

Abstract Submitted
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Liquid flow through particulate systems: from foam drainage to the settling of semi-dilute suspension FLORENCE ROUYER, OLIVIER PITOIS, NICOLAS LOUVET, ELISE LORENCEAU, Université Paris-Est, LPMDI TEAM — We show that the model of permeability proposed by Kozeny and Carman and originally validated on packed beds of spheres – with porosity around 0.4 – is a particular case and can be extended to liquid fraction from 0.001 up to 0.85 for systems made of monodisperse entities. The knowledge of the specific surface area is essential. This modeling allow us to well describe experimental results from drainage of aqueous dry foam up to sedimentation of semi-dilute suspension.

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