

# Crystal Morphology of Zircon in Granitoids from the Mt. Keumjeong District, Pusan, Korea

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The zircon crystals separated from granitoid samples in the Mt. Keumjeong district are described in terms of morphology. There are two kinds of granitoids: the Late Cretaceous Bulgugsa granitoids and Masanites. The former consists of granodiorite, hornblende granite and biotite granite and the other consists of tonalite, adamellite and micrographic granite. Generally, the shapes of zircon crystals are short prismatic to middle prismatic and are dominant in {100} prism and {101} pyramid in total average morphological data of the granitoids.

The crystal forms of zircon in the granitoids of the two different type can be distinguished by the PPEF diagram and the prism index (PI). The prism Index values of zircon crystal forms in the Bulgugsa granitoids are higher than those of the Masanites relatively. The finishing temperature range (820° ~800° ~780°C) for crystallization of zircon crystals in the Bulgugsa granitoid is higher than the temperature (790° ~800° ~770°C) at which the zircon crystals are created in the Masanites magma. The last differentiates of the Bulgugsa granitoids and Masanites have mainly intermediate zircon ({110}={100}) crystals, respectively. As differentiation proceeds, the zircons of granitoids become from short prismatic to middle prismatic in the each granitoids.