

Abstract Submitted  
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**Partial saturation in capillary rise into deformable porous material** JAVED SIDDIQUE, Penn State York, DANIEL ANDERSON, George Mason University — We investigate the partial saturation dynamics of capillary rise into a deformable porous material. Experiments show a deviation from the classical Washburn model dynamics after early times and our aim in this work is to investigate this deviation. We consider a three-phase mixture theory model with solid, liquid, and gas phases. We compare the results of our model to experimental data.

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