

Abstract Submitted
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Capillary Rise and Flow of Complex Liquids in Nanopores

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— We present measurements on the capillary rise (spontaneous imbibition) and pressure driven flow (forced imbibition) of liquids into silica monoliths (namely porous Vycor) permeated by tortuous pores with radii of 4.4nm (V10) and 3nm (V5) resp. The flow properties are studied as a function of the complexity of the building blocks of the liquids (water, n-alkanes and liquid crystals), of shear rate and temperature in the case of the liquid crystal.

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