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Fluidization and Flow Properties of Fine Cohesive Powders

Guest Editor:

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Message from the Guest Editor

The Special Issue will address experimental/theoretical research and latest progress in the science and technology of fluidization and flow behavior of fine/ultrafine particles. The interest in using this type of granular materials raises many questions around how they can be handled and processed in large-scale applications. In this framework, fluidization is one of the most effective available techniques in ensuring continuous powder handling and dispersion characterized by good heat and mass transfer coefficients. However, fluidization of fine powders is very challenging due to their intrinsic cohesive nature deriving from strong interparticle forces. In particular, interparticle forces are closely related to powder flowability, a complex of different characteristics generally adopted for measuring the ability of a powder to flow under specified conditions.

Articles dealing with fundamental aspects of powder flow behavior, also highlighting the complex link between local particles interactions and their fluidization behavior, and with methods to predict and improve powder flowability are very welcome.









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Editor-in-Chief

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Message from the Editor-in-Chief

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