Contribution ID: 28 Type: Lecture (2x45min)

Response of nanoporous media to humidity

Thursday, 1 July 2021 13:30 (1h 30m)

I will present a variety of responses associated with humidity changes in nanoporous media or micro/nano composites, which we investigated using artificial systems. These phenomena include capillary flows (imbibition, drying), osmotic flows, nucleation (cavitation, precipitation) and self-organized evaporation patterns. Through these examples, I will discuss how the interplay of thermodynamics and transport can result in interesting dynamics that can be triggered using external humidity as a control parameter.

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