

Comparative schemes of cluster streams in the study of phase portraits of colloid-chemical systems

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Keywords: *oxyhydrate gel systems, oxyhydrate noise, colloidal clusters, spontaneous pulsating current, spike splash, the diffuse double electric layer.*

Abstract

We have shown the "explosive" behavior of nanocluster splashes in the real objects of tin oxyhydrate, i.e. the input of such oxyhydrate system is fed by some external signal that initiates the effect of stochastic resonance, synchronous with the input signal. In addition, in the presence of reaction noise a surprising effect of coherent resonance was demonstrated, that is, a statistically validated strictly oscillatory motion in oxyhydrate of d-elements was observed.

A quantitative criterion (method) for tracking the phenomena of periodic stochastic properties of colloidal systems was found. Spatial oxyhydrate structures and objects with ratchet are exposed to noise or fluctuations and the geometry of the Ratchet-forming space. These parameters should be considered in the induction of the diffusive motion. Uncorrelated Ratchet potential simulates the stochastic external forces or, in general, stochastic changes in the reactions of clusters in the conditions of such transition. This should take into account an element of symmetry breaking to select the direction of the Brownian motion of clusters.