

CURRICULUM VITAE
Professor Antonios Koroneos
Head of Mineralogy and Petrology Lab

Home: P.O. Box 1209, Trilofos 575 00, Thessaloniki, Greece,
Tel. +30 23920-62795

Work: Department of Mineralogy, Petrology, Economic Geology,
School of Geology, Aristotle University of Thessaloniki
541 24 Thessaloniki, Greece
Tel. +30 2310-998515, Fax. 2310-998568
e-mail: koroneos@geo.auth.gr

Sex: Male Marital status: Married with three children
Nationality: Greek Date and place of birth: 04/06/1962, Athens

EDUCATION

1984: Degree in Geology, School of Geology, Aristotle University of Thessaloniki.
1991: Doctor of Philosophy in Geology, School of Geology, Aristotle University of Thessaloniki.

EDUCATIONAL WORK

1984 - 1991: Professor's assistant in the teaching courses, exercises and field trips on Mineralogy and Petrology, Department of Mineralogy, Petrology, Economic Geology, School of Geology, Aristotle University of Thessaloniki.

1993 - 1995: Professor on Mineralogy and Petrology, Mining Department, Technological Education Institute of Kozani.

1995 - 2001: Lecturer of petrology and geochemistry in Department of Mineralogy, Petrology, Economic Geology, School of Geology, Aristotle University of Thessaloniki.

2001 – 2010: Assist. Professor of petrology and geochemistry in Department of Mineralogy, Petrology, Economic Geology, School of Geology, Aristotle University of Thessaloniki.

2010 – 2014: Assoc. Professor of petrology and geochemistry in Department of Mineralogy, Petrology, Economic Geology, School of Geology, Aristotle University of Thessaloniki.

2014 – Today: Professor of petrology and geochemistry in Department of Mineralogy, Petrology, Economic Geology, School of Geology, Aristotle University of Thessaloniki.

TEACHING

Rock-forming minerals, Petrology of Igneous Rocks, Geochemistry, Petrogenesis of Igneous Rocks (undergraduates), Petrology (postgraduates).

SCIENTIFIC WORK

Research

Mineralogy, petrology and geochemistry of magmatic rocks (Greece, Serbia, Bulgaria, Egypt, Slovenia, Iran). Geochronology. Natural radioactivity of rocks. REE and critical metals in rocks.

Post-graduate specialization

X-ray Fluorescence, Department of Petrology, University of Vienna, Austria, 1986.

Isotopic analysis, Istituto di Geochronologia et Geochemica Isotopica, Pisa, Italy, 1988 and 2008.

K-Ar geochronology, Institute for Nuclear Research of the Hungarian Academy of Sciences, Debrecen, Hungary, 2004, 2008 and 2010

ICP-MS LA, Zircon Geochronology, Department of Earth Sciences, Perugia University, Italy, 2008.

ICP-MS LA, Trace element analysis, Department of Earth Sciences, Pisa University, Italy, 2023.

Member of Scientific Societies

Member of Geological Society of Greece.

Secretary of the Economic Geology, Mineralogy and Geochemistry Committee of the G.S.G. for the period 1998-2000 & 2000-2002

Member of Geotechnic Chamber of Greece.

Member of the Scientific Society of the Mineral Wealth Technologists.

SELECTED SCIENTIFIC PAPERS

CHRISTOFIDES, G., SOLDATOS, T. and KORONEOS, A. (1990). Geochemistry and evolution of the Fanos granite (N. Greece). *Mineralogy and Petrology*, **43**, 49-63.

KORONEOS, A., CHRISTOFIDES, G., DEL MORO, A. and KILIAS, A. (1993). Rb - Sr geochronology and geochemical aspects of the Eastern Varnountas plutonite (NW. Macedonia, Greece). *N. Jb. Mineral. Abh.*, **165,3**, 297-315.

CHRISTOFIDES, G., THIMIATIS, G., KORONEOS, A., SKLAVOUNOS, S. and ELEFTHERIADIS, G. (1994). Mineralogy and chemistry of Cr-chlorites associated with chromites from Vavdos and Vasilika ophiolite complexes (Chalkidiki, Macedonia, northern Greece). *Chemie der Erde*, **54**, 151-166.

SOLDATOS, T., POLI, G., CHRISTOFIDES, G., ELEFTHERIADIS, G., KORONEOS, A. and TOMMASINI, S. (1998). Petrology and evolution of transitional alkaline-subalkaline granitoids from Vrondou (NE Greece): evidence for fractional crystallization and magma mixing. *Acta Vulcanologica*, **10/2**, 319-330.

