

# Capillary properties of model pores

## -- Pore

Nano-Liquids, Nano-Particles, Nano-Wetting:  
X-ray Scattering Studies  
P.S. Pershan: Physics & DEAS, Harvard Univ.

Physics of Confined Liquids with/without Nanoparticles:

- > Confinement ⇒ Phase transitions are suppressed and/or shifted.
- > When do liquids fill nano-pores?  
(i.e. wetting and capillary filling).
- > Contact Angles vary with surface structure. (i.e. roughness & wetting)
- > Attraction/repulsion between surfaces. (i.e. dispersions or aggregation)
- > Important for formation of Nanoparticle arrays:  
(i.e. electronic/optical properties, potential use for sensors, catalysis, nanowires)

How will these affect nano-scale liquid devices?  
How will these affect processes that are essential for nano-scale liquid technology?

Description: -

-Capillary properties of model pores

-Capillary properties of model pores

Notes: Thesis(Ph.D.) - Loughborough University of Technology.

This edition was published in 1989



Filesize: 46.96 MB

Tags: #Capillary #Model

## British Library EThOS: Capillary properties of model pores

Dunster, in , 2010 20. The experiments were performed at 4 discrete values of the injection rate, i.

## Multiphase Flow in Porous Media: II. Pore

This approach offers a more rigorous method to study pore-scale physics under a wide variety of flow conditions, at the expense, however, of significant computational resources and time. Figure shows the extracted pore network from 3D virtual image identical to the one shown in Fig.

## British Library EThOS: Capillary properties of model pores

Society of Petrophysicists and Well-Log Analysts.

## Multiphase Flow in Porous Media: II. Pore

The micrographs obtained from PFM analysis, supplemented with SEM—EDS studies, reveal that only the top, surface portion of the concrete has been attacked by acidic solution.

## Pore

The most commonly used parametric correlations are those of Brooks and Corey and van Genuchten. In this work the two-phase transport properties, involving capillary pressure and relative permeability in a porous fibrous media, PMFSS, are performed using SCLBM and PNMs with different definitions of throat radius.

## Capillary Bundle Model

A further complication can arise in that humidity drying of cores may sometimes leave water of condensation in clay-free micropores.

## Capillary Bundle Model

They found that diffuse growth of C—S—H had to be considered in order to obtain better agreement between the experimental MIP tests and the simulations.

### **Multiphase Flow in Porous Media: II. Pore**

In each integer time step, the walker executes a random jump to one of the nearest face-connected voxels. Comparison of NWP distributions of SCLBM and PNM The advantage of computational simulation in comparison to experimental testing is the facility of observing the local phase distributions.

## Related Books

- [France - Paris.](#)
- [Few months in New Guinea](#)
- [Xiangshan mai ban yu jin dai Zhongguo](#)
- [Plant gene isolation - principles and practice](#)
- [Introduction to mapwork and practical geography.](#)