”  
Department of Mineralogy-Petrology-Economic Geology, University of  
Thessaloniki  
Project Leader: A. Tsirambides.
25. 1998-2000 “Study of gold, silver and stone archaeological finds from the excavations of  
ancient Mesimvria-Zoni”  
Department of Mineralogy-Petrology-Economic Geology, University of  
Thessaloniki  
Financing: European Community through the Archaeological Museum of  
Komotini  
Project Leader: M. Vavelidis.

26. 1996-1998 “Archaeometric research for the provenance of gold for archaeological finds in Macedonia dated from Neolithic time to late Hellenistic period”  
Department of Mineralogy-Petrology-Economic Geology, University of Thessaloniki  
Research Project PENED. Financing: General Secretariat for Research and Technology of Greece (1163).  
Project Leader: M. Vavelidis.
27. 1996 “Magmatism, metallogenesis and exploitation of mineral resources in the area of Kavala-Paggaion in Eastern Macedonia”  
Department of Mineralogy-Petrology-Economic Geology, University of Thessaloniki  
Research Project PENED. Financing: General Secretariat for Research and Technology of Greece (91 243).  
Project Leader: G. Christofides.
28. 1995-1997 “Provenance of gold for archaeological finds dated from the late Classical to Hellenistic times (Vergina, ancient Pydna, Derveni, Sedes, Stavroupoli)”  
Department of Mineralogy-Petrology-Economic Geology, University of Thessaloniki  
Financing: Research Committee of the University of Thessaloniki (7661).  
Project Leader: M. Vavelidis.

#### **4.4. Scientific collaborations with Research Groups**

1. 2019-2024 «Magmatism and metallogenesis in Greece»  
Co-working with Reiner Klemd, Karsten Haase, Keith Manuel (University of Erlangen, Germany), Alexandre Tarantola (University of Lorraine, France) and Panagiotis Voudouris (University of Athens)
2. 2014-2022 “Precious stones in Greece”  
Co-working with Stefanos Karamelas (Bahrain Institute for Pearls & Gemstones - DANAT) and Professor Panagiotis Voudouris (University of Athens).
3. 2013-2016 “Western Tethyan Metallogeny Project”  
Co-working with Craig Hart, Aleksandar Miskovic, Matias Sanchez, Thomas Bissig (MDRU-UBC), Panagiotis Voudouris (University of Athens)  
Mineral Deposit Research Unit (MDRU), The University of British Columbia (UBC), Vancouver, Canada
4. 2012-2014 “Archaeological and petrographic-geochemical study of the prehistoric chert quarries in Triadi of Thessaloniki”  
Co-working with the archaeologist Niels Andreasen.
5. 2012-2018 “Genesis of magnesites in Northern Greece”

Co-working with Ladislav and Sabina Strmic-Palinkas (Department of Geology, University of Zagreb, Croatia)  
Scientific agreement between the University of Thessaloniki and the University of Zagreb

6. 2006-2024 "Genesis of hydrothermal ore deposits in Greece",  
Co-working with Paul Spry (Iowa State University, USA) and Panagiotis Voudouris (University of Athens)
7. 2006-2018 "Gold in ore deposits in Greece and Bulgaria-mineralogical, archaeometric, ecological aspects"  
Participation in the Exchange Program between the University of Thessaloniki and the University of Sofia, Bulgaria.
8. 1999-2006 "Gold and platinum group elements from mineral deposits in Greece and Bulgaria"  
Participation in the Exchange Program between the University of Thessaloniki and the University of Sofia, Bulgaria.
9. 1991-1992 "Mineralogy and genetical models of gold and base-metal deposits from eastern Rhodope, Bulgaria and northern Greece"  
Participation in the Exchange Program between the University of Thessaloniki and the University of Sofia, Bulgaria.

#### 4.5. Congresses and Meetings

##### 4.5.1. International Congresses

1. 2023 2<sup>nd</sup> International Conference on Raw Materials and Circular Economy (RawMat 2023), Athens, Greece, 28 Aug - 02 Sep (2 posters).  
**Member of the Organizing Committee, of the Scientific Committee and Chairman at the SESSION C6 Reuse-Recycling and Valorisation II**  
(<https://www.rawmat2023.ntua.gr/conference-information/programme/detailed-programme/>)
2. 2022 XXII Congress of the Carpathian Balkan Geological Association (CBGA 2022), Plovdiv, 7-11 September (2 oral and 6 poster presentations).  
**Chairman at the Session "Economic Geology"**  
(<https://cbga2022.geology.bas.bg/>).
3. 2016 SEG 2016 Conference: Tethyan Tectonics and Metallogeny of the Society of Economic Geologists, Çeşme, 25-28 September (1 poster presentation).  
**Chairman at the Session "Tethyan Tectonics and Metallogeny"**  
(<http://www.seg2016.org/technical-program.html>).
4. 2010 XIX Congress of the Carpathian Balkan Geological Association, Thessaloniki, 23-26 September (2 oral presentations and 2 poster presentations).

5. 2009 EGU 2009, European Geosciences Union, General Assembly 2009, Vienna, Austria, 19-24 April (1 oral and 1 poster presentation).
6. 2008 XIII All-Russian conference on thermo-barogeochemistry in conjunction with IV APIFIS symposium of the Russian Mineralogical Association, Moscow, Russia, 22-25 September (1 oral presentation).
7. 2006 11<sup>th</sup> International Conference on Experimental Mineralogy, Petrology and Geochemistry (EMPG XI) of the European Mineralogical Union and the Mineralogical Society of Great Britain. Bristol, UK, 11-13 September (1 poster presentation).
8. 2005 Field Workshop of IGCP-486 "Au-Ag-telluride-selenide deposits", Kiten, Bulgaria, 14-19 September (1 oral presentation).
9. 2003 7<sup>th</sup> International Conference of ASMOSIA (Association for the Study of Marble and Other Stones used in Antiquity). Thasos, Greece, 15-20 August.
10. 2003 7<sup>th</sup> Biennial of SGA. "Mineral Exploration and Sustainable Development". Athens, 24-28 August (1 oral presentation).
11. 2002 6<sup>th</sup> International Conference: "Protection and Restoration of the Environment". Skiathos, Greece, 1-5 July (1 oral presentation).
12. 2000 1<sup>st</sup> Workshop titled "Geodynamics and Ore Deposit Evolution of the Alpine-Balkan-Carpathian-Dinaride Province". Borovets, Bulgaria, 26-29 May (1 oral and 2 poster presentations).
13. 1997 1<sup>st</sup> International Conference for the "Ancient Greek Technology". Thessaloniki, 4-7 September (1 oral presentation).
14. 1996 International Conference "TERRANES OF SERBIA. The Formation of the Geologic Framework of Serbia and the Adjacent Region". Belgrade-Brezovica Yugoslavia, 23-27 September (3 oral presentations).  
Chairman at the Session "Metallogeny and Plate Tectonics in the Carpatho-Balkan Region".
15. 1995 15<sup>th</sup> International Conference for the Geology of the Carpatho-Balkan. Athens, 17-20 August (1 oral presentation).
16. 1995 8<sup>th</sup> International Conference for the Research on Fluid Inclusions (ECROFI). Sitges, Spain, 21-23 June (2 oral presentations).
17. 1991 1<sup>st</sup> Biennial of SGA. "Source, transport and deposition of metals". Nancy, France, 30 August-3 September (1 oral presentation).

18. 1989 2<sup>nd</sup> Greek-Bulgarian Symposium. "Geological and Physico-geographical problems of the Rhodope Massif". Thessaloniki, 14-17 October.
19. 1987 1<sup>st</sup> Greek-Bulgarian Symposium. "Geological and Physico-geographical problems of the Rhodope Massif". Smolyan, Bulgaria, 16-19 September.

#### 4.5.2. National Congresses

1. 2022 16<sup>th</sup> Congress of the Geological Society of Greece, Patras, 17-19 October (5 oral presentations or posters).  
**Chairman at the Session "Geochemistry, Mineralogy, Petrology and Volcanology"** (<https://gsg2022.gr/general-sessions/>).
2. 2021 33<sup>rd</sup> Scientific Conference for the Archaeological Investigations in Macedonia and Thrace, Thessaloniki, 22-24 April (1 oral presentation).
3. 2017 1<sup>st</sup> Conference of the Department of Culture and Sciences of the Municipality of Larissa and the Folklore Historical Museum of Larisa, Larisa, 3-5 November (1 oral presentation).
4. 2016 14<sup>th</sup> Conference of the Geological Society of Greece, Thessaloniki, Greece, 25-27 May (1 oral presentations and 3 posters).
5. 2014 10<sup>th</sup> Geographical Conference of the Hellenic Geographical Society, Thessaloniki, 22-24 October.
6. 2014 10<sup>th</sup> Hydrogeological Conference of Greece, Thessaloniki, 8-10 October.
7. 2010 12<sup>th</sup> Conference of the Geological Society of Greece, Patras, Greece, 19-22 May (2 oral presentations).
8. 2010 21<sup>st</sup> Scientific Conference for the Archaeological Investigations in Macedonia and Thrace, Thessaloniki, 11-13 March (1 oral presentation).
9. 2008 5<sup>th</sup> Symposium of the Hellenic Society for Archaeometry, Athens, 8-10 October (1 oral presentation).
10. 2005 2<sup>nd</sup> Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece, Thessaloniki, 7-9 October (1 oral presentation).
11. 2004 10<sup>th</sup> Conference of the Geological Society of Greece, Thessaloniki, 15-17 April (1 oral presentation).
12. 2003 4<sup>th</sup> Symposium of the Hellenic Society for Archaeometry, Athens, 28-31 May (1 oral presentation).

13. 2002 6<sup>th</sup> Greek Geographical Conference of the Hellenic Geographical Society, Thessaloniki, 3-5 October.
14. 2002 15<sup>th</sup> Scientific Conference for the Archaeological Investigations in Macedonia and Thrace, Thessaloniki, 14-16 February (1 oral presentation).
15. 2001 9<sup>th</sup> Conference of the Geological Society of Greece, Athens, 26-28 September (2 oral presentations).
16. 2000 1<sup>st</sup> Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece: "Mineral Wealth and Environment", Kozani, 12-13 February.
17. 1997 4<sup>th</sup> Hydrogeological Conference of Greece, Thessaloniki, 14-16 November.
18. 1996 3<sup>rd</sup> Symposium of the Hellenic Society for Archaeometry, Athens, 6-9 September (1 oral presentation).
19. 1994 7<sup>th</sup> Conference of the Geological Society of Greece, Athens, 25-27 May.
20. 1993 2<sup>nd</sup> Symposium of the Hellenic Society for Archaeometry, Thessaloniki, 26-28 March.
21. 1992 6<sup>th</sup> Conference of the Geological Society of Greece, Thessaloniki, 25-27 May (1 oral presentation).
22. 1990 5<sup>th</sup> Conference of the Geological Society of Greece, Thessaloniki, 25-27 May.
23. 1988 4<sup>th</sup> Conference of the Geological Society of Greece, Athens, 25-27 May (1 oral presentation).

#### **4.5.3. Meetings**

1. 2017 Meeting: "The Contribution of geology to the society - Geological Surveys of AUTH in the Municipality of Volvi", organized by the Faculty of Geology, in collaboration with the Municipality of Volvi and the Cultural Association of Vrasna, Stavros of Thessaloniki, 13<sup>th</sup> May (1 oral presentation).
2. 2007 Meeting: "Maronia Municipality - Centre of Development and Culture", Maronia, 10<sup>th</sup> June (1 oral presentation).
3. 2003 Meeting of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece: "Aggregates and Building Stones". Thessaloniki, 11<sup>th</sup> April.

#### **4.5.4. Participation at Training Courses-Workshops**

1. 2014 MDRU Short Course: “Porphyry Cu(-Mo, Au) and Epithermal Au-Ag Deposits: Metallogeny, Alteration & Mineralization”, by Dr. Thomas Bissig and Dr. Farhad Bouzari, MDRU-UBC Vancouver, Canada, in Sofia Bulgaria, 26<sup>th</sup>-27<sup>th</sup> August.
2. 2014 MDRU Short Course: “Tectonic Units and Geodynamic Processes of the Greater Alpine Collision Zone: Eastern Alps to Western Turkey”, by Professor Stefan M. Schmid, Emeritus Professor, ETH Institut für Geophysik, Zürich, in Athens, 6<sup>th</sup>-7<sup>th</sup> June.
3. 2013 5<sup>th</sup> Thematic School on Conservation Science “Solutions to Questions of our Cultural Heritage by Physical and Chemical Methods in Theory and Practice” organized by the Vienna University of Technology, Austria, 17<sup>th</sup>-26<sup>th</sup> September.
4. 2011 “Organizing and writing of Research Proposals”, organized by the Research Committee of the AUTH, Thessaloniki, 26<sup>th</sup>-30<sup>th</sup> September.
5. 2010 9<sup>th</sup> Freiberg Short Course in Economic Geology on “Magmatic Ni-Cu-PGE deposits: petrogenesis and exploration”. University of Freiberg, Germany, 6<sup>th</sup>-10<sup>th</sup> December.
6. 2006-2007 “Special Training Program Workshop for Adult Educators” for the Certification System of the National Accreditation Centre of Vocational Training Structures and Accompanying Support Services (E.KE.PI.S.). Thessaloniki
7. 1992 Participation at the Fluid Inclusions seminar: “Introduction to Fluid Inclusions Studies: Short Courses of Lectures and Practical Exercises”, organized by the Eidgenössische Technische Hochschule (ETH), Zürich, Switzerland 2<sup>nd</sup>-5<sup>th</sup> February.

#### **4.6. Stay at European Institutes and Universities for analytical methods training**

1. Institut für Archäometrie of TU Bergakademie Freiberg, Germany, through the Exchange Program between Greece and Germany IKYDA 2001 (December 2002)
2. University of Sofia in Bulgaria, through the Inter-University Exchange Program between Universities of Sofia and Thessaloniki (June 2002): «Gold and elements of platinum group in mineral deposits in Bulgaria and Greece»
3. University of Sofia in Bulgaria, through the Inter-University Exchange Program between Universities of Sofia and Thessaloniki (December 2000): «Gold and elements of platinum group in mineral deposits in Bulgaria and Greece»
4. University of Cologne in Germany (December 1993)
5. Eidgenössische Technische Hochschule (ETH), Zurich, Switzerland (February 1992).
6. University of Sofia in Bulgaria, through the Inter-University Exchange Program between Universities of Sofia and Thessaloniki (February and March 1991)

7. Universities of Heidelberg, Karlsruhe and Stuttgart in Germany (December 1990)
8. "Industriško Energetski Kombinat Kostolac", Kostolac of Yugoslavia through the Inter-University Student Exchange Program IASTE (August 1986)

#### **4.7. Participation in Electoral Committees for Faculty members**

Member of 18 Electoral Committees for the promotion of faculty members at the Universities of Thessaloniki (2 Faculty members), Athens (6 Faculty members), Patras (4 Faculty members), and Ionion (2 Faculty members), and at the Technical Universities of Athens (2 Faculty members) and Crete (2 Faculty members). Of these, in three I was member of the 3-Member Advisory Committee.

#### **4.8. Reviewer in published works**

##### **4.8.1. International and National Journals Reviewer**

Reviews according to Publons = 70

1. Acta Vulcanologica (2015)
2. Archaeological and Anthropological Sciences (2013, 2018, 2021)
3. Archaeological Prospection (2018, 2019, 2020)
4. Archaeometry (2011, 2012, 2013, 2018, 2020x2, 2022, 2023, 2024)
5. Bulletin of the Geological Society of Greece (2019, 2020)
6. Crystals (2022)
7. Economic Geology (2015)
8. Environment and Pollution (2013)
9. Environments (2019)
10. European Mineralogical Union Notes in Mineralogy (2016)
11. Geologica Balcanica (2024)
12. Geologia Croatica (2015)
13. Geological Magazine (2021)
14. Geosciences (2023)
15. International Journal of Environmental Research and Public Health (2020)
16. Journal of African Earth Sciences (2015, 2019, 2022)
17. Journal of Archaeological Science (2020)
18. Journal of Basic and Applied Research International (2015)
19. Journal of Building Engineering (2022)
20. Journal of Cultural Heritage (2017)
21. Journal of Geochemical Exploration (2016)
22. Journal of Geosciences (2021)
23. Journal of Taibah University for Science (2020x2)
24. Mineralium Deposita (2013, 2020)
25. Minerals (2019x3, 2020x3, 2021x4, 2022x2, 2023x2)
26. Neues Jahrbuch für Mineralogie / Journal of Mineralogy and Geochemistry (2013)
27. Open Geosciences (2017, 2018)
28. Ore Geology Reviews (2017, 2019, 2022x2, 2023, 2024x2)
29. Physics and Chemistry of Minerals (2023)
30. PLOS ONE (2023)
31. Romanian Journal of Mineral Deposits (2011)



32. Scientific Reports of Nature (2020)
33. Turkish Journal of Earth Sciences (2024)
34. Water (2020)

#### **4.8.2. Conference Proceedings Reviewer**

- 2023 Reviewer in an extended Abstract submitted at the Materials Proceedings of MDPI in the frame of the Conference RawMat 2023.
- 2018 Reviewer in a paper submitted at the 1<sup>st</sup> International Electronic Conference on Mineral Science (IECMS2018), section: Mineral Deposits, sponsored by the MDPI open access journal Minerals.
- 2016 Reviewer in papers submitted at the “14<sup>th</sup> International Conference of the Geological Society of Greece”.
- 2015 Reviewer in papers submitted for the Special Volume in memoriam to Professor G. Eleftheriadis.
- 2014 Reviewer in papers submitted at the “10<sup>th</sup> International Hydrogeological Congress” of the Hellenic Chapter of International Association of Hydrogeologists and IAH Cyprus Association of Geologists and Mining Engineers.
- 2013 Reviewer in papers submitted at the “13<sup>th</sup> International Conference of the Geological Society of Greece”.
- 2012 Reviewer in papers submitted at the International Conference: “Scientific Protection and Restoration of the Environment XI”.
- 2010 Reviewer in papers submitted at the “XIX Congress of the Carpathian Balkan Geological Association”.
- 2007 Reviewer in papers submitted at the “11<sup>th</sup> International Conference of the Geological Society of Greece”.
- 2005 Reviewer in papers submitted at the “2<sup>nd</sup> Scientific Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece”.
- 2004 Reviewer in abstracts and papers submitted at the “10<sup>th</sup> International Conference of the Geological Society of Greece”.
- 2004 Reviewer in extended abstracts submitted at the “5<sup>th</sup> International Symposium on Eastern Mediterranean Geology”.
- 2000 Reviewer in papers submitted at the “1<sup>st</sup> Scientific Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece”.

#### **4.8.3. Books and Special Volumes Reviewer**

- 2012 Reviewer in papers published in the book: “Ecological Water Quality - Water Treatment and Reuse”. Voudouris K. and Voutsas D. (eds). In Tech, Rijeka, Croatia, 496 p.
- 2021 Reviewer in the book “The Mines of Cyprus. History and Development. A Contribution to the Recording and Study of the Contemporary Mining Industry of Cyprus” by Dr. Georgios Maliotis for the Publications of the University of Cyprus, 322 p.
- 2024 Reviewer in the book “The Gold Deposits of Cyprus.” by Dr. Georgios Maliotis for the Publications of the University of Cyprus, 177 p.