CHRISTOFIDES, G., SOLDATOS, T., ELEFTHERIADIS, G., and KORONEOS, A. (1998). Chemical and isotopic evidence for source contamination and crustal assimilation in the Hellenic Rhodope plutonic rocks. *Acta Vulcanologica*, **10/2**, 305-318.

SOLDATOS, T., KORONEOS, A., DEL MORO, A. and CHRISTOFIDES, G. (2001). Evolution of the Elatia plutonite (Hellenic Rhodope Massif, N. Greece). *Chem. Erde*, **61**, 92-116.

SOLDATOS, T., KORONEOS, A., CHRISTOFIDES, G. and DEL MORO, A. (2001). Geochronology and origin of the Elatia plutonite (Hellenic Rhodope Massif, n. Greece) constrained by new Sr isotopic data. *N. Jb. fur Miner. Abh.*, **176**, 179-209.

CHRISTOFIDES, G., KORONEOS, A., SOLDATOS, T., ELEFTHERIADIS, G. and KILIAS, A. (2002). Eocene magmatism (Sithonia and Elatia plutons) in the internal

Hellenides and implications for Eocene – Miocene geological evolution of the Rhodope Massif (Northern Greece). *Acta Vulcanologica*, **13(1-2)**, 73-89.

ELEFTHERIADIS, G. and KORONEOS, A. (2003). Geochemistry and petrogenesis of post-collision Pangeon granitoids in central Macedonia, northern Greece. *Chem. Erde*, **63/4**, 364-389.

PERUGINI, D., POLI, G., CHRISTOFIDES, G., ELEFTHERIADIS, G., KORONEOS, A., and SOLDATOS, T. (2004). Mantle-derived and crustal melts dichotomy in northern Greece: spatiotemporal and geodynamic implications. *Geological Journal*, **39**, 63-80.

CHRISTOFIDES, G., PECSKAY, Z., ELEFTHERIADIS, G., SOLDATOS, T. and KORONEOS, A. (2004). The tertiary Evros volcanic rocks (Thrace, Northeastern Greece): petrology and K/Ar geochronology. *Geologica Carpathica*, **55,5**, 397-409.

PAVLIDOU, S., KORONEOS, A., PAPASTEFANOU, C., CHRISTOFIDES, G., STOULOS, S. and VAVELIDES, M. (2006). Natural radioactivity of granites used as building materials. *Journal of Environmental Radioactivity*, **89**, 48-60.

VLAHOU, M., CHRISTOFIDES, G., ELEFTHERIADIS, G., PINARELLI, L. and KORONEOS, A. (2006). Tertiary volcanic rocks from Samothraki island (North Aegean, Greece): Sr and Nd isotope constraints on their evolution. In Dilek, Y. and Pavlides, S. (eds), *Postcollisional tectonics and magmatism in the Mediterranean region and Asia*, Geol. Soc. Am., Sp. Paper, **409**, 283-304.

CHRISTOFIDES, G. PERUGINI, D., KORONEOS, A., SOLDATOS, T., POLI, G., ELEFTHERIADIS, G., DEL MORO, A., and NEIVA, A. M. (2007). Interplay between geochemistry and magma dynamics during magma interaction: an example from the Sithonia plutonic complex (NE Greece). *Lithos*, **95**, 243-266.

CVETKOVIC, V., POLI, G., CHRISTOFIDES, G., KORONEOS, A., PÉCSKAY, Z., RESIMIC-ŠARIC, K. and ERIC, V. (2007). The Miocene granitoid rocks of mt. Bukulja (Central Serbia): evidence for Pannonian extension-related granitoid magmatism in the northern Dinarides. *Eur. J. Mineral.*, **19**, 513–532.

SOLDATOS, T., KORONEOS, A., KAMENOV, B.K., PEYTCHEVA, I., VON QUADT, A., CHRISTOFIDES, G., ZHENG, X. and SANG, H. (2008). New U-Pb and Ar-Ar mineral ages for the Barutin-Buynovo-Elatia-Skaloti-Paranesti batholith (Bulgaria and Greece): refinement of its debatable age. *GEOCHEMISTRY, MINERALOGY AND PETROLOGY*, **46**, 85-102.

