

探討 PEG/PLLA 摻合物離子對產生的影響

The effect of end group (2NH_2) of poly(Ethylene glycol) (PEG) on the miscibility and crystallization behaviors of binary crystalline blends of PEG/poly(L-lactic acid)(PLLA) were investigated by differential scanning calorimetry (DSC) and polarized optical microscopy (POM). The results of conductivity meter and dielectric analyzer (DEA) implied the existence of ionic pairs between the amine group ($-\text{NH}_2$) of PEG and carboxylic hydrogen group ($-\text{COOH}$) of PLLA. Therefore, the miscibility, fold surface free energy, and spherulitic growth rate were influenced due to the ionic interaction.