STATISTICAL STUDY ON THE DISTRIBUTION RATIO OF U(VI) AND U(IV) SPECIES IN SEVERAL ROMANIAN URANIUM ORES

Marian E. Răileanu1, Gabriel Barbir2, Alexandru Cecal1∗

1"Al. I. Cuza“ University of Iaşi, Faculty of Chemistry, Department of Inorganic and Analytical Chemistry, 11 – Carol I, Blvd. 700506, Iaşi, Romania
2Uranium National Company, Suceava Branch, Crucea, Romania.

Abstract

This paper deals with a statistical treatment applied to the determination of U(VI)/U(IV) ratio in some uranium ores, depending on the pH and humidity samples taken out directly from a uranium mine. The concentrations of different uranium species were determined spectrofotometrically. Some statistical parameters were calculated for a subsequent statistical interpretation of the experimental data.

Keywords: uranium, uranium-bearing ore, U(VI), U(IV) species, uranium geochemistry, sampling, statistical study

∗ Author to whom all correspondence should be addressed: acecal@ch.tuiasi.ro