Recrystallization of Cephalosporin Antibiotics with Supercritical Fluids

주준호, 리광화¹, 노경호¹, 임종성², 이윤우* 서울대학교 화학생물공학부; ¹인하대학교 생명화학공학과; ²서강대학교 화공생명공학과 (ywlee@snu.ac.kr*)

Cephalosporin Antibiotics was crystallized by using an Aerosol Solvent Extraction System (ASES) with supercritical CO2, where the particle size and morphology was investigated according to pressure, concentration, and solvent. The yield of particles that were collected in the separated membrane filter was about 80%. The particles were analyzed by a Scanning Electron Microscopy (SEM), which showed that the size of primary particle was measured to be 100~200nm and the morphology is similar to spherical type. The secondary particle size was about 300~600nm as a result of primary particle agglomeration.