

CONTENTS

Volume L/4

Mineral Sciences, Petrology, Geochemistry, Isotope Geology, Volcanology

AESTHETIC CHARACTERISTICS OF GREEK ORNAMENTAL STONES ASSOCIATED WITH MINERAL, GEOCHEMICAL AND STRUCTURAL PROPERTIES Badouna I., Koutsovitis P., Laskaridis K., Patronis M. and Papatrechis Ch.....	1771
MINERALOGICAL AND GEOCHEMICAL CHARACTERIZATION OF ZEOLITES IN ALBANIAN OPHIOLITIC PLAGIOGRANITES Goga Beqiraj E., Muller F. and Beqiraj A.....	1781
ON THE RELATIVELY COMPOSITIONAL HOMOGENEITY OF ALBANIAN EASTERN OPHIOLITIC BELT Çina A.	1789
GEOCHEMISTRY OF THE GAS MANIFESTATIONS OF GREECE: METHANE AND LIGHT HYDROCARBONS Daskalopoulou K., D'Alessandro W., Cabassi J., Calabrese S., Fiebig J., Grassa F., Kyriakopoulos K., Parelo F. and Tassi F.....	1799
APPLICATIONS OF THE HELLENIC NATURAL ZEOLITE (HENZA) AND SPECIFICATIONS OF ZEOLITIC TUFFS Filippidis A.....	1808
THE MINERALOGICAL COMPOSITION OF THRACE ZEOLITIC ROCKS AND THEIR POTENTIAL USE AS FEED ADDITIVES AND NUTRITION SUPPLEMENTS Filippidis A., Kantiranis N. and Tsirambides A.	1820
THE INTERDEPENDENCE OF MECHANICAL PROPERTIES AND PETROGRAPHIC CHARACTERISTICS OF ULTRAMAFIC ROCKS FROM GERANIA OPHIOLITIC COMPLEX Giannakopoulou P.P., Tsikouras B. and Hatzipanagiotou K.	1829
MUDPOTS AT STEFANOS HYDROTHERMAL CRATER OF NISYROS VOLCANO. AN INSIGHT AT THE HYDROTHERMAL PROCESSES OF AN ACTIVE VOLCANO Kanellopoulos C. and Xirokostas N.	1838
RESERVES ESTIMATION OF A MARBLE QUARRY USING QUALITY INDICATORS Kapageridis I. and Albanopoulos C.....	1849
GEOCHEMICAL ANALYSIS OF SILICEOUS SEDIMENTS FROM VASILIKA, NORTHERN GREECE Karageorgiou S., Vavelidis M., Andreou S. and Melfos V.	1859

PETROLOGICAL, MINERALOGICAL AND GEOCHEMICAL DATA FROM THE EOHellenic OPHIOLITIC NAPPE IN THE ISLAND OF SKYROS, GREECE	
Karkalis C., Magganas A. and Koutsovitis P.	1867
DETERMINATION OF SILICA POLYMORPHS AND FELDSPARS IN INDUSTRIAL SAMPLES OF BENTONITE AND PERLITE	
Kaza T. and Stamatakis M.G.	1878
GEOCHEMICAL CHARACTERISTICS OF THE MAFIC ENCLAVES AND THEIR HOSTS FROM NEOGENE ERENLERDAGI VOLCANITES, AROUND YATAGAN VILLAGE AND SAĞLIK TOWN (KONYA), CENTRAL TURKEY	
Koçak K.	1887
ATTAPULGITE CLAY OF THE VENTZIA BASIN, WESTERN MACEDONIA, GREECE, AS TEMPLATE IN SYNTHESIZING AMORPHOUS CARBON NANOTUBES	
Koukakis P., Tsakiridis P., Ntziouni A., Kordatos K. and Perraki M.	1895
MINERALOGICAL, PETROLOGICAL AND GEOCHEMICAL FEATURES OF THE UNIQUE LAPIS LACEDAEMONIUS (KROKEATIS LITHOS) FROM LACONIA, GREECE: APPROACH ON PETROGENETIC PROCESSES WITHIN THE TRIASSIC VOLCANIC CONTEXT	
Koutsovitis P., Kanellopoulos C., Passa S., Foni K., Tsapara E., Oikonomou G., Xirokostas N., Vallianatou K. and Mouxioi E.	1903
ASSESSMENT OF THE QUALITY OF METAMORPHIC AND IGNEOUS ROCKS FROM TERPNI (SERRES, NORTH GREECE) FOR THEIR USE AS RAW MATERIALS IN THE PRODUCTION OF STONEWOOL	
Lampropoulou P., Papoulis D., Metaxa E., Tsikouras B., Hatzipanagioutou K., Tzeveleku Th. and Karageorgis A.	1913
PHOSPHORUS ZONING FROM SECONDARY OLIVINE IN MANTLE XENOLITH FROM MIDDLE ATLAS MOUNTAINS (MOROCCO, AFRICA): IMPLICATIONS FOR CRYSTAL GROWTH KINETICS	
Mavrogonatos K., Fletmetakis S., Papoutsas A., Klemme S., Berndt J., Economou G., Pantazidis A., Baziotis I. and Asimow P.D.	1923
ASSESSMENT ON HYDROTHERMAL PARTICLE CHEMISTRY FROM A SHALLOW VENTING SYSTEM OFFSHORE KOS, AEGEAN SEA	
Megalovasilis P.	1933
MARIALITIC SCAPOLITE OCCURENCES FROM THE KIMMERIA-LEFKOPETRA METAMORPHIC CONTACT, XANTHI (N. GREECE)	
Mouchos E., Papadopoulou L., Williamson B.J. and Christofides G.	1943
EASILY LEACHABLE RARE EARTH ELEMENT PHASES IN THE PARNASSUS-GIONA BAUXITE DEPOSITS, GREECE	
Mouchos E., Wall F., Williamson B.J. and Palumbo-Roe B.	1952
THE KONDAROS-KATSIMOUTI INTERMEDIATE-SULFIDATION EPITHERMAL Pb-Zn-Ag-Mn MINERALIZATION, WESTERN MILOS, GREECE: NEW MINERALOGICAL AND GEOCHEMICAL DATA	
Papavasiliou K., Voudouris P., Kanellopoulos C., Alfieris D. and Xydous S.	1959
MINERALOGY AND GEOCHEMISTRY OF THE TRIADES-GALANA Pb-Zn-Ag-Au INTERMEDIATE-HIGH SULFIDATION EPITHERMAL MINERALIZATION, MILOS ISLAND, GREECE	
Papavasiliou K., Voudouris P., Kanellopoulos C., Alfieris D. and Xydous S.	1969

