

Properties of PC/MWNT composites prepared by melt extrusion

승유탉, 송기현, 김우년*, 이현상¹, 금종구¹
고려대학교 화공생명공학과, 유변공정연구센터; ¹LG화학
(kimwn@korea.ac.kr*)

Polycarbonate (PC)/multi-walled carbon nanotube (MWNT) composites were prepared by melt extrusion using twin screw extruder. Rheological properties and electric conductivity of PC/CNT composites were measured by advanced rheometric expansion system (ARES) and four probes method, respectively. From the rheological and electrical measurements, the rheological and electrical percolation threshold show about 2 wt% MWNT content, respectively. Also, the viscoelastic properties of the PC/MWNT composites by dynamic mechanical thermal analysis (DMTA) are presented.

Acknowledgement: This study was supported by research grants from the Korea Science and Engineering Foundation (KOSEF) through the Applied Rheology Center (ARC), an official KOSEF-created engineering research center (ERC) at Korea University, Seoul, Korea.