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Leges Motus*



Seminar über Fragen der Mechanik

zu folgendem Vortrag wird herzlich eingeladen

Dienstag, **30.01.2018, 14:15 Uhr**, Egerlandstr. 5, Raum 0.044

Simulating gas transport by Finite Volume Method and Lattice Boltzmann Method

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Semi-volatile organic compounds (SVOCs) are a group of contaminants that exist in indoor air for long time period. Their low emission rate and adsorption on both wall surface and particles make it difficult to study their mass-transfer processes experimentally. The purpose of the current study was to investigate the mass-transfer of SVOCs in indoor air by Computational Fluid Dynamics (CFD) techniques (mainly Finite Volume Method, FVM and Lattice Boltzmann Method, LBM). The fundamental theories of FVM and LBM are introduced firstly. The employment of FVM in the study of SVOCs' adsorption on wall surfaces, and SVOCs' partition on particles by LBM are then presented. Both FVM and LBM reveal detailed mechanism of SVOC mass-transfer in the presence of wall surfaces and particles.

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