Contribution ID: **87** Contribution code: **S2 Condensed Matter Physics** Type: **Poster Presentation**

Effect of Fly-ash Doped Kaolin on Mechanical Properties and Heat-insulating of Ceramics

In this research, ceramics fly-ash doped kaolin 10 to 50 wt.% were fabricated by solid-state reaction. All powders were weighed, mixed and further milled by ball-milling for 4 h. All compositions of powders were uniaxial pressed in pellets and sintered at the temperatures 1100 °C for 4 h. Compositions of the ceramics were investigated by using X-ray diffraction technique. The particle size of powder and microstructure of ceramics were measured by scanning electron microscope. The result shows relationships between ratio of fly-ash doped kaolin with mechanical properties and heat-insulating of ceramics.

Author: Dr FUNSUEB, Narit (Department of Science, Faculty of Science and Agricultural Technology, Rajamangala University of Technology Lanna, Lampang, 52000, Thailand)

Co-authors: Mr PANTHUWAT, Watee (Department of Science, Faculty of Science and Agricultural Technology, Rajamangala University of Technology Lanna, Lampang, 52000, Thailand); Mr THIPBOONRAJ, Anawin (Department of Industrial Engineering, Faculty of Engineering, Rajamangala University of Technology Lanna, Lampang, 52000, Thailand); Dr PRANAMORNKITH, Pat (Department of Science, Faculty of Science and Agricultural Technology, Rajamangala University of Technology Lanna, Lampang, 52000, Thailand)

Presenter: Dr FUNSUEB, Narit (Department of Science, Faculty of Science and Agricultural Technology, Rajamangala University of Technology Lanna, Lampang, 52000, Thailand)

Session Classification: Poster: S2 Condensed Matter Physics

Track Classification: Condensed Matter Physics