

Supplementary video files for ‘Late stage drainage of block copolymer stabilized emulsion drops’

S1 – Normal Drainage

A video of an oil (toluene) droplet pushed against a flat mica substrate and the consequent drainage of the trapped outer fluid captured using Laser Scanning Confocal Microscopy (LSCM). The number of interference rings reduce as the height of this draining cap is decreased and ultimately disappear as the contact area becomes flat.

S2 – Oil Breakout

LSCM video of the oil breaking through the PS-PEO emulsion droplet during a thin film drainage process. As the PS-PEO concentration is reduced the oil-water interface is exposed to the mica surface. This leads to the inner fluid (toluene) to break through and wetting the mica surface.

S3 –Bridge Drainage

LSCM video of a bridge formation at the contact area during a thin film drainage process. As the trapped fluid cap is moved towards the contact ring, a bridge is formed making the film to drain faster.