"COFFEE STAIN EFFECT" AND "CHEERIOS EFFECT" IN AN EVAPORATING DROP

Hyunsoo Song and Jung Yul Yoo School of Mechanical and Aerospace Engineering Seoul National University Seoul 151-744, Korea

SUMMARY. We report that high and low density particles in a sessile evaporating drop migrate respectively toward the edge and the center of the drop by "coffee stain effect" and "Cheerios effect." By analyzing the distribution of particles in a dried drop, we reveal that the particles can be separated efficiently at small contact angles.