

U-PB ZIRCON GEOCHRONOLOGY FOR PRECAMBRIAN ROCKS OF GYEONGGI MASSIF, KOREA

1KIM, C.B., 2CHANG, H.W. 3YOON, C.H. AND 4TUREK, A. 1The Institute of Basic Sciences, Chonnam National University, Kwangju, KOREA, 500-757, 2Department of Earth System Sciences, Seoul National University, Seoul, Korea, 151-742, 3Department of Mineral and Energy Engineering, Chonnam National University, Kwangju, Korea, 500-757, 4Earth Sciences, University of Windsor, Windsor, Ontario, N9B 3P4, CANADA

The Eurasian plate in East Asia is a mosaic of tectonic terrains. Korea is composed of three massifs: Nangrim massif in North Korea, Gyeonggi and Ryeongnam massifs in South Korea. The Gyeonggi massif is bounded by the Imjingang fold belt to the north and the Ogcheon fold belt to the south. It consists of Precambrian gneisses and metasedimentary rocks, overlain by Paleozoic, Permian-Triassic, and Cretaceous rocks and intruded by Jurassic plutons and to a lesser extent by some Cretaceous plutons. U-Pb zircon ages determined for Precambrian basements of Gyeonggi massif are several episodes of plutonism. In Gyeonggi massif the oldest rocks dated here are the migmatites- 2420-2410 Ma, the banded gneiss- 2160 Ma, the porphyroblastic gneiss- 1950 Ma, the pink feldspar granite gneiss- 1700 Ma, and the leucocratic gneiss- 700 Ma. The Qinling-Dabie belt of China represents a continental collision zone in Triassic time, between the North China and South China blocks. Linkage of this massif to the North or South China blocks on the basis of isotopic ages at the present time is not possible due to insufficient data, particularly in China, though early Proterozoic rocks of comparable age to those in the Gyeonggi massif have been identified in South China block.