#### 4.9. External reviewer in Research Proposals

- 2012 Reviewer in a scientific proposal submitted at the Portuguese Foundation for Science and Technology (FCT).
- 2013 Reviewer in a scientific proposal submitted at the Israel Science Foundation (ISF).
- 2013 Reviewer in 10 scientific proposals submitted at the Portuguese Foundation for Science and Technology (FCT).
- 2014 Reviewer in a scientific proposal submitted at the State Scholarships Foundation (IKY) of Greece for the Program IKYDA 2015.
- 2018 Reviewer in a scientific proposal submitted at the GeoERA Secretariat and the Netherlands Organization for Scientific Research (NWO).
- 2019 Reviewer in 5 scientific proposals submitted at the General Secretariat for Research and Technology of Greece.
- 2019 Reviewer in a scientific proposal submitted at the Austrian Science Fund (FWF).
- 2020 Reviewer in a scientific proposal submitted in the frame of the “2<sup>nd</sup> Call for H.F.R.I. Research Projects for the support of Postdoctoral Researchers - B’ Phase» of the Hellenic Foundation for Research and Innovation.
- 2020 Reviewer in a scientific proposal submitted in the National Science Centre of Poland.
- 2021 Reviewer in 2 scientific proposals submitted at the IUGS Assessments UNESCO Global Geopark Nominations 2020/2021
- 2023 Reviewer in 1 scientific proposal submitted at the French National Agency for Research (ANR)
- 2023 Reviewer in 1 training proposal at the Center for Training and Lifelong Learning (KEDIVIM) of AUTH

#### 4.10. Editing

1. 2013-21 Editorial Board at the “Romanian Journal of Mineral Deposits”.
2. Melfos V., Tarantola A., Voudouris P., Sakellaris A.-G. (2023). Guest Editors at the Special Issue “Geochemistry of Ore Deposits”. *Frontiers in Geochemistry*, 2023 (<https://www.frontiersin.org/research-topics/58454/geochemistry-of-ore-deposits>)
3. Xenidis A., Komnitsas K., **Melfos V.** (2023). Guest Editors at the Special Issue “Exploration, Mining, and Processing of Minerals: Enabling the Clean Energy Transition”. *Minerals*, 2023 ([https://www.mdpi.com/journal/minerals/special\\_issues/5J5M686577](https://www.mdpi.com/journal/minerals/special_issues/5J5M686577))
4. **Melfos V.**, Voudouris P., Sakellaris A.-G. (2022). Guest Editors at the Special Issue “Economic Mineral Deposits: A Review”. *Minerals*, 2022 ([https://www.mdpi.com/journal/minerals/special\\_issues/EMDAR](https://www.mdpi.com/journal/minerals/special_issues/EMDAR))
5. **Melfos V.**, Voudouris P. (2020). Guest Editors at the Special Issue “Ore Mineralogy and Geochemistry of Rare Metal Deposits”. *Minerals*, 2020 ([https://www.mdpi.com/journal/minerals/special\\_issues/Rare\\_Metal\\_Deposits](https://www.mdpi.com/journal/minerals/special_issues/Rare_Metal_Deposits)).

6. **Melfos V.**, Voudouris P. (2018). Guest Editors at the Special Issue “Magmatic-Hydrothermal Ore Deposits”. *Geosciences*, 2017 ([http://www.mdpi.com/journal/geosciences/special\\_issues/Ore\\_Deposits](http://www.mdpi.com/journal/geosciences/special_issues/Ore_Deposits)).
7. Voudouris P., Karampelas S., **Melfos V.**, Graham I. (2018). Guest Editors at the Special Issue “Mineralogy and Geochemistry of Gems”. *Minerals*, 2017 ([http://www.mdpi.com/journal/minerals/special\\_issues/Gems](http://www.mdpi.com/journal/minerals/special_issues/Gems)).
8. Voudouris P., **Melfos V.** (2012). Guest Editors at the Special Issue “Advances in Rhenium Mineralogy, Geochemistry and Industrial Uses”. *Minerals*, 2012 ([http://www.mdpi.com/journal/minerals/special\\_issues/rhenium\\_mineralogy](http://www.mdpi.com/journal/minerals/special_issues/rhenium_mineralogy)).
9. Christofides G., Kantiranis N., **Melfos V.**, Soldatos T. (2012). Editors at the Scientific Annals of the Faculty of Geology, School of Sciences, University of Thessaloniki. Special Volume 101, 145 p.
10. Chatzipetros A., **Melfos V.**, Marchev P. and Lakova I. (2010). Editors at the Abstracts volume of the XIX Congress of the Carpathian-Balkan Geological Association, *Geologica Balcanica*, 39 (1-2), 435 p., ISSN: 0324-0894.
11. Filippidis A., Christofides G., Georgakopoulos A., Albanakis K., Vouvalidis K., Kantiranis N., **Melfos V.**, Papazachos K. (2004). Editors at the Bulletin of the Geological Society of Greece, Volumes XXXVI/1-4, 2101 p.

#### 4.11. Invited Lectures given at Seminars, Workshops and Summer schools

1. 20.5.2022 “The contribution of mineral wealth to the economic and social life at Kroussia of Kilkis. The case of Palatiano in antiquity” by Vasilios Melfos, Christos Stergiou, Georgia Stratouli  
Invitation of the Ephorate of Antiquities of Kilkis, in the framework of the project "Europos-Palatiano-Stobi, European past and future cultural values», of the Cross-Border Cooperation Program INTERREG IPA CBC Greece - Republic of North Macedonia 2014-2020 ".  
Vathi and Palatiano, Kilkis
2. 17.10.2019 “The rocks as building materials in the monuments”  
Invitation Boulouki Group: Itinerant Workshop for the Traditional Building Techniques  
Mouchoustiou Monastery, Plaka of Tzoumerka, Ioannina
3. 8.4.2019 "Minerals and rocks in the Aegean: a diachronic relationship with the evolution of civilization"  
Invitation Open University of Thessaloniki in the frame of the seminars with a broader title: In the neighborhood of science  
Thessaloniki History Center
4. 10.5.2019 "Minerals and rocks in the Aegean: a diachronic relationship with the

- evolution of civilization"  
 Invitation of CEE of Kilkis with the CEE of Stylida-Ypati in the framework of the National Environmental Education Network "Geo-environmental and Geomythological paths", entitled: "Geo-environmental routes to myth, legend and history"  
 Lecture Hall of the Austrian-Hellenic Tobacco Store of the Municipality of Kilkis
5. 27.2.2019 "The wonderful world of minerals"  
 Invitation 1<sup>st</sup> PE.KE.S Central Macedonia, in the frame of the seminars for teachers in Science at AUTH  
 Faculty of Geology, A.U.TH
6. 24.4.2018 "Minerals: the gifts of the earthquakes and the volcanoes in Aegean"  
 Invitation: 2<sup>nd</sup> GEL of Oreokastro in the frame of the European Programme e-HAND Erasmus+ "Enceladus"  
 Lecture Hall of NOESIS
7. 8-11.9.2015 "The Green Thessalian Stone (Verde Antico): quarrying techniques and uses"  
 Invitation to the General Intensive School on Conservation Science  
 Historical and Folklore Museum of Larissa, Greece
8. 29.11.2014 "Quarrying techniques in antiquity and analytical methods used in marble provenance studies"  
 Invitation to the Workshop organized by the Volos Natural History Museum and the Ephorate of Prehistoric and Classical Antiquities of Volos.  
 Lecture Hall of the Archaeological Museum of Volos
9. 25.9.2014 "New technologies in exploration of ore deposits"  
 Invitation to the Technical Education on Resource Savings for Industrial Development (TE.R.S.I.D.), TEMPUS.  
 University of Thessaloniki.
10. 29.8.2014 "Fluid inclusions application in the exploration of porphyry-epithermal deposits. Examples from NE Greece"  
 Invitation to the 2<sup>st</sup> Technical Meeting of the Western Tethyan Metallogeny Project (WTMP), Sofia, Bulgaria.  
 Project of the Mineral Deposit Research Unit (MDRU), The University of British Columbia (UBC), Vancouver, Canada.
11. 14-18.7.2014 "Ancient white marbles: provenance studies and surface decay determination"  
 Invitation to the General Intensive School on Conservation Science  
 "Surface Processing of ceramic and cultural heritage materials"  
 University of Seville - Spain

- 12.20.3.2014 “Mineral resources exploitation, sustainable development and environmental protection”  
Invitation BEST (Board of European Students of Technology) course on Technology  
University of Thessaloniki
- 13.17-26.9.2013 “C-O stable isotopic geochemistry as a tool for determining the provenance of white marbles used in ancient Mediterranean”  
Invitation to the 5<sup>th</sup> Thematic School on Conservation Science “Solutions to Questions of our Cultural Heritage by Physical and Chemical Methods in Theory and Practice”  
Vienna University of Technology - Austria
- 14.22-24.8.2013 “The Oligocene-Miocene intrusion-related Au systems at the Rhodope core complex, Greece”  
Invitation to the 1<sup>st</sup> Technical Meeting of the Western Tethyan Metallogeny Project (WTMP), Izmir, Turkey  
Project of the Mineral Deposit Research Unit (MDRU), The University of British Columbia (UBC), Vancouver, Canada
- 15.6-12.12.2011 “White marble in ancient buildings: quarrying techniques and provenance determination”  
Invitation: Université Cadi Ayyad, Faculté des Sciences Semlalia, Marrakech, Morocco, Winter School 2011: L’ Ecole Intensive sur les Sciences de la Conservation du Patrimoine (EISCP)  
Musée de la Palmeraie
16. 27-28.12.2010 “Application of XRD, microscopy and stable isotopes for the provenance determination of ancient white marble artifacts”  
Courses at the Postgraduate students of the “Implementation of a Master's Course on Cultural Heritage Safeguarding in Morocco” (144968-TEMPUS-2008-GR-JPCR)
- 17.21-22.7.2009 “Application of X-Ray Diffraction and optical Petrographic, Microscopy”  
Courses at the 3<sup>rd</sup> Residential Summer School on Conservation Science: “Chemistry and Culture Euro Mediterranean Cooperation in Research and Education” organized under the Lifelong Learning Erasmus Intensive Program.  
University of Thessaloniki
- 18.24.6.2008 “Mineralogy, petrography and geochemistry of Neolithic stone artifacts and characterization of the raw materials provenance. Case studies from Greece”  
Invitation: Yarmouk University, Irbid Jordan, TEMPUS program in collaboration with AUTH.  
Vocational Seminar on Cultural Heritage Preservation

19.24.6.2008 “Ancient marble quarries in Greece and technology of stone extraction. Provenance studies of ancient white marble artifacts”  
Invitation: Yarmouk University, Irbid Jordan, TEMPUS program in collaboration with AUTH.  
Vocational Seminar on Cultural Heritage Preservation

#### **4.12. Invited talks and speeches**

1. 20.10.2020 “The continuous use of decorative stones in public and private buildings of Thessaloniki”  
Invitation: Aristotle Museum of Natural History of Thessaloniki (AMNHT) in the frame of the exhibition “Urban landscape. The space where modern man moves and is active - a constant challenge of man - nature”  
Lecture Hall of the AMNHT, Port of Thessaloniki
2. 28.11.2019 “Minerals and rocks of the Aegean: a permanent relationship with the development of the civilization”  
Invitation: Aristotle Museum of Natural History of Thessaloniki (AMNHT) in the frame of the exhibition “Minerals and Humans”  
Lecture Hall of the AMNHT, Port of Thessaloniki
3. 10.4.2019 “Decorative and ornamental stones in the monuments of Thessaloniki”  
Invitation: Association "Friends of the monuments of Thessaloniki"  
Lecture Hall of the Archaeological Museum of Thessaloniki
4. 9.11.2018 “The Green Thessalian Stone and the quarries of Chasanbali”  
Presentation of the Book  
Invitation: Regional Administration (Prefereia) of Thessaly and Ephorate of Antiquities of Larisa.  
Lecture Hall of the Diachronic Museum of Larisa
5. 21.2.2017 “The quarrying techniques and the uses of the famous during antiquity Green Thessalian Stone”  
Invitation: Archaeological Museum of Thessaloniki.  
Lecture Hall “M. Andronikos” of the Archaeological Museum of Thessaloniki
6. 16.4.2016 “Minerals and precious stones of Greece. The tiny treasures of the Greek mountains”  
Event: “The geological history and the mineral wealth of Pieria district”  
Department of Logistics of the TEI of Central Macedonia in collaboration with the Faculty of Geology AUTH, the Museum of Natural History of Volos and the Museum of the geological history of Olympos.  
Lectures Hall of the TEI in Katerini
7. 28.3.2014 “Porphyry type ore deposits in northern Greece and their relation with high grades in precious, rare and critical metals”

SGA Baltic Students Chapter and Department of Economic Geology  
AGH - University of Science and Technology Kraków, Poland

8. 28.3.2014 "Economic crisis in Greece. Can the mineral resources play a key role in a sustainable development at one of the richest metallogenic provinces in south-eastern Europe?"  
SGA Baltic Students Chapter and Department of Economic Geology  
AGH - University of Science and Technology Kraków, Poland
9. 28.3.2014 "Fluid inclusions as an exploration tool for hydrothermal deposits. Case studies from northern Greece"  
SGA Baltic Students Chapter and Department of Economic Geology  
AGH - University of Science and Technology Kraków, Poland
10. 20.3.2014 "Mineral resources exploitation, sustainable development and environmental protection"  
BEST (Board of European Students of Technology) Course on Technology, Thessaloniki 2014  
University of Thessaloniki
11. 14.12.2013 "Minerals and rocks of Aegean: a permanent relationship with the development of the civilization"  
The Natural History Museum of the Lesvos Petrified Forest  
Lecture Hall of the Science Center and Technology Museum of Thessaloniki  
"NOESIS"
12. 22.5.2013 "Water management in antiquity at Retziki of Thessaloniki"  
Regional Association of Teachers for Environmental Education (PEKPE) of Central Macedonia, Greece  
A High School of Pefka
13. 15.2.2013 "The quarrying techniques and the uses of the famous during antiquity Green Thessalian Stone"  
Invitation: The Volos Natural History Museum and the Ephorate of Prehistoric and Classical Antiquities of Volos.  
Lecture Hall of the Archaeological Museum of Volos
14. 22.9.2012 "Minerals and precious stones of Greece".  
Invitation: The Volos Natural History Museum.  
Amphitheater "Metaxourgeion" Municipality of Volos city
15. 18-19.5.12 "The ancient quarries in the area of Larisa as part of the Hellenic Cultural heritage. Provenance studies of marble archaeological findings" - Tour at the ancient quarries of Tempí and Chasanbali.  
Invitation: IE' Ephorate of Prehistoric and Classical Antiquities of Larisa, in the frame of the International Day of Museums.  
Amphitheater of the Diachronic Museum of Larisa

16. 22.4.2012 “Mineral resources, environment and economic development. Can they be combined?”  
Invitation: School of Sciences of the University of Thessaloniki, in the frame of the International Mother Earth Day.  
Building of Meteorology, AUTH
17. 22.2.2012 “Minerals of the Greek Caves and conditions of formation”  
Invitation: Hellenic Speleological Society, Branch of Northern Greece  
Faculty of Geology, AUTH
18. 21.8.2010 “The treasures of Kissavos - A diachronic relation of the mineral wealth and the Greek culture”  
Invitation: Municipality of Melivoia and the 7<sup>th</sup> Ephorate of the Byzantine Antiquities of Larisa  
Open Theatre of Velika
19. 10.10.2010 “The Green Thessalian Stone and the quarries of Chasanbali”  
Presentation of the Book  
Invitation: Mayor of Nesson Municipality  
Primary School of Kalochorion
20. 7.3.2009 “The geological-mineralogical heritage of Maronia. Geotopes and archaeological sites”  
Invitation: Environmental Education Centre of Maronia, in the frame of the Seminar “The European path E6”  
Environmental Education Centre of Maronia
21. 26.3.2008 “Minerals and precious stones in N. Greece -Minerals of the Caves”  
Invitation: Hellenic Speleological Society, Branch of Northern Greece  
Faculty of Geology AUTH
22. 10.6.2007 “The mineral wealth of Maronia: a proposal for the establishing of a Natural History Museum”  
Invitation: Municipality of Maronia, Meeting “Municipality of Maronia, a centre of development and culture”  
Maronia
23. 17.1.2007 “Minerals and precious stones: the hidden treasures of the Greek mountains”  
Invitation: Hellenic Society of Climbers, Thessaloniki  
Hall of the Society
24. 30.11.2005 “The geological heritage of Thrace. An ongoing relationship of culture to the mineral wealth”  
Invitation: Hellenic Society of Climbers, Thessaloniki  
Hall of the Society



25. 31.10.2004 "The Natural History Museum of Delasalle College: Classification, organizations and record of the mineral, rocks and fossil collections"  
Invitation: Director of Delasalle College during the Opening of the Natural History Museum  
Delasalle College
26. 7.5.2004 "Geology and Mineral Wealth of Milos island"  
Invitation: 1<sup>st</sup> TEE of Stavroupoli, Thessaloniki, in the frame of the Environmental Project: "Renewable energy sources. The geothermal field of Milos island"  
Cultural Foundation of Stavroupoli
27. 17.3.2004 "Maronia: Geology, Mineral Wealth and Integration of Geotopes and Geoarchaeological sites"  
Invitation: Rodopi Prefecture of the utilization of the Maronia cave  
Cultural Centre of Maronia
28. 5.12.2002 "Geology and genesis of the Tertiary porphyry copper-molybdenum deposits in the Rhodope metallogenetic province, Northern Greece"  
Invitation: Professor Th. Seifert  
Institute of Mineralogy, Freiberg University of Mining and Technology, Germany
29. 22.2.2002 "Gemstones: research and prospects for their detection in Macedonia and Thrace"  
Invitation: Geological Society of Greece "Geology and Society. The contribution of geological exploration in northern Greece" for the 50 Years of the GSG.  
History Centre of Thessaloniki City
30. 13.4.2000 "Quarrying and stone processing in Antiquity-Ancient Quarries"  
Invitation: 1<sup>st</sup> SEK of Stavroupoli, Thessaloniki, specialty of "Maintenance Art and Archaeological Objects"  
1<sup>st</sup> TEE of Stavroupoli

From 2020 to 2024 I have given a large number of lectures and talks on minerals, rocks, mineral deposits, ancient quarries, and ancient decorative stones to organizations such as the Friends of Thessaloniki Monuments, the Association of Guides of Thessaloniki, the Office of Environmental Education of the Directorate Primary and Secondary Education of Western Thessaloniki, the 1<sup>st</sup> PE.K.ES. of Central Macedonia of the Regional Directorate of Primary and Secondary Education, the Environmental Education Center of Kilkis (KPE Kilkis), the ELISME, the AMFITH, the Friends of Astronomy Club of Thessaloniki and the Thessaloniki Walking Tours, while I participated in the event "The Harmony of the Sounds and the Stones" organized by the Faculty of Geology of the University of Thessaloniki in collaboration with the Dean of the School of Sciences at the University of Thessaloniki and the Aristotle Museum of Natural History in Thessaloniki.

All these activities are aimed at disseminating the Science of Geology to the general public and have been attended by hundreds of people.

