

Abstract Submitted
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Effect of Salts on Drainage of Foam SOUMYADIP SETT, University of Illinois at Chicago, STOYAN KARAKASHEV, University of Sofia, Bulgaria, STOYAN SMOUKOV, University of Cambridge, UK, ALEXANDER YARIN, University of Illinois at Chicago — Gravitational drainage from thin planar vertical sodium dodecyl sulfate (SDS) films in the presence of inorganic salts was experimentally studied. Strong ion-specific effects of the counter ions were found to affect the stability and the rate of drainage of the planar foam films as a function of concentration of the inorganic salts. The counter-ions can either stabilize (below the critical concentration) or destabilize the foam films. We found that the strongest foam stabilizer salt became the strongest foam destabilizer beyond its critical concentration.

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