



**Cloud point extraction (CPE)
Part I: Removal of Bromocresol green with neutral surfactant (TX100)**

D.S.V.N.M. Ramamurty, Md. Asif and K. Ramakrishna*

*Department of Chemistry, Institute of Science, GITAM University, Visakhapatnam, 530 017, **INDIA**

Email: karipekdir@gmail.com

Accepted on 21st March 2016

ABSTRACT

A cloud-point extraction (CPE) process using the nonionic surfactant, Triton X-100, for the separation of bromocresol green (BCG) from aqueous solution is investigated using UV-vis spectrophotometer. The optimum extraction conditions viz. pH, dye and surfactant are arrived by OVAT (one variable at a time) procedure. The calibration model for variation of absorbance versus analyte is linear. Thermodynamic parameters (entropy, enthalpy and Gibb's free energy) are reported.

Keywords: Bromo cresol green (BCG), Cloud point extraction, Triton X-100, UV-vis spectra, calibration.