#### **4.13. Participation in the Organization of Conferences-Meetings-Lectures**

1. Member of the Organizing Committee of the 2<sup>nd</sup> International Conference on Raw Materials and Circular Economy (RawMat 2023), Athens, Greece, 28 August - 02 September 2023 (<https://www.rawmat2023.ntua.gr>).
2. Member of the Organizing Committee of the Workshop "Epithermal Gold Deposits: Tectonics, magmatism and alterations", organized by the AUTH SEG Student Chapter, at the University of Thessaloniki, 20<sup>th</sup> February 2023.
3. Member of the Organizing Committee of the Workshop «Biological diversity in past geological and historical periods» organized by the School of Sciences of the University of Thessaloniki at the Ceremony Hall, Old Building of Faculty of Philosophy, 29<sup>th</sup> November 2017.
4. Member of the Organizing Committee of the Workshop «Urban Environment and Sustainable Development. School of Sciences (AUTH): the comparative advantage of the city» organized by the School of Sciences of the University of Thessaloniki, 2<sup>nd</sup> October 2017.
5. Member of the Organizing Committee of the Workshop "Exploration and Exploitation of Mineral Resources since Antiquity" organized by the Faculty of Geology, AUTH, and the AUTH SEG Student Chapter, at the University of Thessaloniki, 25<sup>th</sup> April 2017.
6. Member of the Organizing Committee of the Workshop "New ideas and methods of Tectonic Geology in applied research - examples and applications" organized by the Faculty of Geology, AUTH, and the AUTH SEG Student Chapter, at the University of Thessaloniki, 17<sup>th</sup> February 2017.
7. Member of the Organizing Committee of the Workshop "Latest Developments in Research and Exploitation of Hydrocarbons in Greece and Cyprus" organized by the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, AUTH, at the University of Thessaloniki, 6<sup>th</sup> April 2016.
8. Member of the Organizing Committee of the Workshop-Seminar "The formation of magmatic-hydrothermal ore deposits: from magmas to exploration" organized by the AUTH SEG Student Chapter in collaboration with the Department of Mineralogy-Petrology-Economic Geology, at the University of Thessaloniki, 16<sup>th</sup> October 2015.
9. Member of the Organizing Committee of the Workshop-Seminar "Integrated Geophysical Models. Theory, examples and implications on creativity", organized by the European Association of Geoscientists and Engineers (EAGE) in collaboration with the Faculty of Geology, at the University of Thessaloniki, 6<sup>th</sup> March 2015.
10. Member of the Organizing Committee of the Workshop-Seminar "Basin and Petroleum Systems Modeling. Technology and Applications for Petroleum Exploration Risk and Resource Assessments", organized by the European Association of Geoscientists and Engineers (EAGE) in collaboration with the Faculty of Geology, at the Telloglion Foundation, Thessaloniki, 26<sup>th</sup> March 2013.
11. Organizer of the talk of Professor Ladislav Palinkas, Department of Geology,

- University of Zagreb, Croatia, entitled: Genesis of vein-stockwork cryptocrystalline magnesite from the Dinaride ophiolites. Faculty of Geology, AUTH, 28<sup>th</sup> September 2012.
12. Organization of the talks of Professor Paul Spry, Department of Geological and Atmospheric Sciences, Iowa State University, USA, in collaboration with the Society of Economic Geologists (SEG), the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, AUTH and the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece. Faculty of Geology, AUTH, 10<sup>th</sup> May 2012.
  13. Member of the Organizing Committee of the Conference "Research, exploration and exploitation of hydrocarbons in Greece: past, present, future", organized by the European Association of Geoscientists and Engineers (EAGE) in collaboration with the Faculty of Geology, Thessaloniki, 16<sup>th</sup> March 2012.
  14. Member of the Organizing Committee of the Meeting: "Konstantinos Soldatos - The Man, the Scientist, the Professor", Faculty of Geology, AUTH, 20<sup>th</sup> January 2012.
  15. Organizer of the Workshop-Seminar "Geological storage of CO<sub>2</sub>", organized by of the European Association of Geoscientists and Engineers (EAGE) in collaboration with the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, AUTH, Thessaloniki, 14<sup>th</sup> March 2011.
  16. Treasurer of the Organizing Committee of the XIX Conference of the Carpathian Balkan Geological Association, Thessaloniki, 23<sup>rd</sup>-26<sup>th</sup> September 2010.
  17. Organizer of the Workshop-Seminar "What Energy Future after the World Oil Production Peak?", organized by the European Association of Geoscientists and Engineers (EAGE) in collaboration with the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, AUTH, Thessaloniki, 18<sup>th</sup> February 2010.
  18. Member of the Organizing Committee of the 2<sup>nd</sup> Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece, Thessaloniki, 7<sup>th</sup>-9<sup>th</sup> October 2005.
  19. Member of the Organizing Committee of the 10<sup>th</sup> International Conference of the Geological Society of Greece, Thessaloniki 15<sup>th</sup>-17<sup>th</sup> April 2004.
  20. Member of the Organizing Committee of the Meeting of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece: "Aggregates and Building Stones", Thessaloniki, 11<sup>th</sup> April 2003.
  21. Member of the Organizing Committee of the 1<sup>st</sup> Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece, "Mineral Wealth and Environment of Western Macedonia, Greece", Kozani 12<sup>th</sup>-13<sup>th</sup> February 2000.
  22. Member of the Secretariat of the 2<sup>nd</sup> Symposium of the Hellenic Society of Archaeometry "Archaeometric and Archaeological Investigations in Macedonia and Thrace", Thessaloniki 26<sup>th</sup>-28<sup>th</sup> March 1993.

#### **4.14. Participation in the Organization of Field Trips**

1. 2019 - Co-organizing a 15-days Field Trip at ore deposits of Bulgaria and N. Greece for the students and the Professors of the ETH Zurich. 16<sup>th</sup>-30<sup>th</sup> June 2019.
2. 2019 - Organizing a 6-days Field Trip at ore deposits of N. Greece for the students and the Professors of the University "St. Kliment Ohridski", Sofia, Bulgaria. 23<sup>th</sup>-28<sup>nd</sup> June 2019.
3. 2016 - Organizing a 3-days Field Trip at gold ore deposits in Thrace for the students and the Professors of the University "St. Kliment Ohridski", Sofia, Bulgaria. 4<sup>th</sup>-6<sup>nd</sup> November 2016.
4. 2014 - Co-organizing with P. Voudouris an one-day Field Trip at the ore deposits of Lavrion in the frame of the MDRU Short Course: "Tectonic Units and Geodynamic Processes of the Greater Alpine Collision Zone: Eastern Alps to Western Turkey" in Athens, 8<sup>th</sup> June 2014.
5. 2013 - Co-organizing (P. Voudouris, V. Melfos, G. Falalakis, T. Baker) a 3-days Field Trip at gold ore deposits in Thrace and Chalkidiki for the students and the Professors of the Mineral Deposit Research Unit (MDRU), University of British Columbia (UBC), Vancouver, Canada. 16<sup>th</sup>-18<sup>th</sup> May 2013.
6. 2012 - Organizing a 4-days Field Trip at gold ore deposits in Thrace and Chalkidiki for the students and the Professors of the University "St. Kliment Ohridski", Sofia, Bulgaria. 19<sup>th</sup>-22<sup>nd</sup> October 2012.
7. 2001 - Organizing a 3-days Field Trip at ore deposits in Macedonia and Thrace of the students of the University "St. Kliment Ohridski" and the University of "Mining and Geology" of Sofia, Bulgaria, 17<sup>th</sup>-19<sup>th</sup> October 2001.

#### **4.15. Classification and organizing the collection of minerals and rocks, AUTH**

According to the decision of the assembly of the Department of Mineralogy-Petrology-Economic Geology (No 2/25-10-2002) I participate in the committee for re-organization and classification of the mineral and rock collections of the Department of Mineralogy-Petrology-Economic Geology. A digital database of this collection was created to be used for educational purposes and for social purposes. So far, with the help of students from the Faculty of Geology, about 4,000 minerals were recorded, photographed and cataloged which will be available on the Department's website.

#### **4.16. Participation at Exhibitions of Minerals and Material from Ancient Quarries and Classification and Organization of Mineral Exhibitions**

1. Collection and organizing of the Mineral, Rock and Ore Exhibition for the Meteora Geological History Museum, Kastraki Kalapmaka, 2016.
2. Classification of the Mineral and Rock Collection of the Folk and Natural History Museum of Vrasna, invited by the Volvi Municipality, 2014.
3. Contribution with photographs from ancient quarries for the Temporary Exhibition about

- Conservation at the Museum of Byzantine Culture of Thessaloniki, invited by the Museum Director, Mrs. Agathoniki Tsilipakou, 2012.
4. Contribution at the Mineral Collection of the Promotion Center of the Agios Georgios Hill of Kilkis, invited by Professor E. Tsoukala, 2012.
  5. Classification of the Mineral and Rock Collection of the Natural History Museum of Nea Kalindoia (Kalamoto), of the Langadas Municipality, 2009.
  6. Organizing and classification of the Mineral and Rock Collection of the Museum of Mineralogy and Petrology of the Aridaia Municipality of Pella Prefecture, in collaboration with Professor G. Eleftheriadis, April-May 2006.
  7. Organizing and classification of the Mineral and Rock Collection of the Department of Mineralogy-Petrology-Economic Geology, Faculty of Geology, AUTH, 2003-2008 (in progress).
  8. Organizing and classification of the Mineral, Rock and Fossil Collection of the Natural History Museum of Delasalle College in Pefka of Thessaloniki. 2003-2004. Editor of the information sheet about the museum and production of the audiovisual material (DVD) for the information of the visitors.
  9. Contribution to the Exhibition “Water Power in the pre-industrial era in Northern Greece” of the Folk life and Ethnological Museum of Macedonia-Thrace, January 2003.
  10. Collection of mineral, rock and ore samples from Thrace for the Natural History Museum of Maronia, Rhodopi prefecture, September 2002.
  11. Collection and organizing of the Mineral, Rock and Geological Exhibition for the Natural History Museum and the Information Centre for Rhodope in Paranesti of Drama, July-August 1999.
  12. Organizing of the Mineral, Rock and Fossil Collection at the Macedonian Cultural Society “TECHNI”, Kilkis, September 1996.
  13. Participation with samples at the 1<sup>st</sup> International Exhibition of Minerals and Fossils of the Society of Greek Mineral and Fossils Collectors, in Zapion, Athens, October 1992.

#### **4.17. Professional Memberships**

1. Society of Geology Applied to Mineral Deposits (SGA)
2. Society of Economic Geologists (SEG) - **Fellow Member since 2014**
3. Geological Society of Greece (EGE)
4. Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece
5. Association of Greek Geologists (SEGG) - **Member of the Mineral Raw Materials committee since 2023**

6. Geotechnical Chamber of Greece (GEOTEE)
7. Vice-president of the Association "Friends of the Monuments of Thessaloniki"
8. Member of the Board of the Aristotle Museum of Natural History of Thessaloniki (AMFITH) (since 2024), Alternate member of the Board (2019-2024), and member of the Scientific Council (since 2015).

## 5. PUBLICATIONS

### 5.1. Theses

#### 5.1.1. Diploma Thesis

**Melfos V.** and Parlantza I. (1988). Geological investigations of the coastal phenomena in Sithonia peninsula, Chalkidiki. Diploma Thesis. Department of Geology and Geography, the University of Thessaloniki. 56 p (in Greek).

#### 5.1.2. Doctoral Thesis

**Melfos V.** (1995). Investigation of the Base and Precious Metals at the Circum Rhodope Belt in Thrace. Doctoral Thesis. Scientific Yearbook of the Faculty of Geology, University of Thessaloniki, N° 30, 289 p (in Greek).

### 5.2. Papers in refereed international Journals

**5.2.1.** Vavelidis M., Gialoglou G., **Melfos V.**, Wagner G.A. (1996). Goldgrube in Palaea Kavala/Griechenland: Entdeckung von Skaptehyle? *Erzmetall: The World of Metallurgy*, 49, 547-554.

**5.2.2.** Vavelidis M., **Melfos V.** (1997). Two plumbian tetrahedrite-tennantite occurrences from Maronia area (Thrace) and Milos island (Aegean sea), Greece. *Eur.J. Mineral.*, 9, 653-657. <https://doi.org/10.1127/ejm/9/3/0653>

**5.2.3.** **Melfos V.**, Vavelidis M., Christofides G., Seidel E. (2002). Origin and evolution of the Tertiary Maronia porphyry copper-molybdenum deposit, Thrace, Greece. *Mineralium Deposita*, 37, 648-668. <https://doi.org/10.1016/j.gexplo.2023.107336>

**5.2.4.** Vavelidis M., **Melfos V.** (2004) Bi-Ag-bearing tetrahedrite-tennantite in the Kapsalina copper mineralisation, Thasos island, Northern Greece. *Neues Jahrbuch für Mineralogie - Abhandlungen (Journal of Mineralogy and Geochemistry)*, 180 (2), 149-169. <https://doi.org/10.1127/0077-7757/2004/0180-0149>

**5.2.5.** Voudouris P., Katerinopoulos A., **Melfos V.** (2004). Alpine-type fissure minerals in Greece. *Documenta Naturae*, 151, 23-45.

**5.2.6.** Voudouris P., **Melfos V.**, Spry P.G., Bonsall T., Tarkian M., Economou-Eliopoulos M. (2008). Mineralogical and fluid inclusion constraints on the evolution of the Plaka intrusion-related ore system, Lavrion, Greece. *Mineralogy and Petrology*, 93, 79-110. <https://doi.org/10.1007/s00710-007-0218-0>

**5.2.7.** Voudouris P., **Melfos V.**, Spry P.G., Bonsall T., M. Tarkian, Solomos Ch. (2008). Carbonate-replacement Pb-Zn-Ag±Au mineralization in the Kamariza area, Lavrion, Greece: Mineralogy and thermochemical conditions of formation. *Mineralogy and Petrology*, 94, 85-106. <https://doi.org/10.1007/s00710-008-0007-4>

**5.2.8.** **Melfos V.** (2008). "Green Thessalian Stone": The Byzantine quarries and the use of a unique architecture material from Larisa area, Greece. Petrographic and geochemical characterization. *Oxford Journal of Archaeology*, 27(4) 387-405. <https://doi.org/10.1111/j.1468-0092.2008.00313.x>

**5.2.9.** Voudouris P.C., **Melfos V.**, Spry P.G., Bindi L., Kartal T., Arikas K., Moritz R., Ortelli M.

- (2009). Rhenium-rich molybdenite and rheniite (ReS<sub>2</sub>) in the Pagoni Rachi-Kirki Mo-Cu-Te-Ag-Au deposit, Northern Greece: Implications for the rhenium geochemistry of porphyry style Cu-Mo and Mo mineralization. *Canadian Mineralogist*, 47, 1013-1036. <https://doi.org/10.3749/canmin.47.5.1013>
- 5.2.10.** Giouri A., Vavelidis M., **Melfos V.**, Christophoridis C. (2010). Geochemical study of the Bogdanas River waters at the Assiros-Lagada area, Northern Greece. *Journal of Environmental Protection and Ecology*, 11, 424-433.
- 5.2.11.** **Melfos V.**, Helly B., Voudouris P. (2011). The ancient Greek names "Magnesia" and "Magnetes" and their origin from the magnetite occurrences at the Mavrovouni mountain of Thessaly, central Greece. A mineralogical-geochemical approach. *Archaeological and Anthropological Sciences*, 3, 165-172. <https://doi.org/10.1007/s12520-010-0048-6>
- 5.2.12.** Fornadel A.P., Spry P.G., **Melfos V.**, Vavelidis M., Voudouris P. (2011). Is the Palea Kavala Bi-Te-Pb-Sb±Au district, northeastern Greece, an intrusion-related system? *Ore Geology Reviews*, 39, 119-133. <https://doi.org/10.1016/j.oregeorev.2011.01.002>
- 5.2.13.** Lazaridis G., **Melfos V.**, Papadopoulou L. (2011). The first cave occurrence of orpiment (As<sub>2</sub>S<sub>3</sub>) from the sulfuric acid caves of Aghia Paraskevi (Kassandra Peninsula, N. Greece). *International Journal of Speleology*, 40(2), 133-139. <https://doi.org/10.5038/1827-806X.40.2.6>
- 5.2.14.** Bonsall T.A., Spry P.G., Voudouris P., Tombros S., Seymour K., **Melfos V.** (2011). The Geochemistry of Carbonate-Replacement Pb-Zn-Ag Mineralization in the Lavrion District, Attica, Greece: Fluid Inclusion, Stable Isotope, and Rare Earth Element Studies. *Economic Geology*, 106, 619-651. <https://doi.org/10.2113/econgeo.106.4.619>
- 5.2.15.** Voudouris P., **Melfos V.**, Spry P.G., Moritz R., Papavassiliou C., Falalakis G. (2011). Mineralogy and geochemical environment of formation of the Perama Hill high-sulfidation epithermal Au-Ag-Te-Se deposit, Petrotta Graben, NE Greece. *Mineralogy and Petrology*, 103, 79-100. <https://doi.org/10.1007/s00710-011-0160-z>
- 5.2.16.** Fornadel A.P., Voudouris P., Paul G.S., **Melfos V.** (2012). Mineralogical, stable isotope, and fluid inclusion studies of spatially related porphyry Cu and epithermal Au-Te mineralization, Fakos Peninsula, Limnos Island, Greece. *Mineralogy and Petrology*, 105, 85-111. <https://doi.org/10.1007/s00710-012-0196-8>
- 5.2.17.** **Melfos V.**, Voudouris P.C. (2012). Geological, Mineralogical and Geochemical Aspects for Critical and Rare Metals in Greece. *Minerals*, 2, 300-317. <https://doi.org/10.3390/min2040300>
- 5.2.18.** Voudouris P., **Melfos V.** (2013). Aluminum-phosphate-sulfate (APS) minerals in the sericitic advanced argillic alteration zone of the Melitena porphyryepithermal Mo-Cu±Au±Re prospect, western Thrace, Greece. *Neues Jahrbuch für Mineralogie - Abhandlungen (Journal of Mineralogy and Geochemistry)*, 190/1, 11-27. <https://doi.org/10.1127/0077-7757/2012/0227>
- 5.2.19.** Voudouris P.C., Spry P.G., Mavrogonatos C., Sakellaris G-A., Bristol S.K., **Melfos V.**, Fornadel A.P. (2013). Bismuthinite derivatives, lillianite homologues and bismuth sulfotellurides as indicators of gold mineralization in the Stanos shear-zone related deposit, Chalkidiki, Northern Greece. *Canadian Mineralogist*, 51, 119-142.



