

NT-P016

## Ag Paste Using Ag Nanowires

**Jun-Ui Hong<sup>1</sup>, Dae-Jin Kim<sup>2</sup>, Byung-Seon Kong<sup>2</sup>, Sang-Ho Kim<sup>1</sup>**

<sup>1</sup>Department of Chemistry, Kongju National University, Chungnam 314-701, Korea,

<sup>2</sup>Advanced Energy Materials Team, KCC Central Research Institute, Gyunggi-Do 446-912, Korea

Traditional screen printing is still a dominant method to print electrodes on c-Si solar cells. In order to achieve higher efficiency for c-Si solar cells, improvement of the electrode material is one of the key approaches. Shadowing loss can be reduced by using high aspect ratio finger electrode with width of finger electrode less than 80um. The rheological properties of Ag paste for applying c-Si solar cells are improved by using Ag nanowires. The printing properties including the aspect ratio of printed electrode can be improved with higher Thixotropic index (T.I.) values.

**Keywords:** Screen print, Solar, Ag paste, Silver nano wires, Rheology, c-Si