화학과 세미나

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Designer Lactide-Derived Poly(or Oligo)mers in KRICT: Toughening, Plasticization, and Elastomericity

Poly(lactide) (PLA) is a renewable, degradable (or compostable), and thermoplastic with the mechanical properties similar to poly(styrene). Unfortunately, PLA is inherently brittle and possesses poor melt strength. In particular, the fragileness of PLA limits its current use for disposable packing. Melt blends between PLA and rubbery materials can toughen the plastic.

Recent efforts introduce copolymer architectures with a majority PLA block and minority rubbery block with phase separation on nanoscale, in which precise molecular design is also needed. To achieve the hierarchically structured (multi)block, graft, and star-shape copolymers for sustainability, toughening, plasticization, and biodegradability, various architectures prepared via controlled polymerization/oligomerization, post-functionalization, and cross-linking should be developed.

Date : 2024년 10월 10일 (목) 오후 5시
Venue : 과학관 B130호
Host : 연세대학교 화학과