ABSTRACT

Thermoelectric Generator (TEG) has a promising potential as semiconductor material electronic devices for harvesting heat energy as a result of energy conversion waste, use seebeck effect principal, turn heat energy into electrical energy, screen printing method is one of many solution to low the cost of TEG fabrication and also to be able to applied TEG in flexible substrate. Preparation of the paste as one of many aspects in screen printing methods are characterized, we found the filler:binder:thinner composition 2:1:1 in thixotropic fluid gave the best result after applied in alumina substrate with the best performance at 70° C temperature difference and 14.2 mV output voltage.

Keywords : Thermoelectric Generator, Screen Printing, Seebeck Effect, Bi₂Te₃, Sb₂Te₃