

Synthesis of high performance polyethersulfone – mesoporous silica nanocomposites
application for substrate of OLEDs with high transparency and dimensional stability

VO TRINHAT, 김덕준^{1,†}

성균관대학교; ¹성균관대학교 화학공학과

(djkim@skku.edu[†])

Mesoporous silica rod with surface modification of the particles were synthesized. Mesoporous silica filler with high surface area may increase interaction between polymer and fillers. Rod shape of filler had showed good effect to dimensional stability of nanocomposite. Therefore, dimensional stability of film can be improved. Furthermore, the mesopore maybe immobile the polymer chains inside it. Preventing the polymer expand with heating. With surface modification of the particles, the mesoporous silica nanoparticles can be well dispersed into polymer matrix. The characteristics of mesoporous silica nanoparticles and the nanocomposites will be measured.