

### Application of Modified Clay to New Polylactide/Clay Nanocomposite

이성남, 김창현<sup>1</sup>, 박정기\*  
한국과학기술원 생명화학공학과;  
<sup>1</sup>호남석유화학 대덕연구소 연구 2실  
(jungpark@kaist.ac.kr\*)

The rheological and mechanical properties of novel polylactide/clay nanocomposite were investigated. The nanocomposite was prepared by combinational method which consists of *in-situ* polymerization of L-lactide onto clay surface followed by melt compounding of polylactide with the poly(L-lactide) grafted clay. The rheological properties and the mechanical properties of the nanocomposite showed very high shear thinning, high modulus, low elongation, and low strength compared to simply melt compounded polylactide/clay nanocomposite.