세미나 초록

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발표 주제	**Production of Polyhydroxyalkanoates (PHAs) in Engineered Microbes**
발표 내용	Polyhydroxyalkanoate (PHA) is a biodegradable polymer and produced by various microorganisms. PHAs are regarded as a promising substitute for petroleum-based polymers in the future, and they are already being used as packaging, textile, and household materials, and even as medical and research materials. As there is more increasing interest in the use of bio-based, biodegradable polymers for ecofriendly and sustainable development of various industries, there have been many studies on PHA production containing different monomers giving different thermal and physical properties. Among them, we have studied the production of poly(3-hydroxybutyrate-*co*-3-hydroxyvalerate) [P(3HB-*co*-3HV)] and poly(3-hydroxybutyrate -*co*-3-hydroxyhexanoate) [P(3HB-*co*-3HHx)], and terpolymer poly(3-hydroxybutyrate-*co*-3-hydroxyhexanoate-*co*-3-hydroxyhexa noate) [P(3HB-*co*-3HV-*co*-3HHx)] from different carbon sources and various strains. We also tried to develop various route of PHA production and modify PHAs. These approaches will help us to produce more economical PHAs, improve physical properties of PHAs.