KORONEOS, A. (2008). Biotites from biotite-rich crusts of enclaves and clots in the Monopigadon pluton (Macedonia, Northern Greece). *Per. Mineral.*, **77,3**, 3-20.

ŠARIC, K., CVETKOVIC, V., ROMER, R., CHRISTOFIDES, G. and KORONEOS, A. (2009). Granitoids associated with East Vardar ophiolites (Serbia, F.Y.R. Of Macedonia and Northern Greece): origin, evolution and geodynamic significance inferred from major and trace element data and Sr–Nd–Pb isotopes. *Lithos*, **108**, 131-150.

- KORONEOS, A. (2010). Petrogenesis of the Upper Jurassic Monopigadon pluton related to the Vardar-Axios ophiolites (Macedonia, northern Greece) and its geotectonic significance. *Chem. Erde*, **70**, 221-241.
- KORONEOS, A., POLI, G., CVETKOVIĆ, V., CHRISTOFIDES, G., KRSTIĆ D. and PÉCSKAY, Z. (2010). Petrogenetic and tectonic inferences from the study of Mt. Cer Pluton (West Serbia). *Geol. Mag.*, **148**(1), 89-111.
- POLI, G., CHRISTOFIDES, G., KORONEOS, A., SOLDATOS, T., PERUGINI, D. LANGONE, A. (2009). Early triassic granitic magmatism – Arnea and Kerkinis granitic complexes – in the Vertiskos unit (Serbo-macedonian massif, north-eastern Greece) and its significance in the geodynamic evolution of the area. *Acta Vulcanologica*, **21**(1-2), 47-70.
- GEORGIADIS, I.K., KORONEOS, A., TSIRAMBIDES, A. and STAMATAKIS, M. (2012). Modern Sands Derived from the Vertiskos Unit of the Serbomacedonian Massif (N. Greece): a Preliminary Study on the Weathering of the Unit. *Cent. Eur. J. Geosci.*, **4**(3), 465-477.
- PIPERA, K., KORONEOS, A., SOLDATOS, T. PÉCSKAY, Z. and CHRISTOFIDES, G. (2013). K/Ar mineral geochronology of the northern part of the Sithonia Plutonic Complex (Chalkidiki, Greece): implications for its thermal history and geodynamic interpretation. *Geologica Carpathica*, **64**, 2, 133-140.
- PAPADOPOULOS, A., CHRISTOFIDES, G., KORONEOS, A., STOULOS, S. and PAPASTEFANOU, C. (2012). Natural radioactivity and dose assessment of granitic rocks from the Atticocycladic Zone (Greece). *Per. Mineral.*, **81**, 3, 301-311.
- KORONEOS, A., KILIAS, A. and AVGERINAS, A. (2013). Hercynian plutonic rocks of Voras Mountain, Macedonia, Northern Greece: their structure, petrogenesis, and tectonic significance. *Int. Geol. Rev.*, **55**, 8, 994-1016.
- PAPADOPOULOS, A., CHRISTOFIDES, G., KORONEOS, A., STOULOS S., and PAPASTEFANOU, C. (2013). Radioactive secular equilibrium in ^{238}U and ^{232}Th series in granitoids from Greece. *Applied Radiation and Isotopes*, **75**, 95–104.
- PAPADOPOULOS, A., CHRISTOFIDES, G., KORONEOS, A., and POLI, G. (2013). Concentration of ^{238}U and ^{232}Th among constituent minerals of two igneous plutonic rocks exhibiting elevated natural radioactivity levels. *J. Radioanal. Nucl. Chem.*, **298**, 639–650.
- GEORGIADIS, I.K., KORONEOS, A., PAPADOPOULOU, L., KANTIRANIS, N., TAMPAROPOULOS, A.E. and TSIRAMBIDES, A. (2014). Using detrital garnets to determine provenance: a case study from the Vertiskos Unit (Serbomacedonian Massif, N. Greece). *Miner. Petrol.*, **108**, 187–206.
- PAPADOPOULOS, A., CHRISTOFIDES, G., KORONEOS, A., PAPADOPOULOU, L., PAPASTEFANOU, C. and STOULOS, S. (2013). Natural radioactivity and radiation index of the major plutonic bodies in Greece. *Journal of Environmental Radioactivity*, **124**, 227-238.

PAPADOPoulos, A., CHRISTOFIDES, G., KORONEOS, A., STOULOS S., and PAPASTEFANOU, C. (2013). Natural radioactivity distribution and gamma radiation exposure at beach sands come from Sithonia Peninsula, Greece. *Central European Journal of Geosciences*, **6**(2), 229-242.

