

## Mineralogy, geochemistry and tectonic setting of volcanic rocks in volcano-sedimentary sequence of south Zanzan

Mahin Hashemi\*, Ali Haji-Abolfath

*Department of Geology, Faculty of Basic Sciences, University of Zanzan*

(Received: 4/2/2017, in revised form: 20/6/2017)

**Abstract:** The study area is part of Karaj Formation in the southern city of Zanzan and is located in the central Iran zone. Rocks of the study area consists of pyroclastic, igneous and sedimentary rocks. Igneous rocks in this area consist of two categories: acidic (rhyolite and rhyodasite) and basic (basaltic andesite). Sahl section in terms of lithology can be equal of the lower shale and middle tuff of the Karaj Formation in type section, but compared with Kord Kand in terms of lithology is different. The type of sedimentary units, pyroclastic units and volume of basaltic andesite and andesitic lavas are different. Low Mg# and low MgO, Cr and Ni indicate that magma-generation rocks of the study area is evolution magma. The tectonic environment of the igneous rocks associated with subduction and is continental arc. Probably Magma-generation rocks of the region is evolution magma that is made from a mantle wedge metasomatism a watery fluid caused by the subduction of the lithosphere.

**Keywords:** *Geochemistry; volcanic - sedimentary sequence; Subduction; Karaj Formation; southern Zanzan.*

متن فارسی اصل مقاله از صفحه ۹۳ تا ۱۰۲ در این شماره به چاپ رسیده است.

---

\*Corresponding author, Tel: 09363699138, Email: mahinhashemi10@yahoo.com