

عنوان مقاله:

Determination of Acidity Constants of p-Rosolic acid and Bromoxyleneol Blue by Solution Scanometric Method

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خلاصه مقاله:

Recently solution scanometry, as a new, simple, fast, portable, and economic method was introduced for determination of acidity constants of indicator and dyes. In this study, a method was applied for the determination of the acidity constant of p-Rosolic acid (RA) and Bromoxyleneol blue (BXB) indicators. The method is based on scanning of Plexiglas® sheet containing colored solutions with a flatbed scanner. The obtained images were analyzed to red, green, and blue (RGB) values using software written in visual basic ۶. For comparison, the acidity constants of the indicators were determined by spectrophotometric method using the Hypspec program. The corresponding distribution diagrams were also drawn through the Hyss۲۰۰۹ program. The comparison between the presented and traditional UV-Vis spectrophotometric method was performed, and similar trends in results of both methods were observed. The obtained values of pKa by solution scanometric and spectrophotometric method showed good agreement with corresponding values which were reported in the literature.

کلمات کلیدی:

p-Rosolic acid (RA), Bromoxyleneol blue, Acidity constant, Plexiglas® cell, RGB parameters

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