CASTORINA, F., KORONEOS, A., MASI, U. and ELEFTHERIADIS G. (2013). Geochemical and Sr-Nd isotopic evidence for origin and evolution of the Miocene Pangeon granitoids, Southern Rhodope, Greece. *Int. Geol. Rev.* **56**, 5, 622-652.

PAPADOPoulos, A., CHRISTOFIDES, G., KORONEOS, A., PAPASTEFANOU, C. and STOULOS, S. (2014). Distribution of ^{238}U , ^{232}Th and ^{40}K in plutonic rocks of Greece. *Chemie der Erde*, **74**, 749-764.

PAPADOPoulos, A., CHRISTOFIDES, G., PE-PIPER, G. KORONEOS, A. and PAPADOPoulou L. (2015). Geochemistry of beach sands from Sithonia Peninsula (Chalkidiki, Northern Greece). *Miner. Petrol.*, **109**, 53-66.

PAPADOPoulos, A., KORONEOS, A., CHRISTOFIDES, G. and STOULOS, S. (2015). Natural radioactivity distribution and gamma radiation exposure of beach sands close to Kavala pluton, Greece. *Open Geosci.* **2015**; 1, 407-422

PAPADOPoulos, A., CHRISTOFIDES, G. KORONEOS, A. and HAUZENBERGER, C. (2015). U, Th and REE content of heavy minerals from beach sand samples of Sithonia Peninsula (northern Greece). *N. Jb. Miner. Abh (J. Min. Geochem)* **192**/2, 107-116.

POLI, G., CHRISTOFIDES, G., KORONEOS, A., SOLDATOS, T., PAPADOPoulou, L., MANETTI, P., PAPADOPoulos, A., and ROCCHI, S. (2016). Petrogenesis of the Eocene Gregoriou Plutonic Complex (Mt. Athos, Chalkidiki, Greece): interplay between magma mixing, assimilation, and fractional crystallization. *Acta Vulcanologica*, **24**, 1-2, 121-151.

CHRISTOFIDES, G., PINARELLI, L., PIPERA, K., SOLDATOS, T., KORONEOS, A. and PECSKAY, Z. (2016). Geochemical features of the depression basin-related magmatism in southeastern Rhodope massif and Circum-Rhodope Belt: the Tertiary Evros volcanic rocks (Western Thrace, northeastern Greece). *Acta Vulcanologica*, **24**, 1-2, 43-56.

STAMATIADIS, A., PAPADOPoulou, L., ZORBA, T., KORONEOS, A. and SOLDATOS, T. (2016). Vesuvianite from the contact aureole of Sithonia Plutonic Complex (Elia, northern Greece) and its petrological significance. *Acta Vulcanologica*, **24**, 1-2, 57-66.

DRAKOULIS, A., KORONEOS, A., POLI, G., SOLDATOS, A., PAPADOPoulou, L., MURATA, M. and ELIWA, H. (2016). U-Pb zircon dating of the Mt. Papikion pluton (Central Rhodope, Greece): New constraints on the evolution of Kesebir-Kardamos Dome. *Acta Vulcanologica*, **24**, 1-2, 83-98.

PAPADOPoulos, A., KORONEOS, A., CHRISTOFIDES, G. and PAPADOPoulou, L. (2016). Geochemistry of beach sands from Kavala, Northern Greece. *Ital. J. Geosci.*, **135**, 3, 526-539.

TZAMOS, E., FILIPPIDIS, A., RASSIOS, A., GRIECO, G., MICHAILIDIS, K., KORONEOS, A., STAMOULIS, K., PEDROTTI, M. AND GAMALETROS, P.N. (2016). Major and minor element geochemistry of chromite from the Xerolivado-Skoumtsa mine, Southern Vourinos: Implications for chrome ore exploration. *Journal of Geochemical Exploration*, **165**, 81–93.

MICHAIL, M., PIPERA, M., KORONEOS, A., KILIAS, A. and NTAFLOS, T. (2016). New perspectives on the origin and emplacement of the Late Jurassic Fanos granite, associated with an intra-oceanic subduction within the Neotethyan Axios-Vardar Ocean. *Int J Earth Sci*, **105**, 7, 1965–1983.