<https://doi.org/10.3749/canmin.51.1.119>

- 5.2.20. Voudouris P., **Melfos V.**, Spry P.G., Bindi L., Moritz R., Ortelli M., Kartal T. (2013). Extremely Re-Rich Molybdenite from Porphyry Cu-Mo-Au Prospects in Northeastern Greece: Mode of occurrence, causes of enrichment, and implications for gold exploration. *Minerals*, 3, 165-191. <https://doi.org/10.3390/min3020165>
- 5.2.21. Voudouris P., **Melfos V.**, Spry P.G., Kartal T., Schleicher H., Moritz R., Ortelli M. (2013). The Pagoni Rachi/Kirki Cu-Mo±Re±Au deposit, Northern Greece: Mineralogical and fluid inclusion constraints on the evolution of a telescoped porphyry-epithermal system. *Canadian Mineralogist*, 51, 411-442. <https://doi.org/10.3749/canmin.51.2.253>
- 5.2.22. Spry P., Mathur R.D., Bonsall T.A., Voudouris P.C., **Melfos V.** (2014). Re-Os isotope evidence for mixed source components in carbonate-replacement Pb-Zn-Ag deposits in the Lavrion district, Attica, Greece. *Mineralogy and Petrology*, 108, 503-513. <https://doi.org/10.1007/s00710-013-0314-2>
- 5.2.23. Stratouli G., Sarpaki A., Ntinou M., Kotjabopoulou E., Theodoropoulou T., **Melfos V.**, Andreasen N.H., Karkanas P. (2014). Dialogues between bioarchaeological, geoarchaeological and archaeological data: approaches to understanding the Neolithic use of Drakaina Cave, Kephallonia Island, Western Greece. *Aegaeum*, 37, 23-32.
- 5.2.24. Bristol S.K., Spry P.G., Voudouris P.C., **Melfos V.**, Mathur R.D., Fornadel A.P., Sakellaris G.A. (2015). Geochemical and geochronological constraints on the formation of shear-zone hosted Cu-Au-Bi-Te mineralization in the Stanos area, Chalkidiki, northern Greece. *Ore Geology Reviews*, 66, 266-282. <https://doi.org/10.1016/j.oregeorev.2014.11.001>
- 5.2.25. Kołodziejczyk J., Pršek J., **Melfos V.**, Voudouris P., Maliqi F., Kozub-Budzyń G. (2015). Bismuth minerals from the Stan Terg deposit (Trepça, Kosovo). *Neues Jahrbuch für Mineralogie - Abhandlungen (Journal of Mineralogy and Geochemistry)*, 192/3, 317-333. <https://doi.org/10.1127/njma/2015/0288>
- 5.2.26. Spathis P., Papanikolaou E., **Melfos V.**, Samara C., Christaras B., Katsiotis N. (2015). Characterization and Weathering of the Building Materials of Sanctuaries in the Archaeological Site of Dion, Greece. *Trends Journal of Sciences Research*, 2, 95-103. <https://doi.org/10.31586/ChemicalEngineering.0203.03>
- 5.2.27. Repstock A., Voudouris P., Zeug M., **Melfos V.**, Zhai M., Li H., Kartal T., Matuszczak J. (2016). Chemical composition and varieties of fahlore-group minerals from Oligocene mineralization in the Rhodope area, Southern Bulgaria and Northern Greece. *Mineralogy and Petrology*, 110, 103-123. <https://doi.org/10.1007/s00710-015-0412-4>
- 5.2.28. **Melfos V.**, Voudouris P. (2016). Fluid evolution in Tertiary magmatic-hydrothermal ore systems at the Rhodope metallogenic province, NE Greece. A review. *Geologia Croatica*, 69, 157-167. <https://doi.org/10.4154/GC.2016.12>
- 5.2.29. Kołodziejczyk J., Pršek J., Voudouris P., **Melfos V.**, Asllani B. (2016). Sn-Bearing Minerals and Associated Sphalerite from Lead-Zinc Deposits, Kosovo: An Electron Microprobe and LA-ICP-MS Study. *Minerals* 2016, 6(2), 42, 17 p., <https://doi.org/10.3390/min6020042>.
- 5.2.30. Oikonomidis D., Vavelidis M., **Melfos V.**, Artashova M. (2017). Searching for ancient gold mines in Filippii area, Macedonia, Greece, using Worldview-2 satellite imagery.

- Geocarto International, 32, 87-96. <https://doi.org/10.1080/10106049.2015.1128487>
- 5.2.31.** Kołodziejczyk J., Pršek J., Voudouris P., **Melfos V.** (2017). Bi-sulphotellurides associated with Pb-Bi-(Sb±Ag,Cu,Fe) sulphosalts: an example from the Stan Terg deposit in Kosovo. *Geologica Carpathica*, 68, 4, 366-381 <https://doi.org/10.1515/geoca-2017-0025>
- 5.2.32.** **Melfos V.**, Voudouris P. (2017). Cenozoic metallogeny of Greece and potential for precious, critical and rare metals exploration. *Ore Geology Reviews*, 89, 1030-1057. <https://doi.org/10.1016/j.oregeorev.2017.05.029>
- 5.2.33.** Giouri A., **Melfos V.**, Papadopoulou L., Vavelidis M., Alifragkis D. (2018). Selected Metal Content and Binding Behaviour in Riverbed Sediments of the Kavala-Philippi Area (Northern Greece). *Geosciences*, 8, 187, 1-17. <https://doi.org/10.3390/geosciences8050187>
- 5.2.34.** Voudouris P., **Melfos V.**, Mavrogonatos C., Tarantola A., Götze J., Alfieris D., Maneta V., Psimis I. (2018). Amethyst Occurrences in Tertiary Volcanic Rocks of Greece: Mineralogical, Fluid Inclusion and Oxygen Isotope Constraints on Their Genesis. *Minerals*, 8, 324, 26 p. <https://doi.org/10.3390/min8080324>
- 5.2.35.** Mavrogonatos C, Voudouris P., Spry P.G., **Melfos V.**, Klemme S., Berndt J., Baker T., Moritz R., Bissig T., Monecke T., Zaccarini F. (2018). Mineralogical study of the advanced argillic alteration zone at the Konos Hill Mo-Cu-Re-Au porphyry prospect, NE Greece. *Minerals*, 8, 479, 18 p. <https://doi.org/10.3390/min8110479>
- 5.2.36.** Voudouris P., Mavrogonatos C., Rieck B., Kolitsch U., Spry P.G., Scheffer C., Tarantola A., Vanderhaeghe O., Galanos E., **Melfos V.**, Zaimis S., Soukis K., Photiades A. (2018). The Gersdorffite-Bismuthinite-Native Gold Association and the Skarn-Porphyry Mineralization in the Kamariza Mining District, Lavrion, Greece. *Minerals*, 8, 531, 16 p. <https://doi.org/10.3390/min8110531>.
- 5.2.37.** Galanopoulos E., Voudouris P., Mavrogonatos C., Spry P.G., Hart C., **Melfos V.**, Zaccarini F., Alfieris D. (2018). A New Porphyry Mo Mineralization at Aisymi-Leptokarya, South-Eastern Rhodope, North-East Greece: Geological and Mineralogical Constraints. *Geosciences*, 8, 435, 16 p. <https://doi.org/10.3390/geosciences8120435>
- 5.2.38.** Voudouris P., Mavrogonatos C., Graham I., Giuliani G., **Melfos V.**, Karampelas S., Karantoni V., Wang K., Tarantola A., Zaw K., Meffre S., Klemme S., Berndt J., Heidrich S., Zaccarini F., Fallick A., Tsortanidis M., Lampridis A. (2019). Gem Corundum Deposits of Greece: Geology, Mineralogy and Genesis. *Minerals* 2019, 9, 49, 41 p. <https://doi.org/10.3390/min9010049>
- 5.2.39.** Kalaitzis A., Stoulos S., **Melfos V.**, Kantiranis N., Filippidis A. (2019). Zeolitic rocks application in the environment: radiation assessments due to natural radioactivity. *Journal of Radioanalytical and Nuclear Chemistry*, 319, 975-985. <https://doi.org/10.1007/s10967-019-06427-7>
- 5.2.40.** **Melfos V.**, Voudouris P., Serafimovski T., Tasev G. (2019). Fluid Inclusions at the Plavica Au-Ag-Cu telescoped Porphyry-epithermal System, Former Yugoslavian Republic of Macedonia (FYROM). *Geosciences* 2019, 9, 88, 16 p. <https://doi.org/10.3390/geosciences9020088>.
- 5.2.41.** Voudouris P., Mavrogonatos C., Spry P.G., Baker T., **Melfos V.**, Klemd R., Haase K.,

- Repstock A., Djiba A., Bismayer U., Tarantola A., Scheffer C., Moritz R., Kouzmanov K., Alfieris D., Papavassiliou K., Schaarschmidt A., Galanopoulos E., Galanos E., Kołodziejczyk J., Stergiou C., Melfos M. (2019). Porphyry and epithermal deposits in Greece: an overview, new discoveries, and mineralogical constraints on their genesis. *Ore Geology Reviews*, 107, 654-691. <https://doi.org/10.1016/j.oregeorev.2019.03.019>
- 5.2.42.** Voudouris P., Mavrogonatos C., Graham I., Giuliani G., Tarantola A., **Melfos V.**, Karampelas S., Katerinopoulos A., Magganas A. (2019). Gemstones of Greece: Geology and crystallizing environments. *Minerals* 2019, 9, 461, 29 p. <https://doi.org/10.3390/min9080461>
- 5.2.43.** Voudouris P., Mavrogonatos C., **Melfos V.**, Spry P.G., Magganas A., Alfieris D., Soukis K., Tarantola A., Periferakis A., Kołodziejczyk J., Scheffer C., Repstock A., Zeug M. (2019). The geology and mineralogy of the Stypsi porphyry Cu-Mo-Au-Re prospect, Lesvos Island, Aegean Sea, Greece. *Ore Geology Reviews*, 112. <https://doi.org/10.1016/j.oregeorev.2019.103023>
- 5.2.44.** Mavrogonatos C., Voudouris P., Berndt J., Klemme S., Zaccarini F., Spry P.G., **Melfos V.**, Tarantola A., Keith M., Klemd R., Haase K. (2019). Trace Elements in Magnetite from the Pagoni Rachi Porphyry Prospect, NE Greece: Implications for Ore Genesis and Exploration. *Minerals*, 9, 725, 21 p. <https://doi.org/10.3390/min9120725>
- 5.2.45.** Voudouris, P., Karampelas, S., **Melfos, V.**, Graham, I. (2019). Editorial for special issue "Mineralogy and geochemistry of Gems". *Minerals*, 9, 778, 5 p. <https://doi.org/10.3390/min9120778>
- 5.2.46.** **Melfos, V.**, Stratouli G., Voudouris, P. (2020). Characterization of stone artifacts from the Middle and Late Neolithic to the Chalcolithic deposits of Drakaina Cave, Kefhalonia, Ionian Islands: a mineralogical-geochemical approach for determination of local and "exotic" raw materials and their sources. *Archaeological and Anthropological Sciences*, 12, 65, 28 p. <https://doi.org/10.1007/s12520-020-01027-z>
- 5.2.47.** **Melfos, V.**, Voudouris, P., Melfos M., Sánchez M.G., Papadopoulou L., Filippidis A., Spry P.G., Schaarschmidt A., Klemd R., Haase K.M., Tarantola A., Mavrogonatos C. (2020). Mineralogical Constraints on the Potassic and Sodid-Calcic Hydrothermal Alteration and Vein-Type Mineralization of the Maronia Porphyry Cu-Mo ± Re ± Au Deposit in NE Greece. *Minerals*, 10, 182, 26 p. <https://doi.org/10.3390/min10020182>
- 5.2.48.** Mavrogonatos C., Voudouris P., Zaccarini F., Klemme S., Berndt J., Tarantola A., **Melfos V.**, Spry P.G. (2020) Multi-Stage Introduction of Precious and Critical Metals in Pyrite: A Case Study from the Konos Hill and Pagoni Rachi Porphyry/Epithermal Prospects, NE Greece. *Minerals*, 10, 784, 29 p. <https://doi.org/10.3390/min10090784>
- 5.2.49.** **Melfos, V.** (2020). Archaeometric investigations on the sarcophagus no. 1993/74 in the Diachronic Museum of Larissa, Thessaly, Central Greece: I. Characterization and provenance of the marble. *Periodico di Mineralogia*, 89, 183-187. <https://doi.org/10.2451/2020PM16949>
- 5.2.50.** Samara C., **Melfos V.**, Kouras A., Karali E., Zacharopoulou G., Kyranoudi M., Papadopoulou L., Pavlidou E. (2020). Morphological and geochemical characterization of the particulate deposits and the black crust from the Triumphal Arch of Galerius in Thessaloniki, Greece: Implications for deterioration assessment. *Science of the Total*

- Environment, 174, 139455. <https://doi.org/10.1016/j.scitotenv.2020.139455>
- 5.2.51.** Stergiou Ch.L., **Melfos V.**, Voudouris P., Spry P.G., Papadopoulou L., Chatzipetros A., Giouri K., Mavrogonatos C., Filippidis A. (2021). The geology, geochemistry and origin of the porphyry Cu-Au-(Mo) system at Vathi, Serbo-Macedonian massif, Greece. *Applied Sciences*, 11, 479, 39 p. <https://doi.org/10.3390/app11020479>
- 5.2.52.** Voudouris P., **Melfos V.**, Mavrogonatos C., Photiades A., Moraiti E., Rieck B., Kolitsch U., Tarantola A., Scheffer C., Morin D., Vanderhaeghe O., Spry P.G., Ross J., Soukis K., Vaxevanopoulos M., Pekov I.V., Chukanov N.V., Magganas A., Kati M., Katerinopoulos A., Zaimis S. (2021). The Lavrion Mines: A Unique Site of Geological and Mineralogical Heritage. *Minerals* 2021, 11, 76, 22 p. <https://doi.org/10.3390/min11010076>
- 5.2.53.** Ross J., Voudouris P.C., **Melfos V.**, Vaxevanopoulos M., Soukis K., Merigot K. (2021). The Lavrion silver district: Reassessing its ancient mining history. *Geoarchaeology*, 6:617-642. <https://doi.org/10.1002/gea.21852>
- 5.2.54.** Lazaridis G., **Melfos V.** (2021). Morphological features and formation conditions of the Almopia speleopark caves (Loutra Almopias, N. Greece). *Acta Carsologica*, 50, 37-48. <https://doi.org/10.3986/ac.v50i1.7592>
- 5.2.55.** Stergiou Ch.L., **Melfos V.**, Voudouris P., Papadopoulou L., Spry P.G., Peytcheva I., Dimitrova D., Stefanova E., Giouri K. (2021). Rare and critical metals in pyrite, chalcopyrite, magnetite, and titanite from the Vathi porphyry Cu-Au±Mo deposit, northern Greece. *Minerals*, 11, 630. <https://doi.org/10.3390/min11060630>
- 5.2.56.** Karantoni V., Karampelas S., Voudouris P., **Melfos V.**, Papadopoulou L., Soldatos T., Mavrogonatos C. (2021). Spectroscopy and Microscopy of Corundum from Primary Deposits Found in Greece. *Minerals*, 11, 750. <https://doi.org/10.3390/min11070750>
- 5.2.57.** Schaarschmidt A., Haase K.M., Voudouris P.C., **Melfos V.**, Klemd R. (2021). Migration of arc magmatism above mantle wedge diapirs with variable sediment contribution in the Aegean. *Geochemistry, Geophysics, Geosystems*, 22, e2020GC009565, 1-21. <https://doi.org/10.1029/2020GC009565>
- 5.2.58.** Schaarschmidt A., Klemd R., Regelous M., Voudouris P.C., **Melfos V.**, Haase K.M. (2021). The formation of shoshonitic magma and its relationship to porphyry-type mineralisation: the Maronia pluton in NE Greece. *Lithos*, 380-381, 105911, 1-16. <https://doi.org/10.1016/j.lithos.2020.105911>
- 5.2.59.** Spathis P.K. Mavrommati M., Gkrava E., Tsiridis, V., Evgenidis S.P., Karapanagiotis I., Melfos V., Karapantsios T.D. (2021). Characterization of Natural Stone from the Archaeological Site of Pella, Macedonia, Northern Greece. *Heritage* 2021, 4(4), 4665-4677. <https://doi.org/10.3390/heritage4040257>
- 5.2.60.** Voudouris P., Repstock A., Spry P.G., Frenzel M., Mavrogonatos C., Keith M., Tarantola A., **Melfos V.**, Tombros St., Zhai D., Cook N.J., Ciobanu C.L., Schaarschmidt A., Rieck B., Kolitsch U., Falkenberg J. (2022). Physicochemical constraints on indium-, tin-, germanium-, gallium-, gold-, and tellurium-bearing mineralizations in the Pefka and St Philippos polymetallic vein- and breccia-type deposits, Greece. *Ore Geology Reviews*, 140, 104348. <https://doi.org/10.1016/j.oregeorev.2021.104348>
- 5.2.61.** Stergiou C.L., Bekiaris T., **Melfos V.**, Theodoridou S., Stratouli G. (2022). Sourcing macrolithics: Mineralogical, geochemical and provenance investigation of stone artefacts

- from Neolithic Avgi, north-west Greece. *Archaeometry*, 64(2), 283-299. <https://doi.org/10.1111/arcm.12706>
- 5.2.62. Stergiou Ch.L., **Melfos V.**, Voudouris P., Papadopoulou L., Spry P.G., Peytcheva I., Dimitrova D., Stefanova E. (2022). A Fluid Inclusion and Critical/Rare Metal Study of Epithermal Quartz-Stibnite Veins Associated with the Gerakario Porphyry Deposit, Northern Greece. *Applied Sciences*, 12, 909, 20 p. <https://doi.org/10.3390/app12020909>
- 5.2.63. Peristeridou E., **Melfos V.**, Papadopoulou L., Kantiranis N., Voudouris P. (2022). Mineralogy and mineral chemistry of the REE-rich black sands in beaches of the Kavala district, Northern Greece. *Geosciences*, 12, 277, 21 p. <https://doi.org/10.3390/geosciences12070277>
- 5.2.64. Nikopoulou M., Karampelas S., Gaillou E., Hennebois U., Maouche F., Herreweghe A., Papadopoulou L., **Melfos V.**, Kantiranis N., Nectoux N., Delaunay A. (2023). Non-Destructive Study of Egyptian Emeralds Preserved in the Collection of the Museum of the Ecole des Mines. *Minerals*, 13(2), 158, 14 p. <https://doi.org/10.3390/min13020158>
- 5.2.65. Stergiou, C. L., Sakellaris, G. A., **Melfos, V.**, Voudouris, P., Papadopoulou, L., Kantiranis, N., Skoupras, E. (2023). Mineralogy, Geochemistry and Fluid Inclusion Study of the Stibnite Vein-Type Mineralization at Rizana, Northern Greece. *Geosciences*, 13(2), 61, 23 p. <https://doi.org/10.3390/geosciences13020061>
- 5.2.66. Mederski, S., Prsek, S., Kolodziejczyk, J., Kluza, K., **Melfos, V.**, Adamek, K., & Dimitrova, D. (2023). Mineralogical and geochemical studies of Cu-Bi-Ag±W ores from Janjevo (Kosovo): Insights into the Bi sulfosalt mineralogy and the distribution of bismuth in base metal sulfides. *Journal of Geosciences*, 68(2), 139-162. <http://doi.org/10.3190/jgeosci.371>
- 5.2.67. Lazaridis G., Papadopoulou L., **Melfos V.**, Voudouris P. (2023). Iron oxide crusts in two hypogene caves in Greece. *Journal of Cave & Karst Studies*, 85(2), 51-61. <http://doi.org/10.4311/2022ES0100>
- 5.2.68. Drahota P., Chatziantoniou A., Mihaljevič M., Culka A., Melfou M., **Melfos V.**, Voudouris P. (2023). A mineralogical and geochemical assessment of the As-, Cu-, In-, Pb-, Sb-, and Zn-rich mine wastes at the Pefka epithermal deposit, Greece. *Journal of Geochemical Exploration*, 256, 107336. <https://doi.org/10.1016/j.gexplo.2023.107336>
- 5.2.69. Nikopoulou M., Karampelas S., Tsangaraki E., Papadopoulou L., Katsifas C.S., Nazlis I., Touloumtzidou A., **Melfos V.**, Kantiranis N. (2023). Study of a Third-Century CE Sapphire Gold Ring in the Archaeological Museum of Thessaloniki, Greece. *The Journal of Gemmology*, 38(8), 804-809.
- 5.2.70. Kyranoudi, M., Malletzidou, L., Zorba, T., Vourlias, G., **Melfos, V.**, Pavlidou, E., Chrissafis, K. (2024). Wall mosaics of Thessaloniki: A comparative study of the brown tesserae. *Applied Research*, 1-7. <https://doi.org/10.1002/appl.202300120>
- 5.2.71. Anthrakidou M., Tsokas G. N., Stampolidis A., **Melfos V.**, Liritzis I. (2024). Geophysical investigations at the fortress of Aghia Maura in Lefkada (Greece) revisited. *Mediterranean Archaeology and Archaeometry*, 24(2), 1–15. <https://doi.org/10.5281/zenodo.10989866>
- 5.2.72. Falkenberg J.J., Keith M., **Melfos V.**, Hohl M., Haase K.M., Voudouris P., Höss A., Wenske J., Klemd R., Beier C., Kutzschbach M., Strauss H. (2024). Insights into fluid



evolution and Re enrichment by mineral micro-analysis and fluid inclusion constraints: Evidence from the Maronia Cu-Mo±Re±Au porphyry system in NE Greece. *Mineralium Deposita*, 1-25. <https://doi.org/10.1007/s00126-024-01273-4>

