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THE OCCURRENCE OF SLAGS AND WASTES OF THE PAST MINING AND METALLURGICAL ACTIVITIES WITHIN BEACHROCKS OF THE SOUTHWESTERN LAVREOTIKI PENINSULA; THE ENVIRONMENTAL IMPACT.

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EXTENDED ABSTRACT

The diachronic mining and metallurgical activities in the Lavreotiki peninsula affected the generation, transport and deposition of a large quantity of toxic waste (slag, litharge etc) on the coastal zone where contemporary blocks of beachrocks were formed.

The purpose of this paper is to examine the presence of slag in blocks of beachrock observed in the region of southwestern Attica, specifically at the bays of Legrena and Sounio, and to discuss their chemical composition in relation to the environmental impact. The existence of toxic elements such as Pb, Fe, S, Ba, Cu, As, Mo and Zn, in the structure of sulphide and silicate minerals as well as in metal oxides of slag and other mining waste, and their release to the environment may potentially cause local environmental problems in the coastal area.

Key words: coastal zone, beachrocks, slag, toxic elements, environmental problems, Lavreotiki peninsula, Attica.