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STUDY OF THE COPPER (II) REMOVAL FROM AQUEOUS SOLUTIONS BY CHELATING RESIN PUROLITE S930

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Abstract

This work examines the influence of experimental conditions on the copper (II) ions removal from aqueous solutions using chelating ion exchange resin Purolite S930. The influence of solution pH, initial metal concentration, contact time, temperature, ionic form of the resin and resin dose was studied in batch experiments. The percent of Cu (II) removal has a maximum at pH 5.0 (buffered solutions), and increases with the increasing of resin dose, of the contact time and of temperature and decreases with increasing initial concentration of solution.

Key words: copper, ion exchange, Purolite S930, removal, wastewater treatment

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