

## Fine dispersion Cu ion via complex formation with poly electrolyte in acidic solution

박영근\*, 홍승우, 김민수, 조순진, 민병렬  
삼성전기  
(y3.park@samsung.com\*)

In this study, polyelectrolytic systems has been investigated to low molecular weight PEO parent systems, which give rise to completely amorphous multivalent salt solutions. In order to disperse Cu ion species on Cu surface, Poly(ethylene glycol) (PEG), and PEO-PPO-PEO have been principally added. Based on the fact that the more complex long chain systems, as far as the electric conductivity and the solute solvent interactions, from a structural point of view, are useful. The local structure surrounding the metal ion as defined by the coordinating ether oxygen atom was estimated by Raman Spectroscopy, FT-IP, and Maldi-TOF. This coordination effects had effect on fine dispersion of etching component in acidic solution. The surface characteristics were also investigated by CMI, Maldi-TOF, SEM, and AFM.