세미나 초록

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발표 주제	Poly(lactide) Architecture in KRICT for Flexible, Elastomeric, Degradable, and Toughening Effects
발표 내용	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 block and graft copolymers 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 copolymers for sustainablity, toughness, biodegradability, and flexibility, various architectures prepared via contolled polymerization/oligomerization, post-functionalization, and coupling chemistry should be developed.