https://ikstc.karatekin.edu.tr

/karatekinuni

Ð



21 - 22 DECEMBER 2023 ÇANKIRI, TÜRKİYE

2007 UNIVERSIT

Proceeding Book

Science from Çankırı to the World

www.karatekin.edu.tr

Abstract



2nd International Karatekin Science and Technology Conference

ABSTRACT PROCEEDING BOOK

December 21-22, 2023 – Çankırı, Turkiye

Typesetting

Dr. Muhammed Bora AKIN Dr. Zehra Gülten YALÇIN

Cover Design

İsmail IŞIK

Editors

Dr. Muhammed Bora AKIN Dr. Zehra Gülten YALÇIN

ISBN: 978-605-82910-9-6

2nd International Karatekin Science and Technology Conference



December 21-22, 2023 – Çankırı, Turkiye

https://ikstc.karatekin.edu.tr/

PETROGRAPHIC CHARACTERISTICS OF THE NEOGENE LAVA DOME AROUND SAĞLIK AND YATAĞAN AREA, KONYA/TURKİYE

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

ABSTRACT

To the west of Konya, an extensive lava dome has formed as a component of Neogene Erenlerdagi volcanism, possibly resulting from assimilation-fractional crystallization and/or magma mixing processes associated with subduction. Petrographic studies show that the phenocryst phase of the lava is represented by plagioclase (15-45%), amphibole (3-15%), opaque iron ore (3-20%), rare brown biotite (5-10%), quartz (0-5%), sanidine (0-5%), clinopyroxene (0-5%), and epidote (0-8%). The matrix is primarily composed of plagioclase, pyroxene, epidote, opaque iron ore, and occasional volcanic glass. The lava contains Mafic Microcrystalline Enclaves (MME). A chilly zone may develop between MME and its host, containing phenocrystals of plagioclase (25%) and amphibole (5%).

Keywords: Neogene, volcanism, lava, Konya