

# Curing Behavior on kaolin-based geopolymers

## Abstract

This paper aims at investigating the influence of curing process on kaolin-based geopolymers. Kaolin-based geopolymers were prepared by the alkali-activation of kaolin with alkali activating solution (mixture of NaOH and Na<sub>2</sub>SiO<sub>3</sub> solutions). The compressive testing, XRD and FTIR analysis were performed. The compressive strength results showed that curing at 60°C for 3 day achieves better strength. XRD analysis revealed that the entire geopolymer sample reduced in intensities and became amorphous at longer age while FTIR analysis indicated the presence of geopolymer bondings. Both analyses showed the presence of large amount of un-reacted remained in the system were the reason of the low compressive strength obtained.