

## Characterization of Mineralogy, Geochemical and Origin of Nephelinitic Jurf Ed-darawish Volcano in Western Central Jordan

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**Abstract :** the cenozoic volcanism in westt central jordan which show homohgenous lava from upper mantle.es represented by basaltic scoria cones and flows and covers approximately 10 km. fourtten nephelinitic rock samples were collected at jurf ed-darawish volcanism to analyze major minor and trace elements by using XRF.. geochemical parameters of these samp;es such as MG/MG+FE+2, the ratio range from 0.41 to 0.45 and high ti contents 3.09-3.28wt % indicate that the corresponding magmas are nearly of primary origin . this magma show low variable abundances of compatible and incompatible trace elements reflecting a homogenous source. the studied volcanic rocks, which are mainly nephelinites, belong to the alkaline rocks series containing 4.38-5.95wt% alkali oxides they are usually undersaturated in regard it the silica content, which ranges between 39.88-41.50wt.%.value compared to other jordanien basaltic rocks majorminor and trace elementes data as well as mantel xenoliths entrained in the volcanic rocks are spinel iherzolites that suggest the lithospheric mantle as the source for the pleistocene volcanism these xenoliths resided at shallow mantle depths (45 km ) because a geothermobarometric analysis yielded p-t conditions close to 15 kbar and 1100c the mantle nodules did not equilibrate with the melts indicating a fast transport from the mantle to the surface and a mgma >65 km deeper source area of the melts.

**Keywords :** nephelinite plestocene western central jordan, western central jordan, volcano in western central jordan, central jordan

**Conference Title :** ICCIR 2023 : International Conference on Chemistry of Igneous Rocks

**Conference Location :** Miami, United States

**Conference Dates :** March 16-17, 2023