

Modeling Study on the Transport of Particles in Fluids

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In this talk I will be focusing on our recent results on the transport of particles in fluids combining the fluid equation and the particle equation in order to understand how the particles aspect ratio influence the sedimentation and floating of particles. A thorough mathematical model considering fluid and particle motion, integrated numerical schemes and the numerical simulation will be discussed in this talk.

(This is a joint work with Prof. Thomas, Goetz of Uni-Koblenz, Germany and Dr. Nityananda Roy, IIT Madras).

https://math.iitm.ac.in/public_html/slnt/index.htm