

Special Issue

Nanoparticle Deposition on Walls—Its Mechanism, Control, and Effect Evaluation

Message from the Guest Editor

Particle deposition denotes an arrival of solid or liquid particles suspended in a fluid onto a wall (a gas–solid or gas–liquid interface) followed by a stable attachment of the particles. Particles of the nanometer scale is becoming of greater interest lately. Even a very trace amount of deposited nanoparticles can cause serious problems in certain manufacturing and machining processes that require high precision at a molecular or nanometer scale level. Particle deposition is driven by the mechanisms in which fluid motion and various forces related to particle transport and attachment are integrated. For any of the desirable and undesirable nanoparticle depositions mentioned above, peculiar characteristics of the deposition mechanisms owing to the extremely small particle size need to be understood sufficiently. This Special Issue will cover recent advances in the investigation of the deposition mechanisms, control and prevention of particle deposition, and evaluation of the effects of deposition upon the walls and the human organs onto which deposition took place.

Guest Editor

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