Petrography and Zircon U-Pb ages of the Ryoke Granitoids distributed in the Takanawa Peninsula, Ehime Prefecture.

*Kazuya Shimooka¹, Satoshi SAITO¹, Kenichiro Tani²

1. Graduate School of Science and Engineering, Ehime University, 2. Department of Geology and Paleontology, National Museum of Nature and Science

Various types of granitoids are widely distributed in the Ryoke Belt of Takanawa Peninsula, Ehime Prefecture. Based on geological and petrographic studies, Ochi (1982) has been classified the granitoids into three groups including (1) three tonalitic bodies, (2) four granodioritic bodies and (3) seven granitic bodies, and suggested that the tonalitic bodies intruded at the oldest stage, followed successively by the intrusion of the granodioritic and granitic bodies. In this study, we performed geological and petrographic investigation on the Ryoke granitoids in Takanawa Peninsula, and further obtained new zircon U-Pb ages for representative samples collected from the tonalitic, granodioritic and granitic bodies. The new zircon U-Pb ages are ca. 94 Ma for tonalite, ca. 89 Ma for granodiorite, and ca. 94 Ma for granite. The results suggest multiple intrusive activities in the study area including the older magmatism which has formed tonalites and granites at ca. 94 Ma and the younger granodiorite formation at ca. 89 Ma.

Keywords: Ryoke belt, Granitoids, Takanawa Peninsula