

Problems and their overcoming in the synthesis of concrete additives during utilization of industrial waste

김빅토르^{1,2}, 최상원^{1,*}, 김은영¹, 장우석¹, 문철호¹
¹전남대학교; ²우즈베키스탄 일반 및 무기화학 연구소
(sunchem@chonnam.ac.kr*)

In this study, a solid waste from terephthalic acid (TPA) manufacturing process was treated by Fenton oxidation. In fact, the proposed process for producing concrete additives comprised of a multi step reaction, in the course of which the following tasks and problems were solved: a) partial decomposition of main organic components in TPA waste; b) synthesis of substances with surface active properties; c) giving them a concrete plasticizing ability; d) stabilization of water based suspension from these surfactants.

All the obtained results were analyzed in comparison with those of standard concrete additives.