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## Investigation of Paleozoic magmatism in some part of Central Iran

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**Abstract:** To investigate the characteristics of Paleozoic magmatism in Central Iran, the volcanic rocks from some area like Abyane, Zefreh, Bagherabad and Dalme have been studied and have been compared to another area like Jahagh and Polekhavand. The volcanic horizon occurred as lava flows with massive and pillow structures and intermittent with several sediments layers such as sandstones and carbonates. Geochemical investigations and some diagrams show the transitional nature (tholeiitic to alkaline) of magma and show that it is formed within inter continental rift. This situation related to the tensional movements in Central Iran in Paleozoic. Carboniferous intrusives in Late Devonian of Zefreh and Bagherabad all are evidences of the existence of pulses movement's rhythms of push and pull, especially in Dalme area in Iranian crustal plate. In worldwide scale, these movements are comparable with Hercynian Orogeny.

**Keywords:** *Magmatism, Paleozoic, Central Iran*

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