PAPADOPoulos, A., KORONEOS, A., CHRISTOFIDES, G., PAPADOPoulos, L., TZIFAS, I. and STOULOS, S. (2016). Assessment of gamma radiation exposure of beach sands in highly touristic areas associated with plutonic rocks of the Atticocycladic zone (Greece). *Journal of Environmental Radioactivity*, **162-163**, 235–243.

PAPADOPoulos, A., KORONEOS, A., CHRISTOFIDES, G. and STOULOS, S. (2016). Comparison of $^{226}\text{Ra}/^{238}\text{U}$ and $^{228}\text{Th}/^{228}\text{Ra}$ disequilibrium with weathering indices in beach sand sediments from Greece. *Journal of Sedimentary Research*, **86**, 668–682.

PAPADOPoulos, A., ALTUNKAYNAK, S., KORONEOS, A., ÜNAL, A., and KAMACI, O. (2016). Distribution of natural radioactivity and assessment of radioactive dose of Western Anatolian plutons, Turkey. *Turkish Journal of Earth Sciences*, **25**, 434–455.

PAPADOPoulos, A., ALTUNKAYNAK, S., KORONEOS, A., ÜNAL, A., and KAMACI, O. (2017). Geochemistry of uranium and thorium and natural radioactivity levels of the western Anatolian plutons, Turkey. *Mineralogy and Petrology*, **111**, 677–691.

TZAMOS, E., KAPSIOTIS, A., FILIPPIDIS, A., KORONEOS, A., GRIECO, G., EWING RASSIOS, A., KANTIRANIS, N., PAPADOPoulos, A., GAMALETROS, P.N. and GODELITSAS, A. (2017). Metallogeny of the Chrome Ores of the Xerolivado-Skoumtsa Mine, Vourinos Ophiolite, Greece: Implications on the genesis of IPGE-bearing high-Cr chromitites within a heterogeneously depleted mantle section. *Ore Geology Reviews*, **90**, 226–242.

BAZIOTIS, I., ASIMOW, P. D., NTAFLOS, T., BOYCE, J. W., MCCUBBIN, F. M., KORONEOS, A., PERUGINI, D., FLUDE, S., STOREY, M., LIU, Y. S., KLEMME, S. and BERNDT, J. (2017). Phosphorus zoning as a recorder of crystal growth kinetics: application to second-generation olivine in mantle xenoliths from the Cima Volcanic Field. *Contributions to Mineralogy and Petrology*, **172**:58.

YOUSEFI, F., SADEGHIANA, M., WANHAINENB, C., GHASEMIA, H., PAPADOPoulos, L., BARK, G., REZAEI-KAHKHAEI, M. and KORONEOS, A. (2017). Mineral chemistry and P-T conditions of the adakitic rocks from Torud–Ahmad Abad magmatic belt, S-SE Shahrood, NE Iran *Journal of Geochemical Exploration*, **182**, 110–120.

POLI, G., CHRISTOFIDES, G. KORONEOS, A., TRAJANOVA, M. and ZUPANČIĆ, N. (2020). Multiple processes in the genesis of the Pohorje igneous complex: Evidence from petrology and geochemistry. <https://doi.org/10.1016/j.lithos.2020.105512>

PAPADPOULOS, A., LAZARIDIS, S., KIPOUROU-PANAGIOTOU, A., KANTIRANIS, N., KORONEOS, A. and ALBANAKIS, K. (2021). Mineralogy, Geochemistry and Provenance of Beach Placers from Greece: New Insights on the REE Content of Black Coastal Sands from Aggelochori Area, N. Greece. Minerals 11, 693, <https://doi.org/10.3390/min11070693>

GERONTIDOU, I., KORONEOS, A. and VOGDOPOULOS G. (2022). The Post-Variscan to Pre-Jurassic, Mafic Northern Pelagonian Magmatism: A Comparative Study. Bulletin of the Geological Society of Greece, Sp. Publ. 10, Ext. Abs. GSG2022-205.

GERONTIDOU, I., KORONEOS, A. and DRETAKI, A. (2022). Petrology and geochemistry of the Variscan Kastoria pluton. Bulletin of the Geological Society of Greece, Sp. Publ. 10, Ext. Abs. GSG2022-208.

PANORA, A. and KORONEOS, A. (2022). Permo-triassic granitic magmatism in Serbomacedonian massif and Pelagonian zone: comparative geochemical and petrogenetic study of Kerkini, Arnea and Ardassa granites. Bulletin of the Geological Society of Greece, Sp. Publ. 10, Ext. Abs. GSG2022-186.