- 5.2.73.** Lazaridis G., Papadopoulou L., **Melfos V.**, Kantiranis N., Voudouris P. (2024). Investigating the formation of quartz speleothems within the karstic Theochari Cave (Greece). *Cave and Karst Science*, 51, 31-36
- 5.2.74.** Stroulia A., Robitaille J., **Melfos V.**, Kantiranis N., Chondrogianni-Metoki A., Dubreuil L., Silva T., Saridaki N., Urem-Kotsou D. (2024). Ochre Chaînes Opératoires in Neolithic Greece: The Case of Kremasti-Kilada. *Anthropologica et Præhistorica*, 133. <https://doi.org/10.57937/ap.2023.015>
- 5.2.75.** Nikopoulou M., Karampelas S., Tsangaraki E., Papadopoulou L., Katsifas C.S., Nazlis I., Touloumtzidou A., **Melfos V.**, Kantiranis N. (2024). Study of green-coloured gems of the Roman period from the collections of the Archaeological Museum of Thessaloniki (Greece) and their possible geographic origin. *Journal of Raman Spectroscopy*, 1, 1-14. <https://doi.org/10.1002/jrs.6701>
- 5.2.76.** Höss, A., Haase, K. M., Keith, M., Klemd, R., Melfos, V., Gerlach, L., Pelloth F., Falkenberg J.J., Voudouris P., Strauss H., Baker T., Tarantola, A. (2024). Magmatic and hydrothermal evolution of the Skouries Au-Cu porphyry deposit, northern Greece. *Ore Geology Reviews*, 106233. <https://doi.org/10.1016/j.oregeorev.2024.106233>

### **5.2.1. Papers in international Volumes and Books**

- 5.2.1.1. Melfos V. (2013).** Application of Microscopy, X-ray Diffractometry (XRD) and Stable-Isotope Geochemistry in Provenance Determination of the White Marbles Used in the Ancient Great Theatre of Larisa, Thessaly, Greece. In: Varella E.A. (Ed): *Conservation Science for the Cultural Heritage. Applications of Instrumental Analysis. Lecture Notes in Chemistry*, 79. Springer-Verlag Berlin Heidelberg, 256-262.
- 5.2.1.2.** Kaiafa A., Papanikolaou E., **Melfos V.**, Papacharalampou C., Voudouris K. (2014). Sanitation and Wastewater and Stormwater Management in Ancient Kingdom of Macedonia. In: Angelakis A.N. and Rose J.B. (Eds): *Evolution of Sanitation and Wastewater Technologies through the Centuries*. IWA Publishing, London, UK, 175-190.
- 5.2.1.3. Melfos V., Stratouli G. (2016).** Raw material and provenance identification of Late Neolithic and Chalcolithic chert artefacts from Drakaina Cave, Kefhalonia, through petrographic and geochemical analysis. In: P. Elefanti, N. Andreasen, P.N. Kardulias G. Marshall (eds.), *Lithics Past and Present - Perspectives on Chipped Stone Studies in Greece*. *Studies in Mediterranean Archaeology*, Vol. CXLIV. Åströms Förlag, Uppsala, 121-140.
- 5.2.1.4.** Vaxevanopoulos M., Vavelidis M., **Melfos V.**, Malamidou D., Pavlides S. (2017). Ancient mining in Gold-Silver-Copper ore deposits and metallurgical activity in Mavrokofi area, Mount Pangaeon (Northeast Greece). In: Erez Ben-Yosef (Ed.) *Mining for Ancient Copper - Essays in Memory of Beno Rothenberg*. Tel Aviv University, Sonia and Marco Nadler Institute of Archaeology, Monograph Series, 37, 386-398.
- 5.2.1.5.** Vavelidis M., Chotzidis A.A., **Melfos V.** (2019). Millstones of Macedonia and Thrace.

In: Graham Hackney and George Speis (eds.), Greek Mills, from the Middle Byzantine period to the 20<sup>th</sup> century, Bibliotheca Molinological Society, 23, vol. 1, 71-77.

- 5.2.1.6.** Ross J., Voudouris P., **Melfos V.**, Vaxevanopoulos M. (2020). Mines, Metals and Money: Ancient World Studies in Science, Archaeology and History. In Kenneth A. Sheedy and Gillan Davis (eds) "Metallurgy in Numismatics", Volume 6. Royal Numismatic Society Special Publication, London, 9-22.
- 5.2.1.7.** Vaxevanopoulos M., Vavelidis M., Malamidou D., **Melfos V.** (2020). Metal production chain at Pangaeon Mountain, Eastern Macedonia, Greece. In Kenneth A. Sheedy and Gillan Davis (eds) "Metallurgy in Numismatics", Volume 6. Royal Numismatic Society Special Publication, London, 75-83.
- 5.2.1.8.** Stratouli G., Bekiaris T., **Melfos V.** (2022). Beyond the Horizon. Stone artefacts and social networks in Late Neolithic Drakaina Cave, Kefalonia Island, Western Greece. In: Souyouzoglou-Haywood Ch. and Papoulia Ch. (Eds), Archaeology of the Ionian Sea: Landscapes, seascapes and the circulation of people, goods and ideas from the Palaeolithic to end of the Bronze Age. Oxbow Books, Oxford, 53-63.
- 5.2.1.9.** Vaxevanopoulos M., Ross J., Soukis K., Voudouris P., **Melfos V.** (2022). Mapping the shafts of Laurion - Contribution to a new geological stratigraphy. Der Anschnitt, 50, 47-56.
- 5.2.1.10.** Voudouris P., Melfos V. (2023). The Lavrion mines: geological, metallogenic and mineralogical overview. In: Tzeferis P. and Bitzios D. (Eds), The Lavrion "Argyritis Land" and the Victorious Naval Battle of Salamis. Municipality of Lavreotiki, 36-53 (English and Greek text).

### **5.3. Papers in refereed national Journals and Special Volumes**

- 5.3.1.** **Melfos V.**, Parlantza I. (1989). Coastal geological and geomorphological phenomena in Sithonia, Chalkidiki. Bull Geol Soc Greece, XXIII/1, 395-407 (in Greek).
- 5.3.2.** **Melfos V.**, Vavelidis M., Filippidis A., Christofides G., Evaggelou E. (1993). "Framboidal" pyrite in the Fe-Cu-(Zn-Pb-Au) mineralization of Xylagani area, Rhodopi prefecture (Thrace). Bull Geol Soc Greece, XXVIII/2, 407-415 (in Greek).
- 5.3.3.** Vavelidis M., Chatzikirkou A., Katirtzoglou K., Tarkian M., **Melfos V.**, Nimfopoulos M. (1995). An ancient gold mine in the Alistrati area, Northern Greece. Geol. Soc. Greece, Sp. Publ., 4, 860-864.
- 5.3.4.** Vavelidis M., **Melfos V.** (1998). Fluid inclusion evidence for the origin of the barite silver-gold-bearing Pb-Zn mineralization of the Triades area, Milos island, Greece. Bull Geol Soc Greece, XXXII/3, 137-144.
- 5.3.5.** **Melfos V.**, Vavelidis M. (2000). The manufacture of stone and the quarrying activity during antiquity: traces of quarrying in Maronia, Rhodopi prefecture. "Thessalonikeon Polis", 2, 63-76 (in Greek).
- 5.3.6.** **Melfos V.**, Voudouris P., Arikas K., Vavelidis M. (2001). Rhenium-rich molybdenites in Thracian Mo±Cu porphyry occurrences, NE Greece. Bull Geol Soc Greece, XXXIV/3, 1015-1022 (in Greek).
- 5.3.7.** **Melfos V.**, Vavelidis M., Arikas K. (2001). A new occurrence of argentopentlandite and gold from the Au-Ag-rich copper mineralisation in the Paliomylos area,

- Serbomacedonian massif, Central Macedonia, Greece. Bull Geol Soc Greece XXXIV/3, 1065-1072.
- 5.3.8. Melfos V.,** Stratouli G. (2002). Provenance of the raw materials for the manufacture of the artefacts in the Neolithic settlement of Dispilio. In: Hourmouziadis G. (ed.) "Dispilio. After 7500 years". University Studio Press. 175-183 (in Greek).
- 5.3.9. Melfos V.** (2004). Mineralogical and stable isotopic study of ancient white marble quarries in Larisa, Thessaly, Greece. Bull Geol Soc Greece, XXXVI/3, 1164-1172.
- 5.3.10. Melfos V.,** Chatzipetros A., Hatzopoulou A., Vasileiadou A., Lazaridis G., Vaxevanopoulos M., Syrides G., Tsoukala E., Pavidis S. (2005). Geological, petrological, paleontological study at the Maronia Cave in the Eocene, Nummulitic Limestone in Western Thrace. Bull Geol Soc Greece, XXXVII, 153-167 (in Greek).
- 5.3.11.** Arikas K., Asfahani N., Nowak A., Watzl V., Goetz D., **Melfos V.** (2007). The Kirki mine in Evros Prefecture, NE Greece, and considerations on the environmental impact. Part II: Determination of toxic elements in soils and river sediments. Mining and Metallurgical Annals, 17, 51-69 (in Greek).
- 5.3.12. Melfos V.,** Voudouris P., Papadopoulou L., Sdrolia S., Helly B. (2010). Mineralogical, petrographic and stable isotopic study of ancient white marble quarries in Thessaly, Greece - II. Chasanbali, Tempi, Atrax, Tisaion mountain. Bull Geol Soc Greece, XLIII/2, 845-855.
- 5.3.13.** Vaxevanopoulos M., **Melfos V.** (2010). Hypogenic features in Maronia cave, Thrace, Greece. Evidence from morphologies and fluid inclusions. Bull Geol Soc Greece, XLIII/2, 948-957.
- 5.3.14.** Vavelidis M., **Melfos V.** (2012). Study of the ancient metallurgical works in Kipouristra, Olympiada (Ancient Stageira), NE Chalkidiki. Scientific Annals of the Faculty of Geology, School of Sciences, University of Thessaloniki. Special Volume 101, 9-16 (in Greek)
- 5.3.15. Melfos V.,** Stamatiadis A., Pipera K., Christofides G. (2012). Fluid inclusion study in the pegmatites of the Sithonia Plutonic Complex, Chalkidiki, N. Greece. Scientific Annals of the Faculty of Geology, School of Sciences, University of Thessaloniki. Special Volume 101, 55-61 (in Greek).
- 5.3.16.** Giouri A., Vavelidis M., **Melfos V.** (2013). Occurrence of Arsenic in waters and sediments of the Palea Kavala river, NE Macedonia, Northern Greece. Bull Geol Soc Greece, XLVII, 8 p.
- 5.3.17. Melfos V.,** Voudouris P. (2015). Nature of the mineralizing fluids in Tertiary magmatic-hydrothermal ore mineralizations from the Rhodope metallogenic province, NE Greece. Special Volume in Memory of Professor G. Eleftheriadis, Faculty of Geology, AUTH, 35-38.
- 5.3.18.** Giouri K., **Melfos V.,** Papadopoulou L., Vavelidis M., Alifragkis D. (2016). Correlation of selected metals and their binding behavior with sediment fractions in Philippoi area, NE Macedonia, northern Greece. Scientific Annals of the Faculty of Geology, University of Thessaloniki (Honorary Publication in Memory of Professor A. Kasoli-Fournaraki), 105, 1-7.



- 5.3.19.** Emmanouilidis C., Michailidis K., **Melfos V.** (2016). Geochemistry of the platinum group elements of chromitites from the Vermion ophiolitic complex, N. Greece. *Scientific Annals of the Faculty of Geology, University of Thessaloniki (Honorary Publication in Memory of Professor A. Kasoli-Fournaraki)*, 9-14 (in Greek).
- 5.3.20.** **Melfos V.**, Konstantinidou K. (2016). Mineralogical, petrographic and geochemical study of the rock used for the construction of a part of the decumanus maximus at the Venizelou metro station of Thessaloniki. *Scientific Annals of the Faculty of Geology, University of Thessaloniki (Honorary Publication in Memory of Professor A. Kasoli-Fournaraki)*, 105, 31-35 (in Greek).
- 5.3.21.** Stergiou C., **Melfos V.**, Voudouris P., Michailidis K., Spry P., Chatzipetros A. (2016). Hydrothermal alteration and structural control of the Vathi porphyry Cu-Au-Mo-U ore system, Kilkis district, N. Greece. *Scientific Annals of the Faculty of Geology, University of Thessaloniki (Honorary Publication in Memory of Professor A. Kasoli-Fournaraki)*, 105, 69-74.
- 5.3.22.** Karageorgiou S., Vavelidis M., Andreou S., **Melfos V.** (2016). Geochemical analysis of siliceous sediments from Vasilika, Northern Greece. *Bulletin of the Geological Society of Greece*, L, 1859-1866.
- 5.3.23.** Stergiou C., Karageorgiou S., Theodoridou S., Giouri K., Papadopoulou L., **Melfos V.** (2016). Compositional and morphological evaluation of edible salts: preliminary results. *Bull Geol Soc Greece*, L, 2137-2144.
- 5.3.24.** Zaimis S., Vavelidis M., Alifragkis D., **Melfos V.**, Kantiranis N., Daftsis E., Gazea E. (2016). Mineralogical and geochemical characterization of the Olympias mine tailings, NE Chalkidiki, Greece. *Bull Geol Soc Greece*, L, 2088-2097.
- 5.3.25.** Giouri K., Vavelidis M., **Melfos V.**, Papadopoulou L. (2016). Assessment of selected metals enrichment in sediments from Palea Kavala river, NE Macedonia, Northern Greece. *Bull Geol Soc Greece*, L, 2137-2144.
- 5.3.26.** Aravani F., Papadopoulou L., **Melfos V.**, Soldatos T., Zorba T., Voudouris P. (2019). Mineralogical and Fluid Inclusions Study of Epithermal Type Veins Intruding the Volcanic Rocks of the Kornofolia Area, Evros, NE Greece. *Bulletin of the Geological Society of Greece*, 55(1), 202-222.

#### **5.4. Papers in refereed international Conference Proceedings**

- 5.4.1.** **Melfos V.**, Vavelidis M. (1995). Fluid inclusion studies on the porphyry type Cu-Mo( $\pm$ Au) mineralization in Maronia area, Thrace county, Greece. *Boletin Soc. Espan. Mineralogia*, 18-1, 139-141.
- 5.4.2.** Vavelidis M., Schmidt-Mumm A., **Melfos V.** (1995). Microthermometric investigations in the Bi-Te-Ag bearing Cu-mineralization of Panagia area, Thasos Island, Greece. *Boletin Soc. Espan. Mineralogia*, 18-1, 261-262.
- 5.4.3.** **Melfos V.**, Vavelidis M., Christofides G. (1996). Cu-Pb-(Sb+As) sulphosalts from the porphyry type Cu-Mo( $\pm$ Au) mineralization in Maronia area, Thrace county, Greece. In: Terranes of Serbia. In: Knezevic & Krstic (eds) "The Formation of the Geologic Framework of Serbia and the Adjacent Regions", 305-310.
- 5.4.4.** Vavelidis M., Christofides G., **Melfos V.** (1996). The Au-Ag-bearing mineralization and

- placer gold of Palea Kavala (Macedonia, N. Greece). In: Knezevic & Krstic (eds) "The Formation of the Geologic Framework of Serbia and the Adjacent Regions". Eds: Knezevic & Krstic, 311-316.
- 5.4.5.** Vavelidis M., Kiliyas A., **Melfos V.**, Schmidt-Mumm A. (1996). New investigations in the Au-Ag-bearing Cu mineralization in the Koronouda area, Central Macedonia, Northern Greece. In: Knezevic & Krstic (eds) "The Formation of the Geologic Framework of Serbia and the Adjacent Regions", 317-322.
- 5.4.6.** Vavelidis M., Christofides G., **Melfos V.** (1997). Ancient gold mines near Krinides in Philippoi area (Macedonia, N. Greece). In: *Archaeometrie und Denkmalpflege: Kurzberichte. Gemeinsame Jahrestagung des Arbeitskreises Archaometrie der GDCh und des Arbeitskreises Archaometrie und Denkmalpflege der Deutschen Mineralogischen Gesellschaft, Wien, 24-26.3.1997*, 84-86.
- 5.4.7.** **Melfos V.**, Vavelidis M., Theodorikas S. (2002) Preservation of the Greek Cultural Heritage: A study of the geology and extraction techniques of two ancient quarries, Larisa prefecture, Thessaly, Greece. In: Kungolos et al. (eds), *Proceedings of the International Conference "Protection and Restoration of the Environment VI"*, 1535-1544.
- 5.4.8.** Voudouris P., Papavasiliou C., **Melfos V.** (2005). Silver mineralogy of St Philippos deposit (NE Greece) and its relationship to a Te-bearing porphyry-Cu-Mo mineralization. *Geochemistry, Mineralogy and Petrology*, 43, 155-160.
- 5.4.9.** Voudouris P., **Melfos V.**, Katerinopoulos A. (2006). Precious stones in Greece: mineralogy and geological environment of formation. 12th Quadrennial IAGOD symposium, "Understanding the Genesis of Ore Deposits to meet the demands of the 21<sup>st</sup> Century", Moscow, 21-24 August 2006.
- 5.4.10.** Voudouris P., **Melfos V.** (2006). Bismuth sulfosalts and silver tellurides in the Pagoni Rachi porphyry-Cu-Mo prospect, western Thrace (NE Greece). IGCP-486. Field Workshop, Izmir, Turkey, 24-29 September 2006, 159-166.
- 5.4.11.** Voudouris P., Spry P.G., **Melfos V.**, Alfieris D. (2007). Tellurides and bismuth sulfosalts in gold occurrences of Greece: mineralogical and genetic considerations. *Geological Survey of Finland*, 53, 85-94.
- 5.4.12.** Stratouli G., **Melfos V.** (2008). Exchange networks in the Neolithic of Greece: Gabbro and talc objects from Drakaina cave, Kefhalonia island, Western Greece. In the *Proceedings of the 4<sup>th</sup> Symposium of the Hellenic Society of Archaeometry, Athens*. Eds: Facorelis et al. 381-387.
- 5.4.13.** **Melfos V.**, Voudouris P., Vavelidis M., Spry P. (2008). Microthermometric results and formation conditions of a new intrusion-related Bi-Te-Pb-Sb±Au deposit in the Kavala pluton, Greece. *Proceedings of the XIII All-Russian conference on thermobarogeochemistry in conjunction with IV APIFIS symposium, Moscow, vol 2*, 165-168.
- 5.4.14.** Pavlides S., Tsoukala E., Chatzipetros A., Chatzopoulou A., **Melfos V.**, Vasileiadou M.K., Lazarides G., Vaxevanopoulos M. (2008). The Maronia cave in the nummulitic limestone (Thrace, Greece). *Geology & Palaeontology*. In the *Proceedings of the 14<sup>th</sup> International Congress of Speleology (ICS), Athens*. Ed: Petreas Ch., 88-90.
- 5.4.15.** Giouri A., Christophoridis C., **Melfos V.** and Vavelidis M. (2010). Assessment of heavy

