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Viscous fingering in granular materials in a vertical Hele-Shaw cell<sup>1</sup> TAMAS BORZSONYI, Research Institute for Solid State Physics and Optics of the Hungarian Academy of Sciences — The dynamics of the air-granular interface has been studied in a quasi-two-dimensional vertically aligned Hele-Shaw cell experimentally. The air was pressed into the cell at the bottom through a single hole and the development of the upward propagating fingers was analyzed with the help of fast video recording. The behavior of the system was analyzed as a function of the applied air pressure, the grain size and the grain shape by using spherical glass beads or sorted sand particles.

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Tamas Borzsonyi Research Institute for Solid State Physics and Optics of the Hungarian Academy of Sciences

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