O17-7	MULTIELEMENTAL DETERMINATION IN BAUXITE ORES BY NEUTRON ACTIVATION ANALYSIS

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In this paper it is presented the work done for the determination of several elements in bauxite ores using fast neutron activation analysis. The sample is taken from two main sources in Albanian. The two types have differences in the content of Silicon. The set-up used for elemental determination is composed of a seated-tube neutron generator type KAMAN, pneumatic transfer system, HPGE detector and multichannel analyzer, connected on-line with a computer. The elements determined are Al, Si, Mg, Mn, Zn, Fe, and Cu. Due to complex spectra after irradiation, a combination of thermal and fast neutrons is realized. The thermal neutrons field is created surrounding the target with paraffin as moderator. Also several measurements are done with different cooling times to allow the unfolding of the spectra. The Gaussian fitting is used for the spectrum shape. This method has been used for the analysis of a large number of samples, in order to judge on the quality of the mineral and reserves of the mines under exploratation.