- metals concentrations in sediments of Bogdanas River at the Assiros-Lagadas area, Northern Greece. In the Proceedings of the XIX Congress of the Carpathian-Balkan Geological Association, Thessaloniki. Eds: Christofides et al. Scientific Annals of the Faculty of Geology AUTH, 100, 63-69.
- 5.4.16. Melfos V.,** Chatzikirkou A., Michailidis K. and Voudouris P. (2010). Fluids related to remobilization of Mesozoic sulfide mineralization in the Eptadendro-Rachi region in eastern Rhodope, Thrace, Greece. In the Proceedings of the XIX Congress of the Carpathian-Balkan Geological Association, Thessaloniki. Eds: Christofides et al. Scientific Annals of the Faculty of Geology AUTH, 100, 343-350.
- 5.4.17. Voudouris P., Melfos V.,** Moritz R., Spry P.G., Ortelli M. and Kartal T. (2010). Molybdenite occurrences in Greece: mineralogy, geochemistry and rhenium content. In the Proceedings of the XIX Congress of the Carpathian-Balkan Geological Association, Thessaloniki. Eds: Christofides et al. Scientific Annals of the Faculty of Geology AUTH, 100, 369-378.
- 5.4.18. Papanikolaou E., Spathis P., Melfos V.,** Christaras B., Pavlidou E. (2011) Deterioration Problems of the Building Materials from Demeter and Asklepios Sanctuaries in the Archaeological Site of Dion, Greece. Salt Weathering on Buildings and Stone Sculptures, SWBSS 2011 (Limassol, Cyprus, 19-22 October), 169-176.
- 5.4.19. Papacharalampou C., Melfos V.,** Voudouris K. (2012). Water supply and related constructions since antiquity in Retziki (Pefka) of Thessaloniki, Northern Greece. In the Proceedings of the 3<sup>rd</sup> IWA Specialized Conference on Water and Wastewater Technologies in Ancient Civilizations. Eds: Koyuncu I. et al. (Istanbul, Turkey, 22-24 March 2012), 154-163.
- 5.4.20. Papanikolaou E., Spathis P., Christaras B., Melfos V.,** Katsiotis N. (2012). Application of infrared thermometry and ultrasonic velocity for the investigation of the building materials of historic monuments of Dion, Greece. In the Proceedings of the Smart Sensor Phenomena, Technology, Networks, and Systems Integration 2012, San Diego, California, USA, <http://dx.doi.org/10.1117/12.917579>
- 5.4.21. Giouri A., Vavelidis M., Melfos V.** (2012). Primary approach on the evaluation of total arsenic concentration in Palea Kavala river, NE Macedonia, Northern Greece. In the Proceedings of the International Conference Protection and Restoration of the Environment XI, Eds: Katsifarakis K.L. et al. (Thessaloniki, Greece, July 2012), 356-364.
- 5.4.22. Papanikolaou E., Spathis P., Samara C., Melfos V.,** Sawidis T. Christaras B. (2012). Effect of environmental factors to the deterioration of stone monuments in the archaeological site of Dion (Macedonia, Greece). In the Proceedings of the International Conference Protection and Restoration of the Environment XI, Eds: Katsifarakis K.L. et al. (Thessaloniki, Greece, July 2012), 2504-2512.
- 5.4.23. Behlivani S., Melfos V.,** Kantiranis N., Sikalidis C., Vavelidis M., Tsirambides A. (2012). Mineralogical, geochemical, isotopic and technological characteristics of carbonate rocks from Larisa county, Central Greece. In the Proceedings of the 12<sup>th</sup> International GeoConference SGEM 2012 (Albena, Bulgaria, June 2012), Volume 1, 173-180.
- 5.4.24. Vavelidis M., Zaimis S., Melfos V.** (2012). The “Stone Museum” in Petrota of Evros (NE Greece): An exhibition of rock specimens related to the local geology and the ancient

- quarrying activity. In the Proceedings of the 12<sup>th</sup> International GeoConference SGEM 2012 (Albena, Bulgaria, June 2012), Volume 1, 341-348.
- 5.4.25.** Zaimis S., Vavelidis M., **Melfos V.**, Kantiranis N, Alifragkis D., Daftsis E. (2013). Mineralogical composition of the Olympias tailings in NE Chalkidiki, N Greece. Proceedings of the 6<sup>th</sup> International Conference on Sustainable Development in the Minerals Industry, 30 June - 3 July 2013, Milos island, Greece. 1-6 p.
- 5.4.26.** **Melfos V.**, Papacharalampou C., Voudouris P.Ch., Kaiafa A. and Voudouris K. (2014). Raw materials used for the millstones production in ancient Greece: Examples from Macedonia and Thrace. In the Proceedings of the 4<sup>th</sup> IWA Regional Symposium on Water, Wastewater and Environment: Traditions and Culture, Eds: Kalavrouziotis I.K. and Angelakis A.N. (22-24 March 2014, Patras, Greece), 773-783.
- 5.4.27.** Spathis P., Stamkopoulos G., Papanikolaou E., **Melfos V.**, Christaras B. (2014). Surface decay study by Digital Image Processing of the building materials of the monuments of the archaeological site of Dion, Greece. In the Proceedings of the 9<sup>th</sup> International Symposium on the Conservation of Monuments in the Mediterranean Basin, Ankara, Turkey, 10 p.
- 5.4.28.** Mavromati M., Spathis P., **Melfos V.**, Pingiatoglou S. (2014) Characterization and decay state of the building materials of a Roman ceramic kiln in the archaeological site of Dion, Greece. XX Congress of the Carpathian Balkan Geological Association, Tirana, Albania, 24-26 September, 416-418.
- 5.4.29.** Giouri K., Papadopoulos A., Tzamos E., **Melfos V.** (2014). Geochemical indices of selected heavy metals in estuarine sediments of Koronia Lake (C. Macedonia, Greece). In the Proceedings of the 12<sup>th</sup> International Conference Protection and Restoration of the Environment, Eds: Liakopoulos et al. (Skiathos, Greece, July 2014), 848-855.
- 5.4.30.** Voudouris P., Mavrogonatos C., **Melfos V.**, Alfieris D., Stamatakis M. (2014). Alunite occurrences in Greece: Geological-mineralogical constraints and exploitation. International Conference "Coastal landscapes, mining activities and preservation of cultural heritage" 17-20 September 2014, Milos island, Greece. pp. 1-5.
- 5.4.31.** Lazos I., Stergiou C.L., Chatzipetros A., Pikridas C., Bitharis S., **Melfos V.** (2018). Active tectonics (extensional regime and rotations) and Tertiary mineralization occurrences within Central Macedonia, Greece. In proceedings of the 9th International INQUA Workshop on Paleoseismology, Active Tectonics and Archeoseismology (PATA), Eds: Koukousioura O. and Chatzipetros A., 25-27 June 2018, Possidi, Greece, 145-148.
- 5.4.32.** Galanos E., Voudouris P., Rieck B., Kolitsch U., Mavrogonatos C., **Melfos V.**, Zaimis S., Soukis K. (2018). Oscillatory Zoned Gersdorffite and the Ni-Bi-Au Association at Clemence Mine and Km 3 Locality, Lavrion District, Greece. Proceedings of the 1<sup>st</sup> International Electronic Conference on Mineral Science, 16-31 July 2018, 11 pp. (<https://sciforum.net/paper/view/conference/5451>).
- 5.4.33.** Mavrogonatos C., Voudouris P., Spry P., **Melfos V.**, Klemme S., Berndt J., Moritz R., Kanellopoulos Ch. (2018). First Zunyite-Bearing Lithocap in Greece: The Case of Konos Hill Mo-Re-Cu-Au Porphyry System. Proceedings of the 1<sup>st</sup> International Electronic Conference on Mineral Science, 16-31 July 2018, 12 pp. (<https://sciforum.net/paper/view/conference/5450>).

**5.4.34.** Voudouris P., Spry P., **Melfos V.**, Haase K., Klemd R., Mavrogonatos C., Repstock A., Alfieris D. (2018). Gold Deposits in Greece: Hypogene Ore Mineralogy as a Guide for Precious and Critical Metal Exploration. Proceedings of the 1<sup>st</sup> International Electronic Conference on Mineral Science, 16-31 July 2018, 14 pp. (<https://sciforum.net/paper/view/conference/5452>).

**5.4.35.** Stergiou C.L, **Melfos V.**, Voudouris P. (2018). A review on the critical and rare metals distribution throughout the Vertiskos Unit, N. Greece. Proceedings of the 1<sup>st</sup> International Electronic Conference on Mineral Science, 16-31 July 2018, 8 pp. (<https://sciforum.net/paper/view/conference/5453>).

#### **5.4.1. Extended Abstracts in Special Volumes of International Conferences**

**5.4.1.1. Melfos V.**, Vavelidis M., Filippidis A., Christofides G., Evagelou E. (1991). Re-rich and Re-poor molybdenite in the Maronia rhyolitic intrusion, Northeastern Greece. In: Source, transport and deposition of metals. Eds: Pagel & Leroy., 775-777.

**5.4.1.2.** Vavelidis M., **Melfos V.**, Sklavounos S., Bogdanov K., Driesner T. (1995). Bi-Te-Ag-bearing Cu mineralization in the Panagia area, Thasos Island (Northern Greece). In: Mineral Deposits: From their origin to their environmental impacts. Eds: Pasava, Kribek & Zak, 393-396.

**5.4.1.3.** Vavelidis M., **Melfos V.**, Boboti-Tsitlakidou I., Arikas K. (1997). A new occurrence of placer gold in the Marathousa area (central Macedonia, N. Greece). In: Mineral Deposits: Research and Exploration Where do They Meet? Ed: Papunen, 339-342.

**5.4.1.4.** Vavelidis M., **Melfos V.**, Eleftheriadis G. (1997). Mineralogy and microthermometric investigations in the Au-bearing sulphide mineralization of Palea Kavala (Macedonia, Greece). In: Mineral Deposits: Research and Exploration Where do They Meet? Ed: Papunen, 343-346.

**5.4.1.5.** Vavelidis M., **Melfos V.**, Kilias A. (1999). The gold-bearing quartz veins in the metamorphic rocks at the Drakontio area, central Macedonia, northern Greece. In: Mineral Deposits: Processes to Processing. Ed: C.J. Stanley et al., 209-212.

**5.4.1.6.** Voudouris P., **Melfos V.**, Vavelidis M., Arikas K. (2003). Genetic relation between the Tertiary porphyry Cu-(±Mo) and the epithermal Au-(±Ag) deposits in the Rhodope metallogenic province, Thrace region, Northern Greece. In: Mineral Exploration and Sustainable Development. Eds: Eliopoulos et al., 541-544.

**5.4.1.7. Melfos V.**, Vavelidis M., Bogdanov K. (2003). Occurrence, mineralogy and chemical composition of primary gold from Tertiary ore mineralisations in the Rhodope massif (Greece-Bulgaria). In: Mineral Exploration and Sustainable Development. Eds: Eliopoulos et al., 1201-1204.

**5.4.1.8.** Bonsall T.A., Spry P.G., Voudouris P., Seymour K.St., Tombros S., **Melfos V.** (2007). Fluid inclusion and stable isotope characteristics of carbonate replacement Pb-Zn-Ag deposits in the Lavrion district, Greece. In: Digging Deeper. Eds: Andrew C.J. et al., 283-286.

**5.4.1.9.** Voudouris P.C., **Melfos V.**, Spry P.G., Bindi L., Kartal T., Arikas K., Moritz R., Ortelli M. (2009). A new occurrence of rehiite (ReS<sub>2</sub>) and telluride enrichment in the Pagoni Rachi-Kirki porphyry-style Mo-Cu-Ag-Au prospect, northern Greece. In: Williams P.J. et

al. (eds), Proceedings of the 10<sup>th</sup> Biennial SGA Meeting, Townsville, Australia, 2009. "Smart Science for exploration and Mining", 542-544.

- 5.4.1.10.** Voudouris P.C., Spry P.G., **Melfos V.**, Moritz R., Papavassiliou K., Falalakis G. (2009). Mineralogical constraints on the formation of the Perama Hill High-Sulfidation Epithermal Au-Ag-Te Deposit, Northeastern Greece. In: Williams P.J. et al. (eds), Proceedings of the 10<sup>th</sup> Biennial SGA Meeting, Townsville, Australia, 2009. "Smart Science for exploration and Mining", 545-547.
- 5.4.1.11.** Melfou M., Voudouris P., Klemd R., Keith M., **Melfos V.**, Papadopoulou L., Kantiranis N. (2023). In-situ trace element analyses of pyrite from the Pefka epithermal Cu-Au-Te-In-Se deposit, Rhodope, Northern Greece. Proceedings of the 17<sup>th</sup> Biennial SGA Meeting, Zürich, Switzerland, 2023. "Mineral Resources in a Changing World", 32-35.
- 5.4.1.12.** Makvandi S., Cauzid J., Tarantola A., **Melfos V.**, Voudouris P., (2023). XRD clustering and quantitative analysis as a fingerprinting technique to study ore deposits. Proceedings of the 17<sup>th</sup> Biennial SGA Meeting, Zürich, Switzerland, 2023. "Mineral Resources in a Changing World", 34-37.
- 5.4.1.13.** Höss A., Klemd R., Keith M., Haase K.M., **Melfos V.**, Gerlach L., Pelloth F., Falkenberg J., Voudouris P. (2023). Evolution of the Skouries porphyry Cu-Au system by trace element variations. Proceedings of the 17<sup>th</sup> Biennial SGA Meeting, Zürich, Switzerland, 2023. "Mineral Resources in a Changing World", 113-116.
- 5.4.1.14.** Falkenberg J., Keith M., **Melfos V.**, Hohl M., Haase K.M., Voudouris P., Höss A., Wenske J., Klemd R., Beier C., Kutzschbach M., Strauss H. (2023). Fluid evolution and Re enrichment in the Maronia Cu-Mo±Au porphyry, NE Greece. Insights from mineral microanalysis and fluid inclusions constraints Proceedings of the 17<sup>th</sup> Biennial SGA Meeting, Zürich, Switzerland, 2023. "Mineral Resources in a Changing World", 52-55.
- 5.4.1.15.** Stergiou C.L., Sakellaris G.-A., Melfos V., Voudouris P. (2023). A Review of the Distribution of Critical and Strategic Mineral Raw Materials in the Vein-Type Mineralizations of Vertiskos Unit, Northern Greece. Materials Proceedings, 15, 51, 6 p.

## **5.5. Papers in refereed national Conference Proceedings**

- 5.5.1.** Vavelidis M., Gialoglou Γ., Wagner G.A., **Melfos V.** (1996). Skapti Hyli: An ancient gold mine in the location of Mandra Kari, Palea Kavala. "Archaeometric and Archaeological Investigations in Macedonia and Thrace", Thessaloniki 1993, 23-35 (in Greek).
- 5.5.2.** Vavelidis M., Christofides G., **Melfos V.** (1997). Ancient mining activity in the broader area of Kavala-Filippii. "Ancient Greek Technology", Thessaloniki. 95-101 (in Greek).
- 5.5.3.** **Melfos V.**, Stratouli G., Vavelidis M., Efstratiou N. (2001). Provenance and flow of raw materials used for the polished stone tools manufacture from the neolithic settlement of Makri, Aegean Thrace. In: Bassiakos et al. (eds) "Archaeometry Issues in Greek Prehistory and Antiquity". Hellenic Society of Archaeometry Society of Messenian Archaeological Studies, Athens, 763-778 (in Greek).
- 5.5.4.** Vavelidis M., Gialoglou Γ., Trontsios G., **Melfos V.**, Weisgerber G. (2001). An ancient ochre and lead-silver mine in the site of Elia in Thasos island. In: Bassiakos et al. (eds) "Archaeometry Issues in Greek Prehistory and Antiquity". Hellenic Society of Archaeometry Society of Messenian Archaeological Studies, Athens, 633-644 (in Greek).

- 5.5.5.** Darlagiannis D., Vavelidis M., Arikas K., **Melfos V.**, Goetz D. (2002) Environmental geochemical study of the sediments in the Saporema and the Filiouris rivers, Sapes-Xylagani area, Rhodope county, Thrace. Proceedings of the 6<sup>th</sup> Greek Geographical Conference of the Greek Geographical Society. Thessaloniki, October 2002. Volume II, 445-452 (in Greek).
- 5.5.6.** Vavelidis M., **Melfos V.**, Tsatsopoulou P. Kiourtzoglou E. (2003) Quarrying activity in the area of Mesimvria-Zoni of Evros during the antiquity. In: "The Archaeological Work in Macedonia and Thrace", 15, 33-45 (in Greek).
- 5.5.7.** Mastoris I., Delagrammatikas G., Karmis M., **Melfos V.** (2003). Evaluation of raw materials for the design of mix catering to the cement industry: Studies and applications to sedimentary deposits. In: "Aggregates and Building Stones" of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece, 65-81 (in Greek).
- 5.5.8.** Karatasou E., Vavelidis M., **Melfos V.**, Kotali E. (2004). Geochemical investigation of the surface water and the sediments of Thermorema river in the mining area of Konos, Sapes, Rhodopi prefecture. Proceedings of the 8<sup>th</sup> Conference in Chemistry for Greece-Cyprus: "Chemistry, Quality of Life and Education". Thessaloniki, P196, 1-5 (in Greek).
- 5.5.9.** **Melfos V.** (2005). Study of the fluid inclusions in amethysts from areas of Macedonia and Thrace: K. Nevrokopi, Sapes, Soufli. Proceedings of the 2<sup>nd</sup> Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece, Thessaloniki, 219-228 (in Greek).
- 5.5.10.** Voudouris P., Katerinopoulos A., Kiliass S., **Melfos V.**, Detsi K., Vastardi A. (2005). Mineralogical-microthermometric investigations in quartz veins of South Evia. Proceedings of the 2<sup>nd</sup> Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece, Thessaloniki, 29-38 (in Greek).
- 5.5.11.** Karatasou E., Vavelidis M., **Melfos V.**, Koronaios A., Sklavounos S. (2005). Pollution of the Thermorema river sediments by heavy metals in the mining region Konos, Sapes, Thrace. Proceedings of the 2<sup>nd</sup> Conference of the Committee of Economic Geology, Mineralogy and Geochemistry of the Geological Society of Greece, Thessaloniki, 133-142 (in Greek).
- 5.5.12.** Vavelidis M., Hotzidis A., **Melfos V.** (2007). Quarries and monuments of Northern Evros: Factors of economic development from ancient to modern times. Proceedings of the Conference of the Economic Geology, Mineralogy and Geochemistry, "Capability development in northern Evros: Culture, mineral resources and environment", Petrola of Evros, 38-53 (in Greek).
- 5.5.13.** Vavelidis M., **Melfos V.**, Hotzidis A. (2007). Proposal for the establishment of a museum of stone and a Path in areas of particular geological beauty. Proceedings of the Conference of the Economic Geology, Mineralogy and Geochemistry, "Capability development in northern Evros: Culture, mineral resources and environment", Petrola of Evros, 54-59 (in Greek).
- 5.5.14.** Vavelidis M., Hotzidis A., **Melfos V.** (2008). Quarries and quarrymen in Thrace from ancient to modern times. In: "The Archaeological Work in Macedonia and Thrace", 20, 41-49 (in Greek).

