

Abstract Submitted  
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**Hindered rising in aggregating polydisperse particle suspensions**

SHIHAI FENG, KIM RASMUSSEN, ALAN GRAHAM, BING DAI, Los Alamos National Lab — We describe a direct simulation method that effectively determines the appropriate hindered rising behavior of polydisperse particle suspensions. Our method allows adequate representation of the hydrodynamic interactions as well as system specific colloidal interactions. Simulation results are in good agreement with experimental data obtained by MRI imaging. Our results demonstrate the importance of particle aggregation in the hindered rising suspensions.

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