IMPLICATIONS OF PETROGRAPHY AND GEOCHEMISTRY OF ATHINIOS METAMORPHIC UNITS USING PXRF AND GIS ANALYSES IN THERA (SANTORINI, GREECE)	
Pasqualon N.G., Santos K.N.S., Marsellos A.E. and Kyriakopoulos K.	1980
COMPARATIVE STUDY OF PHYSICOMECHANICAL PROPERTIES OF ULTRABASIC ROCKS AND ANDESITES FROM CENTRAL MACEDONIA (GREECE)	
Petrounias P., Rogkala A., Kalpogiannaki M., Tsikouras B. and Hatzipanagiotou K.	1989
PETROGENETIC SIGNIFICANCE OF SPINELS FROM SERPENTINISED PERIDOTITES FROM THE VERIA-NAOUSA OPHIOLITE	
Rogkala A., Petrounias P., Tsikouras B. and Hatzipanagiotou K.	1999
MINERALOGICAL AND SPECTROSCOPIC STUDY OF NESQUEHONITE SYNTHESIZED BY REACTION OF GASEOUS CO ₂ WITH MG CHLORIDE SOLUTION	
Skliros V., Anagnostopoulou A., Tsakiridis P. and Perraki M.	2009
COMPOSITIONAL AND MORPHOLOGICAL EVALUATION OF EDIBLE SALTS: PRELIMINARY RESULTS	
Stergiou C., Karageorgiou S., Theodoridou S., Giouri K., Papadopoulou L. and Melfos V.	2018
IRON-OXIDE MINERALIZATION OF SESI, KOROPI (S. HYMITTOS, GREECE): MINERALIZATION WITHIN A DETACHMENT ZONE	
Stouraiti C., Lekkas S., Lozios S. and Kanellopoulos C.	2025
GOLD METALLOGENY OF THE SERBOMACEDONIAN-RHODOPE METALLOGENIC BELT (SRMB)	
Tsirambides A. and Filippidis A.	2037
MINERAL CHEMISTRY AND FORMATION OF AWARUITE AND HEAZLEWOODITE IN THE XEROLIVADO CHROME MINE, VOURINOS, GREECE	
Tzamos E., Filippidis A., Michailidis K., Koroneos A., Rassios A., Grieco G., Pedrotti M. and Stamoulis K.	2047
GEOCHEMICAL CHARACTERISTICS OF THE ERENLERDAGI VOLCANICS, KONYA, CENTRAL TURKEY	
Uyanik C. and Koçak K.	2057
MN-ANDALUSITE, SPESSARTINE, MN-GROSSULAR, PIEMONTITE AND MN-ZOISITE/CLINOZOISITE FROM TRIKORFO, THASSOS ISLAND, GREECE	
Voudouris P., Graham I., Mavrogonatos K., Su S., Papavasiliou K., Farmaki M.-V. and Panagiotidis P.	2068
TOURMALINITE VEINS AND BRECCIAS FROM THE SYMVOLON-KAVALA PLUTON, NORTHERN GREECE: PETROGENETIC PRELIMINARY RESULTS	
Xydous S., Magganas A., Pomonis P. and Kokkinakis A.	2079
MINERALOGICAL AND GEOCHEMICAL CHARACTERIZATION OF THE OLYMPIAS MINE TAILINGS, NE CHALKIDIKI, GREECE	
Zaimis S., Vavelidis M., Alifragkis D., Melfos V., Kantiranis N., Daftsis E. and Gazea E.	2088

