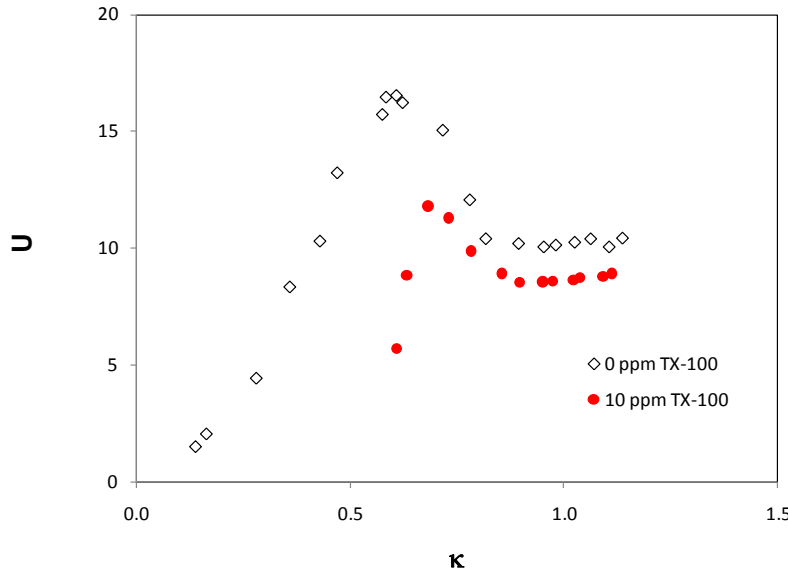


Effect of Surfactant Solubility on Drop Dynamics

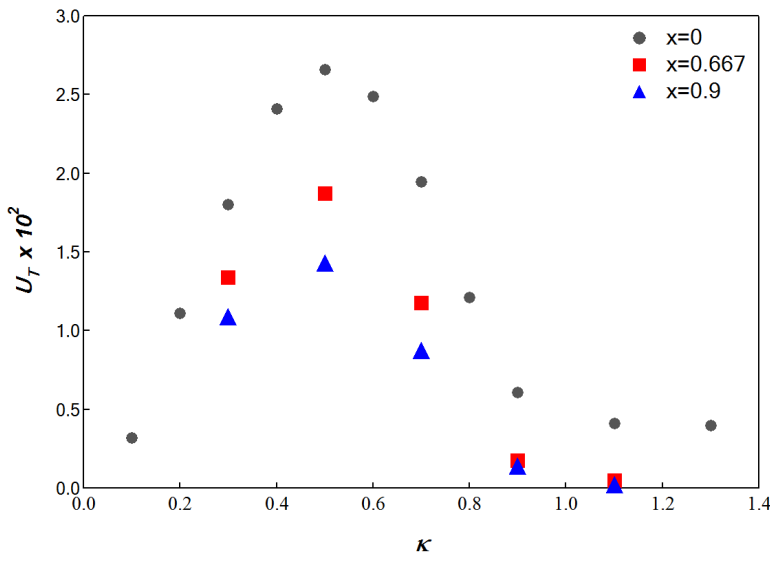
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Below CMC, surface mobility reduced due to Marangoni stresses

Experiments: Air bubbles in carboxy-methyl cellulose

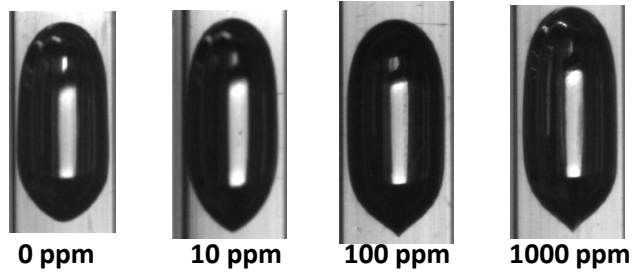


Numerics: Effect of surface coverage on drop mobility



Surfactant effects on bubble shape is geometry dependent

Cusps become more pronounced for 3D geometry
TX-100 in CC solution in 10 x 10 mm square channel



Cusps tend to disappear for 2D geometry
TX-100 in CC solution in 16 x 3 mm rectangular channel

