عنوان مقاله:

DETERMINATION OF TRACE AMOUNT OF SULFATE ION WITH USE OF A MEMBRANE POTENTIOMETRIC SENSOR

محل انتشار:

سومین همایش ملی تکنولوژی های نوین در شیمی،پتروشیمی و نانو ایران (سال: 1395)

تعداد صفحات اصل مقاله: 5

نویسنده:

M. R. Pourjavid - *NFCRS, Nuclear Science & Technology Research Institute, Tehran*

خلاصه مقاله:

A PVC based membrane sensor as a sulfate selective electrode was prepared with a Nernstian slope of –29.7 mV decade-1 of activity over a wide concentration range. Detection limit of proposed sensor is 8.0 × 10-8 mol L-1 and its response is independent of pH between the values of 2.1 to 7.3. This sensor shows a very fast response time and excellent selectivity for sulfate over a large number of common inorganic anions. It has been successfully applied for the direct and indirect determination of sulfate and zinc in zinc sulfate tablets and also was used as an indicator electrode in the potentiometric titration of sulfate ions

کلمات کلیدی:

Sulfate Selective, PVC Membrane Sensor, Potentiometry, Zinc Octaethylporphyrin