

Differential electrolytic potentiometric titration method for the determination of ciprofloxacin in drug formulations. Abulkibash, Abdalla M.; Sultan, Salah M.; Al-Olyan, Abeer M.; Al-Ghannam, Sheikha M. KFUPM, Chemistry Department, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. *Talanta* (2003), 61(2), 239-244. Publisher: Elsevier Science B.V., CODEN: TLNTA2 ISSN: 0039-9140. Journal written in English. CAN 140:47647 AN 2003:795413 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

A simple and rapid differential electrolytic potentiometric titrn. method for the detn. of ciprofloxacin was developed. The work is based on the fast complexation reaction between iron(III) and ciprofloxacin in a ratio of 1:3, resp., in sulfuric acid media of 0.09 mol dm⁻³. Among the electrodes tested silver amalgam electrodes were found to be a suitable indicating system. By applying a c.d. of 0.5 μ A cm⁻² to these electrodes and using iron(III) soln. of 0.097 mol dm⁻³ as a titrant, normal titrn. curves were obtained. The method was successfully applied for the detn. of ciprofloxacin in drug formulations as low as 4.0 ppm.