

Separation of ice crystal from toxic wastewater

강인규, 김광주[†]

한밭대학교

(kjkim@hanbat.ac.kr[†])

In this study, toxic wastewater is treated by crystallization, The toxic wastewater is produced from the high-energy material manufacturing process.

In the manufacturing of explosives, huge volumes of wastewater that contains non-biodegradable nitro compounds are generated. The wastewater causes a serious environmental pollution.

Wastewater treatment methods such as supercritical water oxidation, incineration, adsorption have already been developed. In this study crystallization is used to purify the wastewater. Crystals purity is determined by the inclusion impurities. By controlling the ice crystal production process, it is possible to treat the toxic wastewater.