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Influence of the nature of the polymeric stabilizer on self-organizing and structurally morphological features of selenium containing nanosystems

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*Supervising author; ⁺Corresponding author Keywords: self-organization, structure, nano-composites, nano-systems, selenium, polymeric stabilizers.

Abstract

Light scattering, UF-spectrometric and wide angle X-ray scattering has been conducted by comparative study of dimensional characteristics of selenium containing nanosystems on the basis of polymeric matrixes of the various nature: nonionic polymers – polyvinylpyrrolidone and oxyethylcellulose, cation polyelectrolyte – poly-N,N,N,N-triethylmetacryloiloxyethilammonium methylsylfate, anion polyelectrolyte poly-2-acrylamide - 2-methylpropanesulfonic acid and polimethacrylic acid. Influence of the nature of the polymeric stabilizer on self-organizing (kinetic formations) and structural features (hydrodynamic radius, root-mean-square radius of inertia, radius of a selenic kernel and average density) of selenic nanosystems is established.