

**5 2****PALEOMAGNETIC AND ROCK MAGNETIC STUDIES OF THE PYEONGAN SUPERGROUP IN THE PYEONGCHANG AREA, KOREA**

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Paleomagnetic and rock-magnetic investigations have been carried out for the Upper Carboniferous-Lower Triassic Pyeongan Supergroup, exposed in the Pyeongchang area in the eastern South Korea. A total of 350 independently oriented core samples was drilled from 21 sites for the study. The mean direction after bedding correction ( $D/I=12.3^\circ/69.4^\circ$ ,  $k=8.7$ ,  $\alpha_{95}=15.6^\circ$ ) is more dispersed than the in situ mean direction ( $D/I=354.7^\circ/57.8^\circ$ ,  $k=59.7$ ,  $\alpha_{95}=5.7^\circ$ ), and the stepwise unfolding of the characteristic remanent magnetization (ChRM) reveals a maximum value of  $k$  at 0 % unfolding. Furthermore, authigenic magnetic mineral grains are identified by the electron microscope observations. These results collectively imply that ChRM is the remagnetization due to the formation of the secondary authigenic magnetic minerals. The paleomagnetic pole position ( $57.7^\circ\text{E}$ ,  $84.5^\circ\text{N}$ ,  $A_{95}=7.0^\circ$ ) of the Pyeongan Supergroup calculated from the site mean directions of the ChRMs is close to those of late Cretaceous and Tertiary period of the Korean Peninsula. These results strongly suggest that chemical remanent magnetization was acquired by fluid-mediated process related to the Bulguksa igneous activity during late Cretaceous to early Tertiary. This late Cretaceous to Tertiary remagnetization seems to be widespread because the remagnetization is previously reported to be found in rocks from the Jeongseon and Yeongwol areas as well as the Eumseong and Youngdong basins.