

Analysis of Contact Angle Hysteresis

(Talk #9)

Xiao-Ping Wang*

Department of Mathematics, Hong Kong University of Science and Technology, Hong Kong

***Email of Presenting Author: mawang@ust.hk**

We analyze the wetting hysteresis on rough and chemically patterned surfaces from a phase-field model for two phase fluid. In the slow motion, the dynamic of the contact angle can be derived from the matched asymptotic expansions. The contact angle hysteresis is then studied as the size of the pattern becomes small.