Special Session

Environmental Geochemistry: mobility and speciation of chemical elements in the system rock-soil-water-plant (endorsed by SEGH)

Conveners: Ariadne Argyraki, Athanasios Godelitsas

RARE ELEMENTS (ZR, NB, LA, CE AND HF) IN TRAFFIC EMITTED FERRIMAGNETIC PARTICLES FROM ROAD DUSTS Bourliva A., Papadopoulou L., Aidona E. and Pipera K.	2100
HEAVY METALS IN CULTIVATED SOIL AND PLANTS OF DAMOUR URBAN AREA - LEBANON Fadel D., Argyraki A., Papageorgiou S. and Kelepertzis E.	2108
MOBILITY OF MERCURY IN THE VOLCANIC/GEOTHERMAL AREA OF NISYROS (GREECE) Gagliano A.L., Calabrese S., Daskalopoulou K., Cabassi J., Capecciacci F., Tassi F., Bonsignore M., Sprovieri M., Kyriakopoulos K., Bellomo S., Brusca L. and D'Alessandro W.	2118
REDUCTION OF TOXIC ELEMENT MOBILITY IN MINING SOIL BY ZEOLITIC AMENDMENTS Giannatou S., Vasilatos Ch., Mitsis I., Koukouzas N., Itskos G. and Stamatakis G.M.	2127
ASSESSMENT OF SELECTED METALS ENRICHMENT IN SEDIMENTS FROM PALEA KAVALA RIVER, NE MACEDONIA, NORTHERN GREECE Giouri K., Vavelidis M., Melfos V. and Papadopoulou L.	2137
THE USE OF HEU-TYPE ZEOLITIC TUFF IN SUSTAINABLE AGRICULTURE: EXPERIMENTAL STUDY ON THE DECREASE OF NITRATE LOAD IN VADOSE ZONE LEACHATES Hatzigiannakis E., Kantiranis N., Tziritis E., Filippidis A., Arampatzis G. and Tzamos E.	2145
ORGANIC POLLUTANTS IN THE GROUNDWATERS USED FOR IRRIGATION PURPOSE WITHIN A COAL-BEARING BASIN OF NORTHERN GREECE Iordanidis A., Schwarzbauer J. and Gudulas K.	2155
PRELIMINARY SPECTROSCOPIC STUDY OF FE-BEARING CLAY MINERALS IN ALTERED PILLOW LAVAS FROM LAMIA AREA, GREECE Katranidou B., Godelitsas A. and Sanakis I.	2163
POTENTIAL TOXIC ELEMENTS (PTES) IN GROUND AND SPRING WATERS, SOILS AND SEDIMENTS: AN INTERDISCIPLINARY STUDY IN ANTHEMOUNTAS BASIN, N. GREECE Kazakis N., Kantiranis N., Kaprara M., Mitrakas M., Vargemezis G., Voudouris K., Chatzipetros A., Kalaitzidou K. and Filippidis A.	2171
INTERACTION OF HEAVY METALS IN THE SOIL-PLANT SYSTEM OF URBAN GARDENS IN ATHENS, GREECE Kazantzoglou A., Argyraki A., Papageorgiou S. and Fadel D.	2182
COPPER ACCUMULATION IN VINEYARD SOILS FROM NEMEA, GREECE Kelepertzis E., Massas I., Fligos G., Panagiotou M. and Argyraki A.	2192

