

## Potentiometric determination of cadmium in fertilizers

Alina Catrinel ION, Ion ION and Luminița BARBU

*Dept. of Analytical Chemistry, University Politehnica of Bucharest, 1 Polizu, Bucharest, Romania*

---

**Abstract** The paper investigates a possible application of ion selective electrodes in cadmium determination in extracts from certain fertilizers. Selective ion – exchangers are used for heavy metal separation from the matrix of the fertilizer extract. Supports modification with dithizone functional groups was realized through an ion exchange reaction between the sulphonated dithizone and ion exchanger Amberlite IRA 400. The basic idea of this work is to measure Cd from some phosphate rocks, phosphoric acids and phosphates through potentiometric measurements and to compare these results with those obtained through atomic absorption spectrometry. Preliminary results are presented.

*Keywords:* cadmium, fertilizers, AAS, potentiometric determination

---