- 5.5.15.** Giouri K., Vavelidis M., **Melfos V.**, Christoforidis X., Fytianos K. (2008). Geochemical study of Bogdanas River waters at the Assiros-Langada area, Thessaloniki. In the Proceedings of the 3<sup>rd</sup> Environmental Conference of Macedonia of the Association of Greek Chemists of C. and W. Macedonia, Thessaloniki 14-17 March 2008, 1-8 (in Greek).
- 5.5.16.** Papanikolaou E., Melfos V., Vavelidis M. (2013). Determination of the marble provenance from monuments in Dion of Pieria, Greece: Mineralogical, petrographic and isotopic studies. In: "The Archaeological Work in Macedonia and Thrace", 23, 163-172 (in Greek).
- 5.5.17.** Bampatsikou A., Michailidou A., Giouri K., **Melfos V.** (2014). Geochemical study of surface and underground water samples in Pefka area (Retziki) of Thessaloniki, N. Greece. 10<sup>th</sup> International Hydrogeological Congress of Greece, Thessaloniki, 183-194 (in Greek).
- 5.5.18.** Voudouris K., **Melfos V.**, Aidona E., Kazakis N., Giouri K., Stratis J. (2014). Arsenic concentration in groundwater and sediments of Velestino area, Thessaly, central Greece. 10<sup>th</sup> International Hydrogeological Congress of Greece, Thessaloniki, 759-770.
- 5.5.19.** Vaxevanopoulos M., **Melfos V.**, Skafida E. Karnava A. (2015). Diachronic use of travertine for building purposes at the archaeological site of "Kastro-Palaia" in Volos city. In: "The Archaeological Work in Thessaly and Sterea Ellada, 4, 321-330 (in Greek).
- 5.5.20.** **Melfos V.** (2015). Ancient marble quarries of Macedonia: mineralogical, petrographic and isotopic (C,O) study. Proceedings of the 10<sup>th</sup> Congress of the Hellenic Geographical Society, 22-24 October 2014, Thessaloniki, Greece, 536-548 (in Greek).
- 5.5.21.** Giouri K., Karageorgiou M., Stergiou Ch., Theodoridou St., Papadopoulou L., **Melfos V.** (2017). Edible salts: compositional determination of the insoluble residue. In the Proceedings of the 6<sup>th</sup> Environmental Conference of Macedonia of the Association of Greek Chemists of C. and W. Macedonia, Thessaloniki 5-7 May 2017, 1-8 (in Greek).
- 5.5.22.** Vaxevanopoulos M., Vavelidis M., Malamidou D., **Melfos V.** (2017). Excavations in ancient mines and metallurgical sites of Pangaeon mountain (Asimotrypes, Valtouda). In: "The Archaeological Work in Macedonia and Thrace", 26, 547-552 (in Greek).
- 5.5.23.** Vaxevanopoulos M., **Melfos V.**, Doulgeri-Intzesisoglou A., Skafida E., Vavaliou M., Intzesisoglou Ch. (2020). Recording of ancient quarry activity in the Magnesia Regional Unit. In: "The Archaeological Work in Thessaly and Sterea Ellada, 5, 373-382 (in Greek).

## 5.6. Abstracts in international Conference Proceedings

- 5.6.1.** Vavelidis M., Boboti-Tsitlakidis I., **Melfos V.** (1994). The gold-silver-copper mineralization and the placer gold in Koronouda area, Northern Greece. Beih. zum Eur. Jour. Miner., 6, 293.
- 5.6.2.** Arikas K., Voudouris P., **Melfos V.**, Vavelidis, M. (2000). Hydrothermale Mineralparagenesen und der chemismus der Molybdänite von Mo-Porphry-Vorkommen in Thrakien/NE-Griechenland. Beih. zum Eur. Jour. Miner., 12, 5.
- 5.6.3.** Vavelidis M., **Melfos V.**, Arikas K. (2000). Mineralogy and structural control of the Ag-rich copper mineralization in the Serbomacedonian massif, Paliomylos area, Greece. Beih. zum Eur. Jour. Miner., 12, 220.
- 5.6.4.** **Melfos V.**, Vavelidis M. (2000). Genetical implications of the Cu-Bi-Ag hydrothermal



- veins, Kapsalina area, Thasos island, Northern Greece: mineralogical and fluid inclusion studies. WORKSHOP on Geodynamics and Ore Deposit Evolution of the Alpine-Balkan-Carpathian-Dinaride Province, 26-29 May 2000, BULGARIA, 50.
- 5.6.5. Melfos V.,** Vavelidis M., Christofides G., Seidel E. (2000). Nature and evolution of the Tertiary porphyry Cu-Mo deposit in the Maronia area, Thrace, Greece. WORKSHOP on Geodynamics and Ore Deposit Evolution of the Alpine-Balkan-Carpathian-Dinaride Province, 26-29 May 2000, Bulgaria, 51.
- 5.6.6.** Finitzi A.V., Arikas K., Goetz D., Darlagiannis D., Vavelidis M., **Melfos V.** (2002). Geochemie von Böden und Bachsedimenten im epithermalen Gebiet von Sapes/Perama (Thrakien-Griechenland). Beih. zum Eur. Jour. Miner., 14, 43.
- 5.6.7.** Pavlides S., Tsoukala E., Chatzipetros A., Chatzopoulou A., **Melfos V.,** Basiliadou M.K., Lazarides G., Vaxevanopoulos M. (2005). The Maronia cave in the nummulitic limestone (Thrace, Greece). Geology, palaeontology and archaeology. In the Proceedings of the 14<sup>th</sup> International Congress of Speleology (ICS), Athens, 21-28 August 2005, O22, 61.
- 5.6.8. Melfos V.,** Voudouris P. (2006). Fluid inclusions and O-isotopes of an amethyst and smoky quartz occurrence in Kato Nevrokopi, Rhodope massif, Northern Greece. Abstracts Proceedings, EMPG XI, Experimental Mineralogy, Petrology and Geochemistry, 51.
- 5.6.9.** Bonsall T.A., Spry P.G., Voudouris P., Seymour K.S., Tombros S., **Melfos V.** (2007). Geology, mineralogy, and geochemistry of carbonate-hosted bedded replacement lead-zinc-silver deposits in the Lavrion district, Greece. GSA Denver Annual Meeting, Colorado Convention Centre (28-31 October 2007).
- 5.6.10. Melfos V.,** Magganas A., Voudouris P. and Kati M. (2009). The Mesozoic Larissa opihcalcite-serpentinite association in Eastern Thessaly, Greece: Mineralogical, Geochemical and Isotopic Constraints for rocks formed in an Ocean-Continent Transition setting. Geophysical Research Abstracts, EGU General Assembly 2009, vol. 11, EGU2009-10797-2, Vienna International Centre (20-25 April 2009).
- 5.6.11.** Kati M., Magganas A., **Melfos V.** and Voudouris P. (2009). Sedimentology of the Larissa opihcalcite breccias: Mass flow deposits in a Tethyan Ocean-Continent Transition zone. Geophysical Research Abstracts, EGU General Assembly 2009, vol. 11, EGU2009-11002-1, Vienna International Centre (20-25 April 2009).
- 5.6.12.** Fornadel A.P., Spry P.G., Vavelidis M., **Melfos V.** and Voudouris P. (2009). The Palea Kavala Reduced Intrusion-Related Bi-Te-Pb-Sb±Au System, Northeastern Greece: Mineralogical, fluid inclusion, and sulfur isotope studies. GSA Portland Annual Meeting, Oregon Convention Centre (18-21 October 2009), Geological Society of America Abstracts with Programs, 41-7, 25.
- 5.6.13.** Spry P., Fornadel A., **Melfos V.,** Vavelidis M., Voudouris P. (2010). The Palea Kavala Bi-Te-Sb±Au district, Greece: A Reduced Intrusion-Related System. 13<sup>th</sup> Quadrennial IAGOD Symposium 2010, Adelaide, South Australia (6-9 April), 211-212.
- 5.6.14.** Voudouris P., Kartal T., Spry P., **Melfos V.,** Schleicher H. (2010) Late stage evolution of a porphyry Mo-Re system: Tellurides and sulfosalts in the Pagoni Rachi prospect, Northern Greece. 13<sup>th</sup> Quadrennial IAGOD Symposium 2010, Adelaide, South Australia (6-9 April), 214-215.
- 5.6.15.** Voudouris P., Graham I., **Melfos V.,** Zaw K., Lin S., Giuliani G., Fallick A., Ionescu M.

- (2010). Gem corundum deposits of Greece: diversity, chemistry and origins. In: Cook et al. (eds.), Symposium Proceedings of the 13<sup>th</sup> Quadrennial IAGOD Symposium 2010, Adelaide, South Australia (6-9 April), 429-430 (ISBN 978-1-921399-35-0).
- 5.6.16.** Giouri A., Christophoridis C., **Melfos V.** and Vavelidis M. (2010). Assessment of heavy metals concentrations in sediments of Bogdanas River at the Assiros-Lagadas area, Northern Greece. In: *Geologica Balcanica*, Abstracts Volume of the XIX Congress of the Carpathian-Balkan Geological Association, Thessaloniki, 23-26 September 2010. Eds: Chatzipetros et al., 134.
- 5.6.17.** Kati M., Magganas A., **Melfos V.**, Voudouris P. (2010). Polygenetic history of the Chasanbali opicalcite breccias in Thessaly, Greece. In: *Geologica Balcanica*, Abstracts Volume of the XIX Congress of the Carpathian-Balkan Geological Association, Thessaloniki, 23-26 September 2010. Eds: Chatzipetros et al., 180-181.
- 5.6.18.** **Melfos V.**, Chatzikirkou A., Michailidis K. and Voudouris P. (2010). Fluids related to remobilization of Mesozoic sulfide mineralization in the Eptadendro-Rachi region in eastern Rhodope, Thrace, Greece. In: *Geologica Balcanica*, Abstracts Volume of the XIX Congress of the Carpathian-Balkan Geological Association, Thessaloniki, 23-26 September 2010. Eds: Chatzipetros et al., 250.
- 5.6.19.** Voudouris P., **Melfos V.**, Moritz R., Spry P.G., Ortelli M. and Kartal T. (2010). Molybdenite occurrences in Greece: mineralogy, geochemistry and rhenium content. In: *Geologica Balcanica*, Abstracts Volume of the XIX Congress of the Carpathian-Balkan Geological Association, Thessaloniki, 23-26 September 2010. Eds: Chatzipetros et al., 410.
- 5.6.20.** Fornadel A.P., Spry P.G., Voudouris P.Ch., **Melfos V.** (2011). Mineralogical, Stable Isotope, And Fluid Inclusion Studies Of Spatially Related Porphyry Cu(-Mo) And Epithermal Au-Te Mineralization, Fakos Peninsula, Limnos Island, Greece. GAC Conference, Ottawa, Canada, 25-27 May 2011, p. 66.
- 5.6.21.** Vaxevanopoulos M., **Melfos V.**, Skafida E., Karnava A. (2012). A mineralogical, petrographic and C-O isotopic approach for the provenance determination of the raw materials from the Kastro-Palaea building constructions, in Volos of Thessaly, Central Greece. In Abstracts Proceedings of the 39<sup>th</sup> International Symposium on Archaeometry, Leuven, 28 May - 1 June. 57.
- 5.6.22.** Voudouris P., Graham I., **Melfos V.**, Sutherland F., Zaw K. (2012). Gemstones of Greece: Mineralogy and origins. 34<sup>th</sup> International Geological Congress (IGC), Brisbane, Australia, August 2012, 3240.
- 5.6.23.** Graham I., Voudouris P., **Melfos V.**, Zaw K., Meffre S., Sutherland F., Giuliani G., Fallick A. (2012). Gem corundum deposits of Greece: a spectrum of compositions and origins. 34<sup>th</sup> International Geological Congress (IGC), Brisbane, Australia, August 2012, 3241.
- 5.6.24.** Vaxevanopoulos M., Vavelidis M., **Melfos V.**, Malamidou D., Pavlides S. (2013). Ancient Mining in Gold-Silver-Copper Deposits and Metallurgical Activity in Mavrokofi Area, Pangaeon Mount (NE Greece). In Abstracts Proceedings of the International Conference about "Mining for Copper: Environment, Culture and Copper in Antiquity", Timna, Israel, 22-25 April. 39.
- 5.6.25.** Fornadel A.P., Voudouris P., Spry P.G., **Melfos V.** (2013). Despite Elevated Gold

- Grades at the Fakos Prospect (Limnos Island, Greece), Economic Development is Unlikely. AAPG Search and Discovery Article AAPG/SEG Student Expo, Houston, Texas, 16-17 September.
- 5.6.26.** Vavaliou M., Vaxevanopoulos M., **Melfos V.**, Economou G. (2015). Recording and mapping ancient quarries in Thessaly, Central Greece. XI International Conference of ASMOSIA (Association for the Study of Marble and Other Stones used in Antiquity). Split, Croatia, 18-22 August, 2015. Abstract Volume, 259-260.
- 5.6.27.** Vaxevanopoulos M., Vavaliou M., **Melfos V.**, Economou G. (2015). Quarries of an ancient town close to the modern city of Volos, Thessaly, Central Greece. XI International Conference of ASMOSIA (Association for the Study of Marble and Other Stones used in Antiquity). Split, Croatia, 18-22 August, 2015. Abstract Volume, 261.
- 5.6.28.** Zaimis S., Gutzmer J., Voudouris P., **Melfos V.** (2016). Indium, germanium and gallium enrichments in the carbonate-replacement Pb-Zn-Ag ore deposit at Kamariza, Lavrion (NE Attica, Greece). In the Abstract Volume of the 1<sup>st</sup> Postgraduate conference on the "Geology of Ore Deposits", Freiberg, Germany, March 15-18, 2016.
- 5.6.29.** Vaxevanopoulos M., Economou G., **Melfos V.**, Skafida E. (2016). Mineralogical and isotopic analysis of the building materials in a Late Bronze settlement of Kastro-Palaia in Volos, Greece. 41<sup>st</sup> International Symposium on Archaeometry-ISA 2016, Kalamata, Greece, May 15-21, 2016, 138-139.
- 5.6.30.** **Melfos V.**, Vaxevanopoulos M., Tsvilika M., Vavaliou M. (2016). Mineralogical and C-O isotopic characteristics of the oolitic limestone of Perachora, Tyrnavos, Thessaly, Greece. The ancient quarries and some particular uses during antiquity. 41<sup>st</sup> International Symposium on Archaeometry-ISA 2016, Kalamata, Greece, May 15-21, 2016, 143-144.
- 5.6.31.** Kyropoulou D., Andrikou D., Christaras V., **Melfos V.**, Dotsika E. (2016). <sup>13</sup>C and <sup>18</sup>O applied to detect the technology and degradation of historic mortars. 41<sup>st</sup> International Symposium on Archaeometry-ISA 2016, Kalamata, Greece, May 15-21, 2016, 162.
- 5.6.32.** Stergiou C., **Melfos V.**, Voudouris P., Michailidis K., Spry P. (2016). Mineralogical, geochemical and structural constraints of the Vathi porphyry Cu-Au±U±Mo mineralization, N. Greece. Abstract volume of the Society of Economic Geologists (SEG) Conference "Tethyan Tectonics and Metallogeny", Cesme, Turkey, 25-28/9/2016.
- 5.6.33.** Stergiou C., **Melfos V.**, Voudouris P. (2016). Rare metals and uranium enrichment at the Vathi porphyry Cu-Au±U±Mo mineralization, N. Greece. International Workshop "Recent advances in W-Sn and Rare Metal deposit metallogenesis", Université de Lorraine, Nancy, France, 30/11-1/12/2016.
- 5.6.34.** Stergiou G., Lampakis D., Stergiou C., Karapanagiotis I., **Melfos V.** (2016). Identification of Pigments used in early 19<sup>th</sup> century icons from St. George Church, Asvestochori, Thessaloniki, Greece. 2<sup>nd</sup> International Meeting for Conservation & Documentation of Ecclesiastical Artefacts. Ecumenical Patriarchate Halki Theological School & Division of Conservation of Cultural Heritage (Technological Educational Institute of Ionian Islands), Zakynthos, Greece, December 12-13, 2016.
- 5.6.35.** Theodoridou S., **Melfos V.**, Voudouris P., Miskovic A. (2016). Mineralogical and Geochemical Characterization of the Kimmeria Intrusion-Related Deposit, Xanthi, NE Greece. Geophysical Research Abstracts, EGU General Assembly 2016, vol. 18, EGU2016-

8933, Vienna International Center (17-22 April 2016).

