

## Geochemical characteristics of Miocene volcanic rocks in “Nagura Basalt formation”

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14 samples of the basaltic volcanic rocks collected from the "Nagura Basalt Formation" were analyzed. "Nagura Basalt Formation" is composed by Miocene basaltic-andesitic tuff and lava, pyroclastic sediments and it is distributed in the northern Tanzawa-Mountains, (hereinafter referred to as Nagura basalt). Nagura basalt was compared with the chemical composition of the Miocene volcanic rocks distributed in the northern Tanzawa-Mountains (Hinate andesite, Oshima basic intrusive), and the Quaternary Izu - Ogasawara arc, Northeast-Japan arc volcanic rocks.

As a result, Nagura basalt is classified as low K, tholeiitic series like the current Izu-Bonin arc and Hinate andesite, Oshima basic intrusive, and it has a different chemical composition from the volcanic rocks of the Northeast Japan arc, and it also found that it has high FeO\*/MgO ratio to the volcanic rocks of Izu Bonin arc and Hinate andesite, Oshima basic intrusive.

It is inferred that the tectonic environment at the time of the eruption of Nagura basalt was under the compressive crustal condition compared to the Quaternary volcanic rocks of the Izu- Bonin arc and Hinate andesite, Oshima basic intrusive.

Keywords: Basalt, chemical composition, Izu-Bonin arc