Recent Advances in Fluidized Bed Hydrodynamics and Transport Phenomena

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Deadline for manuscript submissions:
closed (31 October 2020)

Message from the Guest Editors

This Special Issue focuses on fluidized bed hydrodynamics and transport phenomena and aims to attract top-quality studies addressing recent advances in the fundamental and applied aspects of fluidized beds and fluidized systems. A non-exhaustive list of topics follows:

1. Green energy technologies (CLC, CCSU, hydrogen, biofuels, solar)
2. Solids mixing and separation in gas, liquid, and three phase systems
3. Cohesive powder fluidization: characterization methods, assisted fluidization
4. Complex particle production: synthesis, agglomeration, granulation, coating
5. Particle attrition and fragmentation (jets, cyclones, impacts)
6. Advanced computational techniques (TFM, DEM-CFD, MP-PIC, coarse-graining, AI)
7. Dynamics, scale-up, and optimization
8. Innovative solutions (micro-scale, staged) and applications
9. Ancillary equipment: cyclones, non-mechanical valves

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Special Issue
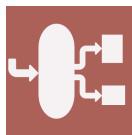
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Message from the Editor-in-Chief

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