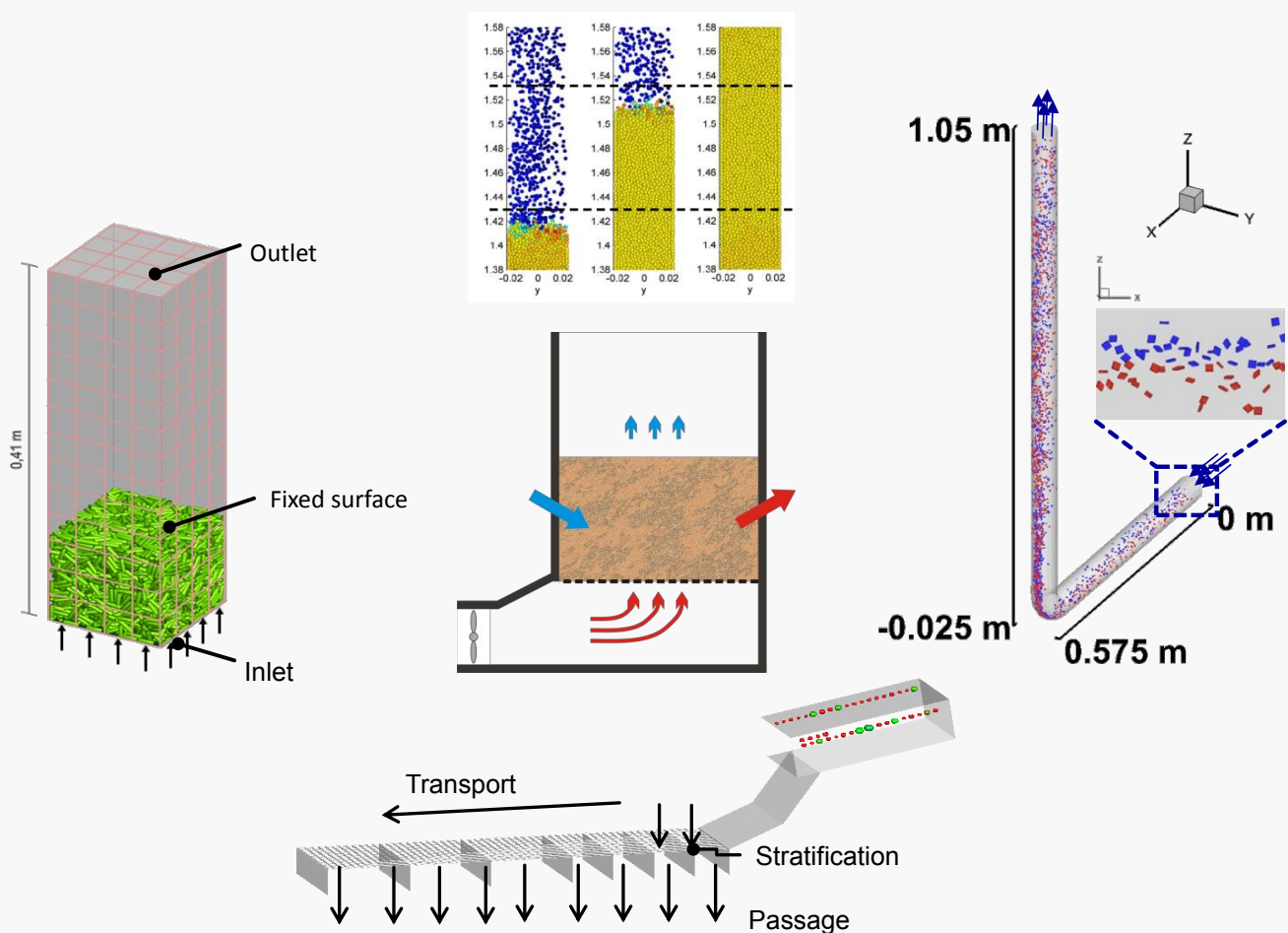


Application of DEM and DEM/CFD simulations in mechanical process engineering

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Often Particle systems in mechanical process engineering consist of heterogeneous particle mixtures with broad size and shape distribution. For these systems mechanical process engineering aims at increasing or decreasing particle sizes, separation of systems by individual particle characteristics, effective particle mixing as well as at storage and transport. From the list of covered processes, process examples (screening, fluid flow through packed beds, mixing, pneumatic transport, drying) are considered in the given presentation and related applicable simulation approaches are critically discussed based on experimental investigations.

