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Dr. Muhammed Bora AKIN
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İsmail IŞIK

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Dr. Muhammed Bora AKIN
Dr. Zehra Gülten YALÇIN

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# PETROGRAPHIC CHARACTERISTICS OF THE MAFIC ENCLAVES OF NEOGENE LAVA DOME AROUND SAĞLIK AND YATAĞAN AREA, KONYA/TÜRKİYE

Kerim Kocak\*
Konya Teknik University, Turkiye kkocak@yahoo.com
0000-0002-4379-8791

#### **ABSTRACT**

To the west of Konya, a widespread lava dome has evolved as a component of Neogene Erenlerdagi volcanism associated with subduction. Its formation involved assimilation-fractional crystallization (AFC) and/or magma mixing processes. The lava is characterized by occurrence well-developed Mafic Microcrystalline Enclaves (MME), which has variable sizes (from a few cm to a few meters) and shapes (ellipse/rounded-angular).

The enclave comprises phenocrysts of plagioclase (10-50%), green amphibole (10-15%), quartz (ocelli) (0-10%), biotite (0-5%), epidote (0-5%), and opaque minerals (5-50%). The matrix consists of plagioclase, chlorite, light green epidote, green amphibole, biotite, and opaque iron ore.

**Keywords:** Neogene, volcanism, enclave, lava, Konya