- 5.6.36.** Barouchas P., Koulos V., **Melfos V.** (2017). Determination of total carbonates in soil archaeometry using a new pressure method with temperature compensation. Geophysical Research Abstracts, EGU General Assembly 2017, vol. 19, EGU2017-12820, Vienna International Centre, 23-28 April 2017.
- 5.6.37.** Periferakis A., Voudouris P., **Melfos V.**, Mavrogonatos C., Alfieris D. (2017). The Stypsi-Megala Therma porphyry-epithermal mineralization, Lesvos Island, Greece: new mineralogical and geochemical data. Geophysical Research Abstracts, EGU General Assembly 2017, vol. 19, EGU2017-12950, Vienna International Centre, 23-28 April 2017.
- 5.6.38.** Ross J.R., Vaxevanopoulos M., **Melfos V.**, Voudouris P. (2017). Precious Metals and the Rise of Philip II of Macedonia. In: Oztunali 2017 Geoarchaeology, Ancient Mining and Metallurgy Symposium. Istanbul University, Istanbul, Turkey, 1-2 November 2017.
- 5.6.39.** Voudouris P., **Melfos V.**, Spry P., Alfieris D., Mavrogonatos C., Repstock A., Djiba A., Stergiou Ch., Periferakis A., Melfou M. (2018). Porphyry and Epithermal Deposits in Greece: A Review and New Discoveries. 8<sup>th</sup> Geochemistry Symposium, Abstracts Book, Antalya, Turkey, 4-6 May 2018, 181.
- 5.6.40.** Galanopoulos E., Voudouris P., Mavrogonatos C., **Melfos V.** (2018). A New Porphyry Mo Mineralization at Aisymi-Leptokarya, Southeastern Rhodope, NE Greece: Mineralogical and Geochemical Constraints. 8<sup>th</sup> Geochemistry Symposium, Abstracts Book, Antalya, Turkey, 4-6 May 2018, 194.
- 5.6.41.** Periferakis A., Voudouris P., **Melfos V.**, Kolodziejczyk J., Mavrogonatos C., Alfieris D. (2018). New Mineralogical Data and Geochemical Constraints on the Stypsi-Megala Therma Porphyry-Epithermal Mineralization, Lesvos Island, Greece. 8<sup>th</sup> Geochemistry Symposium, Abstracts Book, Antalya, Turkey, 4-6 May 2018, 189.
- 5.6.42.** Mavrogonatos C., Voudouris P., Spry P., **Melfos V.**, Klemme S., Berndt J., Periferakis A. (2018). Biotite Chemistry from Porphyry-Style Mineralization in Western Thrace, Greece. 8<sup>th</sup> Geochemistry Symposium, Abstracts Book, Antalya, Turkey, 4-6 May 2018, 193.
- 5.6.43.** Stergiou C.L., Lazos I., **Melfos V.**, Chatzipetros A., Voudouris P., Pikridas C., Bitharis S. (2018). Links between the neotectonic regime and the Tertiary mineralization of the Vertiskos and Kerdylon Units, N. Greece. In: Neubauer F. et al. (Eds.), Abstract volume of the XXI International Congress of the Carpathian Balkan Geological Association (CBGA), Salzburg, September 10-13, 2018, Geologica Balcanica, p. 281.
- 5.6.44.** Aravani F., Papadopoulou L., **Melfos V.**, Soldatos T., Zorba T., Voudouris P. (2019). Mineralogical and fluid inclusions study of epithermal type veins intruding the volcanic rocks of the Kornofolia area, Evros, NE Greece (Preliminary results). 15<sup>th</sup> International Congress of the Geological Society of Greece, Athens, May 22-24, 2019, p. 2
- 5.6.45.** Petika E., **Melfos V.**, Papadopoulou L., Voudouris P. (2019). Mineralogical study of the vein style Cu-Pb-Zn-Bi-As-Au mineralization hosted in the carbonates of Myriofyto, Vertiskos unit, N. Greece. 15<sup>th</sup> International Congress of the Geological Society of Greece, Athens, May 22-24, 2019, p. 2
- 5.6.46.** Lazos I., Stergiou Ch., Chatzipetros A., **Melfos V.**, Voudouris P., Pikridas Ch. (2019). Active tectonics and Pliocene-Pleistocene volcanic rocks of Almopia and Charopo (Sitsi-

- Kamen) areas in Northern Greece. 15<sup>th</sup> International Congress of the Geological Society of Greece, Athens, May 22-24, 2019, p. 2.
- 5.6.47.** Schaarschmidt A., Haase K.M., Klemd R., Voudouris P.C., **Melfos V.** (2019). Alternation of shoshonitic and calc-alkaline magmatism during subduction migration - a cross section through Aegean magmatism. Geomünster 2019, Münster, 22-25 September 2019, p. 1.
- 5.6.48.** Stergiou Ch.L., **Melfos V.**, Voudouris P., Papadopoulou L., Spry P.G., (2021). Geology, Mineralogy, and Geochemistry of the Intrusion-Related Polymetallic Quartz Veins at Laodikino, Serbo-Macedonian Massif, N. Greece. SEG 100 Conference: Celebrating a Century of Discovery, Whistler, BC, Canada, 14-17 September 2021, p. 2.
- 5.6.49.** Lazaridis G., Papadopoulou L., **Melfos V.**, Voudouris P. (2022). The ‘manganese event’ in the byproducts of hydrothermal speleogenesis. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 135.
- 5.6.50.** Peristeridou E., **Melfos V.**, Kantiranis N., Papadopoulou L., Voudouris P. (2022). Enrichment of rare earth elements in coastal black sands from Kavala district, Northern Greece. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 199.
- 5.6.51.** Skoupras E., **Melfos V.**, Voudouris P., Stergiou C.L., Kantiranis N., Papadopoulou L., Sakellaris G.-A. (2022). The stibnite vein-type mineralization in Rizana, Northern Greece. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 200.
- 5.6.52.** Stergiou C.L., **Melfos V.**, Voudouris P., Papadopoulou L., Kantiranis N., Peytcheva I., Dimitrova D., Stefanova E. (2022). Geochemistry and laser ablation mineral chemistry of pyrite and sphalerite from the epithermal veins overprinting the porphyry type mineralization at Aspra Chomata, Kassandra mining district, Northern Greece. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 201.
- 5.6.53.** Stergiou C.L., **Melfos V.**, Voudouris P., Papadopoulou L., Sakellaris G.-A. (2022). Geology, mineralogy and geochemistry of the metamorphic rock- and quartz hosted polymetallic vein mineralization at Kolchiko, Serbo-Macedonian Massif, Northern Greece. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 202.
- 5.6.54.** **Melfos V.**, Adam E. (2022). Geochemical characterization and provenance of obsidian artifacts from the middle Neolithic site of “Episkopi”, Ioannina region, NW Greece. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 240.
- 5.6.55.** Melfou M., Giouri K., Stergiou C.L., **Melfos V.**, Papadopoulou L. (2022). Mineralogy and geochemistry of edible salts and their solid residues from the Greek market. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 258.
- 5.6.56.** Voudouris P., **Melfos V.** (2022). Critical metal/metalloid endowment in Cenozoic gold and silver deposits of Greece. In the Abstract Proceedings of the XXII International Congress of the CBGA, Plovdiv, Bulgaria, 7-11 September 2022, 355-356.

- 5.6.57.** Stergiou Ch., Sakellaris G-A., **Melfos V.**, Voudouris P. (2023). Critical metal/metalloid endowment in Cenozoic gold and silver deposits of Greece. In the Abstract Proceedings of the 2<sup>nd</sup> International Conference on Raw Materials and Circular Economy (RawMat 2023), Athens, Greece, 28 Aug - 02 Sep 2023, p. 88.
- 5.6.58.** Tarantola A., Cauzid J., Caumon M-C., Fabre C., Mehdizadeh R., Voudouris P., Stouraiti C., Soukis K., Mavrogonatos C., Haase K., Keith M., **Melfos V.**, Chatzipetros A., Sakellaris G-A., Mihajlovic J., Baker T., Dossmann O., Gavier C. (2023). ARTEMIS – A European training-through-research program for exploration geologists. In the Abstract Proceedings of the 2<sup>nd</sup> International Conference on Raw Materials and Circular Economy (RawMat 2023), Athens, Greece, 28 Aug - 02 Sep 2023, p. 286.
- 5.6.59.** Stroulia A., Robitaille J., Chondrogianni-Metoki A., **Melfos V.**, Kantiranis N., Dubreuil L., Silva T., Saridaki N., Urem-Kotsou D. (2023). Ochre chaînes opératoires in Neolithic Greece: the case of Kremasti Kilada. In the Abstract Book of the 29<sup>th</sup> EAA Annual Meeting in Belfast, Northern Ireland, 30 August - 2 September 2023, p. 666.
- 5.6.60.** Nikopoulou M., Karampelas S., Tsangaraki E., Papadopoulou L., Katsifas C.S., Nazlis I., Touloumtzidou A., **Melfos V.**, Kantiranis N. (2023). Characterisation of green coloured gems of the Roman period from the collections of the Archaeological Museum of Thessaloniki, Greece. Book of Abstracts of the 11<sup>th</sup> International Conference on the Application of Raman Spectroscopy in Art and Archaeology, Athens, 6-9 September 2023, p. 26-27.

## **5.7. Abstracts in national Conference Proceedings**

- 5.7.1.** Vavelidis M., Hotzidis A., **Melfos V.** (2000). Ancient and modern monuments in the Trigonon region of Evros. *Palmos*, 3, 13-14 (in Greek).
- 5.7.2.** **Melfos V.** (2004). Mineralogical and stable isotopic study of ancient white marble quarries in Larisa, Thessaly, Greece. Abstracts Volume of the 10<sup>th</sup> International Congress of the Geol Soc Greece, 506-507.
- 5.7.3.** Vavelidis M., Pernicka E., **Melfos V.**, Tsatsopoulou P., Sismanidis K. (2005). Chemical and isotopic analysis of lead in ancient silver and lead objects from Thrace. Abstracts Volume of the Scientific Session of the Geological Society of Greece on “Geology of Thrace- NE Aegean Seismotectonic”, 2-4 September 2005, Samothraki, 12 (in Greek).
- 5.7.4.** Vavelidis M., Matsas D., **Melfos V.** (2005). Petrographic and geochemical study of stone artefacts from Mikro Vouni, Samothraki. Abstracts Volume of the Scientific Session of the Geological Society of Greece on “Geology of Thrace- NE Aegean Seismotectonic”, 2-4 September 2005, Samothraki, 13-14 (in Greek).
- 5.7.5.** Vavelidis M., **Melfos V.**, Hotzidis A. (2005). Quarries and quarrymen in Thrace: Information from the ancient and modern times. Abstracts Volume of the Scientific Session of the Geological Society of Greece on “Geology of Thrace- NE Aegean Seismotectonic”, 2-4 September 2005, Samothraki, 15 (in Greek).
- 5.7.6.** Pavlidis S., Tsoukala E., Chatzipetros A., Chatzopoulou A., **Melfos V.**, Vasileiadou A., Lazaridis G., Vaxevanopoulos M. (2005). The cave of Maronia in the nummulitic limestones (Thrace). *Geology and Palaeontology*. Abstracts Volume of the Scientific Session of the Geological Society of Greece on “Geology of Thrace- NE Aegean Seismotectonic”, 2-4 September 2005, Samothraki, 51-52 (in Greek).

- 5.7.7.** Papanikolaou E., Christaras B., Pingiatoglou S., Spathis P., **Melfos V.** (2019). Investigation of the causes of erosion of the building materials of the sanctuaries of Dimitra and Asclepius in Dion. Abstracts Volume of the Conference "Protection, Conservation and Restoration of Cultural Monuments - 20 Years of DMPS", 20-23 November 2019, 78 (in Greek).
- 5.7.8.** Nikopoulou M., Zorba T., Papadopoulou L., **Melfos V.**, Kantiranis N. (2022). Mineralogical characterization of Brochantite from Kimmeria, Xanthi, N. Greece. In the Abstract Proceedings of the 16<sup>th</sup> International Congress of the Geological Society of Greece, 17-19 October, 2022, Patras, Greece, 267-268.
- 5.7.9.** Nikopoulou M., Papadopoulou L., **Melfos V.**, Kantiranis N. (2022). Mineralogical Study of Blue-Lace Agate from Aetochori-Evros, NE Greece. In the Abstract Proceedings of the 16<sup>th</sup> International Congress of the Geological Society of Greece, 17-19 October, 2022, Patras, Greece, 269-270.
- 5.7.10.** Peristeridou E., **Melfos V.**, Papadopoulou L., Kantiranis N., Voudouris P. (2022). Compositional Variability of Epidote-Group Minerals from Black Sands of the Kavala District, Northern Greece. In the Abstract Proceedings of the 16<sup>th</sup> International Congress of the Geological Society of Greece, 17-19 October, 2022, Patras, Greece, 309-310.
- 5.7.11.** Melfou M., Voudouris P., **Melfos V.**, Klemm R., Kantiranis N. (2022). Mineralogy and fluid inclusion study of the Loutros epithermal mineralization, Rhodope, Greece. In the Abstract Proceedings of the 16<sup>th</sup> International Congress of the Geological Society of Greece, 17-19 October, 2022, Patras, Greece, 316-317.
- 5.7.12.** Mavrogonatos C., Voudouris P., **Melfos V.**, Spry P.G., Klemme S., Berndt J., Zaccarini F., Stouraiti C., Soukis K., Anastasatou M. (2022). Trace Elements Distribution in Sphalerite from Epithermal-Style Veins At The Pagoni Rachi and Konos Hill Porphyry/Epithermal Prospects, NE Greece. In the Abstract Proceedings of the 16<sup>th</sup> International Congress of the Geological Society of Greece, 17-19 October, 2022, Patras, Greece, 337-338.
- 5.7.13.** Giouri K., **Melfos V.**, Papadopoulou L., Stergiou C.L., Peytcheva I., Dimitrova D., Stefanova E. (2023). Preliminary results on the elemental accumulation of Fe-Mn oxides in stream sediments from the Palea Kavala district, Northern Greece. In the Abstract Proceedings of the 8<sup>th</sup> Environmental Conference of Macedonia, 6-8 October 2023, Thessaloniki, p. 82.
- 5.7.14.** Gkraikou T., Vouvoudi E., **Melfos V.**, Papadopoulou L., Samara C. (2023). Study of deterioration factors of monuments in Thessaloniki through the analysis of particulate deposits. In the Abstract Proceedings of the 8<sup>th</sup> Environmental Conference of Macedonia, 6-8 October 2023, Thessaloniki, p. 116.
- 5.7.15.** Vaxevanopoulos M., Ross J., Albaréde F., Davis G., Voudouri P., **Melfos V.**, Blichert-Toft J. (2023). New data on the mining process at Lavrion. In: Fakorellis G. (ed) Abstract Proceedings of the SHellenic Society of Archaeometry, Athens, p. 43 (in Greek).
- 5.7.16.** Nikopoulou M., Karampelas S., Tsangaraki E., Papadopoulou L., Katsifas C.S., Nazlis I., Touloumtzidou A., **Melfos V.**, Kantiranis N. (2023). Mobile Raman as a Useful Tool to Determine Red-Coloured Gems in Rings of Hellenistic Period. Book of Abstracts of the 1<sup>st</sup>

## 5.8. Books

- 5.8.1. Melfos V.** (2009). The Green Thessalian Stone and the quarries of Chasanbali. Municipality of Nesson, 80 p., ISBN 978-960-6700-38-5. 2<sup>nd</sup> Edition: 2014, Municipality of Tempi-Region of Thessaly (in Greek).
- 5.8.2.** Voudouris P., Karampelas S., **Melfos V.**, Graham I. (2019). Editors of the Special Issue "Mineralogy and geochemistry of Gems". Minerals. 528 p. ISBN 978-3-03928-076-6 (Pbk); ISBN 978-3-03928-077-3 (PDF). <https://doi.org/10.3390/books978-3-03928-077-3>.
- 5.8.3. Melfos V.,** Voudouris P. (2022). Ore Deposits of Greece. Undergraduate textbook. Kallipos, Open Academic Publications, Athens, 257 p. <http://dx.doi.org/10.57713/kallipos-32>

## 5.9. Non refereed Journals

- 5.9.1. Melfos V.** (2017). Chasanbali Quarries - Green Thessalian Stone. Hellenic Panorama, 114, 2-28.
- 5.9.2. Melfos V.** (2018). Grove of DELASALLE. The magnificent garden of Jake Abbott at Retziki. Hellenic Panorama, 116, 166-177.
- 5.9.3. Melfos V.** (2018). Lavrion, originated from the deepest Earth. Hellenic Panorama, 117, 4-31.
- 5.9.4. Melfos V.** (2019). Marble of Thasos. Whiter than the snow. Hellenic Panorama, 118, 58-86.
- 5.9.5. Melfos V.** (2019). Building and Decorative Stones of the monuments in Thessaloniki. Hellenic Panorama, 118, 92-111.
- 5.9.6. Melfos V.** (2019). Ancient Theater of Larissa; made of stones. Hellenic Panorama, 119, 2-23.
- 5.9.7. Melfos V.** (2019). Metals and our lives. Hellenic Panorama, 120, 114-129.
- 5.9.8. Melfos V.,** Startouli G, Sideridis A, Stergiou Ch., Georgiadis D. (2020). Searching for gold nuggets in the Gallikos river. Hellenic Panorama, 123, 128-143.
- 5.9.9. Melfos V.** (2020). The rare earths and the geopolitical position of Greece. Hellenic Panorama, 124, 2-13.
- 5.9.10. Melfos V.,** Voudouris P., Chatzipetros A. (2020). Maronia, an impressive geotope, where geology meets archeology. Hellenic Panorama, 125, 108-131.
- 5.9.11. Melfos V.,** Voudouris P. (2021). The little brilliant treasures of the Earth. Hellenic Panorama, 127, 2-26.

## 5.10. Non refereed field trip guides

- 5.10.1. Melfos V.** (2001). A Geological Excursion in Northern Greece. Field Guidebook for the students of the Sofia University "St. Kliment Ohridski" and the Sofia University of Mining and Geology, financially supported by the Society of Economic Geologist (SEG), 14 p.



- 5.10.2. Melfos V.,** Bogdanov K. (2012). A Field Guide to the Ore Deposits of NE Greece. Field Guidebook for the students of the Sofia University “St. Kliment Ohridski” and the Sofia University SEG Student Chapter, financially supported by the Society of Economic Geologists (SEG), the Assarel-Medet JSC and the GEOTECHMIN. With the support of Eldorado Gold, Hellas Gold and Thracian Gold Mining, 19 p.
- 5.10.3. Voudouris P., Melfos V.,** Falalakis G., Baker T. (2014). A Field Guide to the Ore Deposits of NE Greece. Field Guidebook for the students of the British Columbia University. Financed by Eldorado Gold. 29 p.
- 5.10.4. Voudouris P., Melfos V.** (2014). Intrusion related polymetallic ore system of Lavrion, Southern Attica, Greece, In: A. Miskovic (Editor), Field Guide: MDRU Short Course 80, June 7, 2014, Athens, Greece: MDRU, The University of British Columbia, 68 p.
- 5.10.5. Voudouris P.C., Siron C.R., Márton I., Melfos V.,** Baker T., Spry P.G. (2016) Eocene to Miocene Hydrothermal Deposits of Northern Greece and Bulgaria: Relationships between Tectonic-Magmatic Activity, Alteration, and Gold Mineralization - A Preface. Society of Economic Geologists, Guidebook Series, 54, 1-15.
- 5.10.6. Voudouris P.C., Melfos V.,** Spry P.G., Baker T. (2016) Cenozoic Porphyry-Epithermal and Other Intrusion-Related Deposits in Northeastern Greece: Geological, Mineralogical and Geochemical Constraints. Society of Economic Geologists, Guidebook Series, 54, 43-82.
- 5.10.7. Voudouris P.C., Melfos V.,** Baker T., Spry P.G. (2016) Diverse Styles of Oligocene-Miocene Magmatic-Hydrothermal Deposits in Northeastern Greece: Relationships between Tectonic-, Magmatic Activity, Alteration and Au-Ag Mineralization. Society of Economic Geologists, Guidebook Series, 54, 83-112.
- 5.10.8. Melfos V.,** Bogdanov K. (2016). A Field Guide to the Ore Deposits of NE Greece. Field Guidebook for the students of the Sofia University “St. Kliment Ohridski” and the Sofia University SEG Student Chapter, financially supported by the Society of Economic Geologists (SEG). With the support of Eldorado Gold, GEOTECHMIN and MUNDORO, 25 p.
- 5.10.9. Voudouris P., Tarantola A., Melfos V.** (2017). A Field Guide to the Tertiary Hydrothermal Ore Deposits of Northern Greece. Field Guidebook for the students of the University of Lorraine, Nancy, and the University of Lorraine SEG Student Chapter, financially supported by the Society of Economic Geologists (SEG). With the support of Eldorado Gold, Hellas Gold and Thracian Gold Mining, 54 p.
- 5.10.10. Melfos V.,** Voudouris P., Rassios A. and Bogdanov K. (2019). A Field Guide to the Mineral deposits of Bulgaria and Greece. Field Guidebook for the students of the Sofia University “St. Kliment Ohridski” and the Sofia University SEG Student Chapter, financially supported by the Society of Economic Geologists (SEG). With the support of Eldorado Gold, GEOTECHMIN and MUNDORO, 17 p.
- 5.10.11. von Quadt A., Driesner Th., Peytcheva I., Vassileva R., Melfos V.** (2019). Porphyry-epithermal Cu-Au, replacement/skarn Pb-Zn, replacement Pb-Zn-Au-Ag and podiform Cr deposit. IGP excursion, ETH Zurich, 57 p.