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The Natural Fibers ratio are Affected to Mechanical Properties of Kaolin/Fly-ash at Low Temperature Ceramics

The study guideline to develop the feasibility of producing low temperature ceramics with the natural fibers. The ceramics prepared by mixed powder of kaolin and fly ash with equal ratio (kaolin/fly-ash: 50/50 wt.%) and milled by ball-milling technique. The natural fibers from local pineapple leaves replaced to ceramics by 5, 10, 15, 20 and 25 wt.%. Green pellets of 30.0 mm diameter were prepared using uniaxial-pressure. Scanning electron microscopy (SEM) was used to determine the sizes of natural fiber and particle size of powder. The mechanical properties of ceramics were investigated by hardness tester. In this study, will be focused on the effect of natural fibers ratio are affected to mechanical properties of ceramics at low temperature.

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