Semibatch and countercurrent predispersed solvent extraction/flotation for recovery of succinic acid

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

In this study, semibatch and countercurrent predispersed solvent extraction (PDSE) of succinic acid were performed in a column with the help of colloidal gas aphron (CGA) flotation. Tertiary amine, trioctylamine (TOA), was used as extractant and 1-octanol was used as diluent. CLA was prepared aqueous solution of anionic surfactant, sodium dodecyl benzene sulfonate (SDBS) and CGA was made of nonionic surfactant, hexadecyl trimethyl ammonium bromide (HTAB). In this work, the effect of flow rate of CGA on extractability and solvent recovery was investigated in semibatch mode. And the effect of PVR and concentration of surfactant solution were also investigated. Finally, continuous countercurrent PDSE / flotation was performed based on the data of semibatch PDSE.