



## **A pseudo-peperite forming by hydrofracture within basalt, Korea**

Chang Woo Kwon

KIGAM, Geological Research, Daejeon, Korea, Republic Of (cwkwon@kigam.re.kr)

A mixture of basaltic fragments and sediments within a basalt, formerly interpreted as a peperite in Korea, shows a difference from the typical peperite features at the boundaries between two rocks. As a result of SEM-EDS analysis, there is no evidence of glassy rim along the margin of the basalt fragments and disturbance in the sediments composed of quartz and clay minerals. These textures are not consistent with a typical feature of the peperite that the internal sedimentary structures are destroyed by fluidization of the host sediment and glassy rim is formed along the margin of clasts of magma origin. On the other hand, the characteristics of the basalt fragments with uneven margins and basalt fragments in the sediments are interpreted that the fluid injected inside crushed the basalt in place and grown and filled the gap with quartz that was carrying it. The sediments within the basalt, therefore, envisaged the veins produced by the secondary fluid. These results represent that the peperitic texture is pseudo-peperite produced by secondary hydrofracture, rather than the synsedimentary volcanism.