APPENDIX

Appendix A
Conferences

- Y. Kongchasing, T. Seetawan, "Thermoelectric Behavior of Al<sub>2</sub>O<sub>3</sub>+Fe<sub>2</sub>O<sub>3</sub>
   Cement Based Material, 3<sup>rd</sup> Southeast Asia Conference on Thermoelectrics 2014, 22–24 December 2014, Champasak Grand Hotel, Pakse, Champasak, Lao PDR.
- Y. Kongchasing, T. Seetawan, Electrical Resistivity and Seebeck Coefficient of Cement-Based Composites The 4<sup>th</sup> Southeast Asia Conference on Thermoelectrics, December 15–18, 2016, Sea Garden Hotel, Danang, Vietnam

3<sup>rd</sup> Southeast Asia Conference on Thermoelectrics 2014 22-24December 2014, Champasak Grand Hotel, Pakse, Champasak, Lao PDR.

**SACT 2014** 

www.sact2014.thtes.org

## Thermoelectric Behavior of Al<sub>2</sub>O<sub>3</sub>+Fe<sub>2</sub>O<sub>3</sub> Cement Based Material

Y. Kongchasing<sup>a,e1</sup>, T. Seetawan<sup>a,e2</sup>

<sup>a</sup>Thermoelectrics Research Center, Research and Development Institute and Program of Physics, Faculty of Science and Technology, SakonNakhonRajabhat University 680 Rd., SakonNakhon 47000,Thailand

elyudhasart.kc@gmail.com, e2t seetawan@snru.ac.th,

## Abstract

 $Al_2O_3$  (50%, Corundum, Hexagonal) +  $Fe_2O_3$  (50%, Hematite, Hexagonal) mixing is the most convenient in a cement based material or cement composites. Seebeck coefficient is thermoelectric behaviour which is the base thermocouples for temperature measurement. It was found that the mixing crystal structure of cement composites. The largest absolute Seebeck coefficient of +8.0 mV/K was obtained by the composites.

Keywords: Seebeck coefficient, cement, composites, thermoelectric