



Separation and Preconcentration of Copper (II) ion by Cloud Point Extraction Methodology

Mohamed A.-Z. Eltayeb, Mona A. Hassan*

Department of Chemistry, Faculty of Science and Technology, Alneelain University, Khartoum, Sudan

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Abstract: A cloud point extraction procedure was presented for the preconcentration of Cu (II), from aqueous solutions. After complexation by diphenylthiosemicarbazide for the first time, the analyte ions are quantitatively extracted in Triton X-100 (1% v/v) following centrifugation. The extraction was carried out at pH 6.0, temperature of 80.0 °C for a period of 25 minutes. The extract was dissolved in 1.0 ml each of 4.0 M nitric acid and methanol and analysed by flame atomic absorption spectrometry (FAAS). The procedure gave a ten- Fold extraction factor.

Keywords: *diphenyl thiosemicarbazide, cloud point extraction procedure, copper, FAAS*

*Corresponding: E-Mail: monachem1@hotmail.com; Tel 00249908427856; Fax. 0024983789055