

A batch complexation-ultrafiltration coupling process was studied at the laboratory level for pollutant removal and wastewater reuse from industrial wastewater containing lead (Pb^{2+}) ion (Zhang and Xu, 2003). Pb^{2+} ion could not be retained by ultrafiltration membrane, therefore, Pb^{2+} ion was complexed with polyacrylic acid and then ultrafiltered. At optimal operating conditions (pH 7.15, $L = 1$, $\Delta P = 200$ kPa, and tangential velocity of 0.6 m/s), the rejection of Pb^{2+} ion was more than 99.98%, flux was 38 l/m²h, and the permeate water could be reused