ANTIMONY FIXATION IN SOLID PHASES AT THE HYDROTHERMAL FIELD OF KOLUMBO SUBMARINE ARC-VOLCANO (SANTORINI): DEPOSITION MODEL AND ENVIRONMENTAL IMPLICATIONS	
Kilias S.P., Gousgouni M., Godelitsas A., Gamaletsos P., Mertzimekis T.J., Nomikou P., Argyraki A., Goettlicher J., Steininger R. and Papanikolaou D.	2200
GEOCHEMICAL MODELING FOR THE ASSESSMENT OF THE CO ₂ STORAGE POTENTIAL IN THE MESOHELLENIC TROUGH, NW GREECE	
Koukouzas N., Kyritidou Z., Purser G., Rochelle C.A. and Vasilatos C.	2210
INTERACTION OF CLAY MATERIALS WITH LEAD IN AQUEOUS SOLUTIONS	
Kyritidou Z., Argyraki A., Chryssikos G. and Stamatakis M.	2221
DISTRIBUTION OF HEAVY METALS CONCENTRATIONS IN SOILS AROUND THE INTERNATIONAL ATHENS AIRPORT (GREECE). AN ASSESSMENT ON PRELIMINARY DATA	
Massas I., Ioannou D., Kalivas D. and Gasparatos D.	2231
ENVIRONMENTAL GEOCHEMISTRY OF PTOLEMAIS LIGNITES, INTERMEDIATE STERILES, AND COMBUSTION PRODUCTS	
Megalovasilis P., Godelitsas A., Papastergios G. and Filippidis A.	2241
HEAVY METALS IN URBAN PARK SOILS FROM ATHENS, GREECE	
Papazotos P., Chalkiadaki O., Chatzistamatiou E.A., Georgopoulos G., Gkiouleka I., Katsikis I., Zygouri E., Kelepertzis E. and Argyraki A.	2251
OCCURENCE OF HEXAVALENT CHROMIUM IN THE OPHIOLITE RELATED AQUIFERS OF LOYTRAKI AND SCHINOS AREAS	
Pyrgaki K., Argyraki A., Kelepertzis E., Paraskevopoulou V., Botsou F., Dassenakis E., Mitsis I. and Skourtsos E.	2261
A GEOCHEMICAL INVESTIGATION OF SOILS, APPLES AND LEAVES IN AGIA AREA, CENTRAL GREECE	
Skordas K., Papastergios G., Filippidis A. and Kantiranis N.	2271

Environmental Geosciences

NEW APPROACHES TO THE REVEGETATION AND RECLAMATION OF OLD TAILING MANAGEMENT FACILITIES: THE EXAMPLE OF THE CASSANDRA MINES	
Alifragkis D., Vavelidis M., Gazea B., Voulgaridou E., Galatsianou A. and Daftsis E.	2283
ENVIRONMENTAL CONTAMINATION BY SUBSTRATA OF ORE MINING DUMPS, THEIR MONITORING AS WELL AS MEASURES OF REDUCTION	
Blumenstein O., Pustlauck F. and Vavelidis M.	2296
SAFETY ISSUES WHEN MONITORING CO ₂ STORAGE IN THE PRINOS AREA, GREECE	
Koukouzas N., Lymperopoulos P. and Tasianas A.	2304
GEOMORPHOLOGICAL CHARACTERISTICS AND ENVIRONMENTAL SENSITIVITY INDEX FOR OIL SPILLS OF ANAVYSSOS BAY, ATTICA	
Kourliaftis G., Kapsimalis V., Vandarakis D. and Pavlopoulos K.	2314
GEO-ELECTRICAL MAPPING OF BEACHROCK IN VATERA BEACH, LESVOS	
Meligonitis R., Galanopoulos D., Hasiotis T. and Velegrakis A.	2323

NATURAL RADIOACTIVITY OF WESTERN ANATOLIAN PLUTONS, TURKEY Papadopoulos A., Altunkaynak S., Koroneos A., Unal A. and Kamaci O.....	2332
GEOCHEMICAL MODELING OF ABANDONED SULFIDIC FLOTATION MILL TAILINGS: THE CASE OF KIRKI, NE GREECE Triantafyllidis S.....	2342

Abstracts of Keynote Lectures

NEOTECTONICS OF THE WESTERN ANATOLIA EXTENDED TERRANE (WAET): IMPLICATIONS FOR EARTHQUAKE POTENTIAL OF WESTERN TURKEY Çemen I.	2355
THE SIGNIFICANT AND NECESSARY ROLE OF THE GEOLOGIST FOR THE STUDY OF THE COASTAL SECTOR AND THE MARINE SUB-BOTTOM. THE EXPERIENCE FROM THE INSTITUTE OF GEOLOGY AND MINERAL EXPLORATION OF GREECE (IGME) Perissoratis C.....	2356
RESPONDING TO ENVIRONMENTAL RISKS TO HEALTH: THE MULTIDISCIPLINARY CHALLENGES Stewart A.G.....	2357
THE IMPORTANCE OF FAULT INTERACTIONS IN THE LONG-TERM AND SHORT-TERM GROWTH OF FAULT SYSTEMS Walsh J.J., Nicol A., Childs C., Mouslopoulou V. and Manzocchi T.....	2358