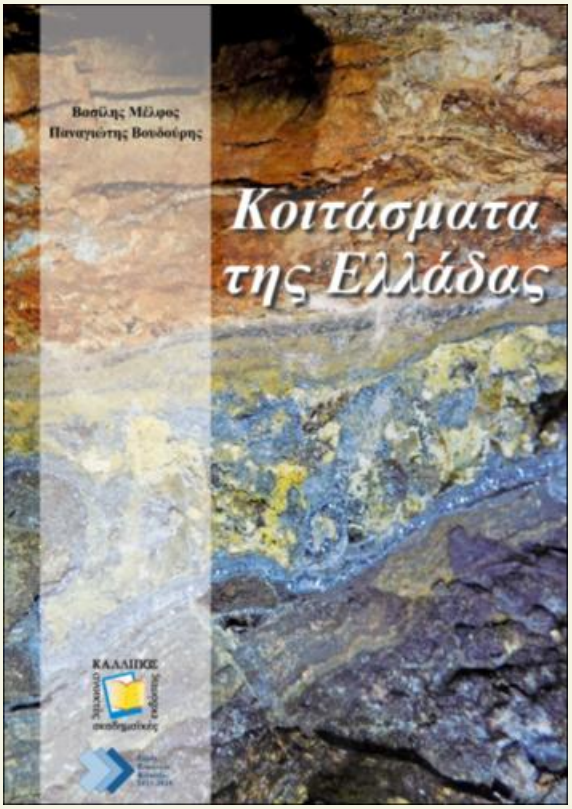

METADATA

Title: Ore Deposits of Greece

Other Titles: -

Language: Greek

Authors: Melfos, V., Associate Professor, AUTH, Voudouris, P., Professor, UOA

ISBN: 978-618-5667-07-8

Subject: NATURAL SCIENCES AND AGRICULTURAL SCIENCES

Keywords: Ore deposit / Geotectonic evolution / Metallogenesis / Mineral raw materials / Magmatic deposits

Bibliographic Reference: Melfos, V., & Voudouris, P. (2022). Ore Deposits of Greece [Undergraduate textbook]. Kallipos, Open Academic Editions. http://dx.doi.org/10.57713/kallipos-32

Abstract

The book describes the most significant metallic mineral deposits of Greece and the conditions of their formation in relation to the geotectonic evolution of the Hellenides. Emphasis is given on the geology, the tectonics, the host rocks, and the mineralogical and geochemical composition of these deposits. The chapters of this book refer to the brief historical background of the mining activity in Greece since the prehistoric period, to the geotectonic evolution and metallogenesis, and to the classification of the Greek deposits in the different metallogenic provinces. The orthomagmatic Cr deposits in ophiolite complexes, the volcanogenic massive sulfide (VMS) deposits, as well as the metamorphic Mn-rich deposits, all of Mesozoic age, are described. The book also refers in details to the mineralization, which is associated with the Cenozoic magmatism, and is restricted mainly in the two large exhumed metamorphic complexes of Greece, the Rhodope and Serbo-Macedonian massifs in the north and the Attic-Cycladic belt in the south. These mineralizations include intrusion-hosted, skarn, carbonate-hosted replacement, porphyry and epidermal deposits. The Cenozoic polymetallic veins hosted in metamorphic rocks, the oxidized Fe, Mn, and Zn deposits, the Fe-Ni laterite deposits, the Al-bearing bauxite deposits, the Au, Pt, and REE enriched placer deposits, and the metal-bearing hydrothermal fields in the South Aegean active volcanic arc and in Central and Northern Greece are also described. At the end of the book, there is a review of the presence of rare and critical metals in the deposits of Greece, while the last chapter provides detailed geological and mineralogical data of two important metallogenic regions of southeastern Europe, in NE Chalkidiki and in Lavrion.

The Project is funded by the National Development Programme 2021-2025 of the Ministry of Education and Religious Affairs and implemented by the Special Account for Research Funds of the National Technical University of Athens and the Hellenic Academic Libraries Link.