Development of crystallization process for the high purified succinic acid from fermentation broth

<u>원효진</u>, 허윤석, 전영시, 이은주, 홍연기¹, 홍원희*, 이상엽 한국과학기술원; ¹충주대학교 (whhong@kaist.ac.kr*)

Succinic acid has recently been drawing much interest as a raw material for biodegradable polymer. This study deals with the development of purification and separation processes required to produce the highly purified succinic acid from the fermentation broth produced by recombinant microorganism, Mannheimia succiniciproducens. The developed process consists of the pretreatment step of vacuum distillation and the crystallization step for the highly purified succinic acid production. Fermentation broth, separated from cells in the fermentation broth by the centrifugation, is applied to the pretreatment processes which is the vacuum distillation for concentration and removal of the volatile contaminated organic acid. The crystallization of highly purified succinic acid from the pretreatment sample solution is conducted at adjusting the pH.