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Novel optical approach to experimental sizing the ion clusters of oxyhydrate gels of *d*- and *f*-elements

© **Juriy I. Sucharev**,* **Boris A. Markov**,+ **Inna Y. Apalikova**, **Irina Y. Lebedeva**, and **Konstantin I. Nosov**
Department of colloidal and coherent chemistry. Chelyabinsk state university. Br. Kashirinyh St., 129. Chelyabinsk, 454000. Russia. Phone: +7 (351) 799-70-63. E-mail: yuri_sucharev@mail.ru

*Supervising author; +Corresponding author

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Abstract

In the submitted work the novel optical approach to the experimental defining of medium sizes of oxyhydrate clusters has been offered. The system of the equations has been obtained and calculation procedure for defining the sizes of clusters has been considered. These equations are easily united with the Lizegang system of equations. Thus it is possible to obtain much information on the system: the ratio of concentrations in clusters and in the intermicellar liquid, proportions of cluster sizes and etc.

Examples of calculations of ion clusters of silicon oxyhydrate with the help of the offered method have been given.