

Recovery of the uranium from low grade ore leach liquors by solvent extraction technique

Jyothi Rajesh Kumar, 김준수*, 이진영, 윤호성

Korea Institute of Geoscience & Mineral Resources (KIGAM)

(jskim@kigam.re.kr*)

Uranium needs going very fast in new millennium life styles. Now-a-days the people daily life depending on the electrical and electronic goods, as well as for rapid economic growth also depends on the countries exports and imports of the goods. For industrial developments and cultivation needs for developing/un-developed countries depends on the electricity. Uranium is the main source to generate the atomic power as cheap and more quantity of the electricity will generate. The present scientific investigations focused on uranium extraction from low grade ore leach liquors and possible separation with other associated elements. Amid based commercial extractant such as Alamine 36 dissolved in kerosene and used as a potential extractant for uranium recovery. For any solvent extraction process development first step is to know the optimum acidic condition or pH condition to extract the targeted metal quantitatively and present study also we studied the initial pH change and measured the uranium extraction. Finally McCabe-Thiele diagrams and follows by counter current extraction procedure was test for uranium recovery.