Geophysical Airborne Survey and Mineral Resources Potential in Kosovo

Zenun Elezaj*

University of Prishtina, Faculty of Geoscience & Technology-Mitrovice, Kosova

Received January 18, 2013; Accepted February 13, 2013

Abstract: A wide range of mineral resources are found in Kosova. The various formational compositions of the sedimentary, magmatic and metamorphic rocks, the successive intrusive and extrusive magmatic activities and in particular the Miocene volcanism closely related to tectonic and neotectonic events combined with different type sedimentation and weathering processes conditioned a healthy panorama of the ore deposits. This paper provides an initial interpretation of detailed, airborne magnetic, electromagnetic and radiometric data obtained over Kosovo during 2006-2007. The Independent Commission for Mines and Minerals of Kosova (ICMM) contracted the project “Airborne geophysical survey over Kosovo” to the Joint Airborne-geoscience Capability (JAC), established in 2004 between Finnish and British Geological Surveys. Also, aeromagnetic high-resolution gradient data were used to interpret the tectonic structure of Kosovo. The combined magnetic analytic signal and tilt derivative highlights the main tectonic features but also the detailed structures, important to outline simplified mineral potential regions of high prospectivity for different deposit types.

Keywords: Kosovo, mineral, aerogeophysical, prospectivity, deposit.

*Corresponding: E-mail: zenunelezaj@yahoo.com, Tel: 0377 44 138 905