

The using of this criterion is caused by characteristic situations, in which the insurance company not aspires to a significant prize at reinsurance of a serious risk so much, how many does not wish to go bankrupt owing to the insurance occasion.

It is represented to perspective exertion of evolutionary (genetic, ant algorithms and other) algorithms of functional optimization for the decision of similar tasks connected to operative search of rational variants of reinsurance of the especially serious risk. *Result is the creation of the new scientific direction on a joint of the realm of reinsurance and the realm of information technologies, namely: methods of operative rational reinsurance of especially serious risk on the basis of the evolutionary algorithms.*

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THE SIMILARLY CHARGED POLYELECTROLYTES' MULTICOMPONENT SYSTEMS AGGREGATE CAPABILITY

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The high – molecular compounds aggregate capability study, having resulted in the disperse phase sedimentationally unstable state, is being presented the obviously scientific and the practically real interest at the dispersions destabilization processes examination. The individual flocculants use just in the compound

multi – component dispersions is not being permitted to achieve the high level efficiency of the dispersions division in the majority of the cases. Therefore, the use bases development of the cationic polyelectrolytes composition is being presented the perspective direction just in this field of the researches.

The aggregate capability of the cationic polyelectrolytes compositions peculiarities finding, on the basis of the kinetic stability analysis of the model kaolin aqueous suspension and the activated sludge structure formation processes is the work's aim.

The industrially produced brands' cationic polyelectrolytes: CF – 91, VPC – 402, CF – 99 and Praestol – 650 have been used, as the flocculants' specimens. The flocculation kinetics have been investigated by the turbidimetric method on the model kaolin aqueous suspension (e.g. the KSD brand with the 18 mkm particles' average size) with the 0,8 mass % disperse phase concentration. The D optical density has been measured at the UNICO 1201 spectrophotometer.

The synergism effect has been discovered, in the result of the RE binary and the ternary mixtures aggregate capability investigation for the compositions' most part. The more polymers' differences by their chemical constitution, the more probable synergistic result display at such reagents use just in the mixture.

The final results of the carried out experimental – industrial tests on the compacted surplus activated sludge dehydration just at the biological treatment facilities in the city of Volgograd have been shown, that the received flocculants' binary mixtures introduction is, noticeably, being lowered just the structure formation critical concentration and also the suspended matters content just in the filtrate.

Thus, the correlation between the data on the kaolin suspension flocculation kinetics and the activated sludge's structural and mechanical characteristics just at the compositions from the cationic polyelectrolytes introduction has already been revealed.

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