



## Possibilities of Synthesis of Monodisperse Latexes for Immunodiagnostic Drugs

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### Abstract:

Monodispersed latexes are polymer nanosystems that are widely used in high technology and in particular in the production of immunodiagnostic drugs. The main requirements for monodisperse latexes are the chemical structure of the surface of latex particles and their diameter and latex stability. The main method for the synthesis of latexes is radical polymerization in heterogeneous systems of monomer-water. The mechanisms of nucleation of latex particles and the formation of their surface structure in such systems are discussed in the report. The report presents the thermodynamic possibility of obtaining monodisperse systems in microheterogeneous monomer-water systems. In the report indicates methods for the synthesis of stable latexes with specified colloidal properties without the use of stabilizing substances and without mixing the system. In the report also demonstrates electron microscopic photographs of latexes, which were obtained on the basis of diene and vinyl monomers.

### Biography:

Arnos Arshaki Hovhannisyán received his doctorate at the age of 31 from the Moscow Technical Institute of Fine Chemical Technologie. He is Doctor of Chemical Sciences, Professor. He is head of Laboratory of Polymer



Dispersions. He published more than 100 works in well-known journals and a monograph titled “The Theory of Emulsion Polymerization”.

### Recent Publications:

1. Hovhannisyán AA, et al Eur J Med Chem, 2020.
2. Hovhannisyán AA, et al Phys Rev E, 2020
3. Hovhannisyán AA, et al Spectrochim Acta A Mol Biomol Spectrosc, 2020
4. Hovhannisyán AA, et al Inorg Chem, 2018.
5. Hovhannisyán AA, et al Phys Rev E, 2018
6. Hovhannisyán AA, et al Bioorg Med Chem Lett, 2017

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