

## Modeling Aggregation of Insoluble Phase in Reactors

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**Abstract :** In the paper we submit the modification of kinetic Smoluchowski equation for binary aggregation applying to systems with chemical reactions of first and second orders in which the main product is insoluble. The goal of this work is to create theoretical foundation and engineering procedures for calculating the chemical apparatuses in the conditions of joint course of chemical reactions and processes of aggregation of insoluble dispersed phases which are formed in working zones of the reactor.

**Keywords :** binary aggregation, clusters, chemical reactions, insoluble phases

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