

# **PETROLOGY OF ALKALINE MAGMATIC ROCKS IN NORTH-WEST VIETNAM AREA**

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Little appearance of alkaline magmatic rocks in NW- Vietnam area was concerned to studies by a great number of geologists ( Lacroix,A., 1928,1933; Dovjicov,A.E et al 1965; Mi, B.P et al 1971; Tri, T,V et al 1977,1979;Wagner,C., Velde,D.,1986; Hoa,T.T et al 1996 etc..). However, these studies were still unspecific, not yet adequate and incoherent. Special, studies about their petrogenesis weren't detailedly implement, because of limitation by analytical methods and historical context.

This paper is based on systematically study for geological and material composition characteristics of alkaline rocks in NW Vietnam through hundreds the collection and addition of analyses for major and trace elements and some isotopic samples of whole rocks and minerals. Conclusions be can possibly suggested as follows: 1-Alkaline granitoids of NW-Vietnam area include 2 series : oversaturated alkaline and peraluminous- subalkaline series; at the same time belong to 2 types : Na- rich(secondary) and K-rich(essential) types. 2-Very K-rich alkaline granitoids of NW-Vietnam area were genetically related with carbonatite- lamproite - lamprophyre association of the same area , and on the basis of that, an alkalic province derived from partial melting of upper mantle during Eocene has been established. 3-Alkaline granitoids of NW-Vietnam area were fractionally crystallized from alkalic basaltic magma and enriched in metasomatism process. 4-Alkaline granitoids and carbonatite - lamproite - lamprophyre association aged in Jurassic-Paleogene in NW-Vietnam are the products of extensional zones and attenuated continental lithosphere associated with two geodynamic regional settings: activity of active continental margin Ande type by subduction of Western Pacific Oceanic under Asia continental crust during the Late Jurassic- Cretaceous and activity of creating Himalayan orogenic belt during the Paleogene by India plate collided with Tibet.