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Separation Science and Technology (Philadelphia)
Volume 52, Issue 18, 12 December 2017, Pages 2802-2814

Simplified flocculation model for inorganic and polymer flocculants (Article)

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Abstract

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Simulation of the flocculation process using both inorganic and polymer flocculants is very difficult because there are many factors that influence the process. In this study, a model that enables the visual understanding of the qualitative trends of the flocculation system using both inorganic and polymer flocculants is proposed. It is a simplified one-dimensional model that expresses flocculation under various additive manners of the flocculant. Various kinds of thought experiments as well as experimental runs with model flocculants were carried out based on the model; the results demonstrate that the model can express many empirical qualitative trends of flocculation. © 2017 Taylor & Francis.

Author keywords

Flocculation model inorganic flocculant polymer flocculant thought experiment

Indexed keywords

Engineering controlled terms: Polymers

 Compendex keywords Flocculation model Flocculation process Flocculation systems Inorganic flocculant
One-dimensional model Polymer flocculant Thought experiments

Engineering main heading: Flocculation

ISSN: 01496395

CODEN: SSTED

Source Type: Journal

Original language: English

DOI: 10.1080/01496395.2017.1335322

Document Type: Article

Publisher: Taylor and Francis Inc.

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