

Abstract Submitted
for the DFD14 Meeting of
The American Physical Society

Dynamics of Rising Dispersant Laden Oil Drops in a Quiescent Environment KHALIL CASTILLO-APONTE, Ithaca College, FARAZ MEHDI, JIAN SHENG, Texas Tech University — We study the dynamics of rising oil drops in a quiescent fluid chamber under uniform and density stratified conditions. Digital in-line holography allows for high resolution topological measurements and tracking of drop trajectories. Statistics of rising velocities, drop shapes and sizes are compared as functions of different oil-dispersant ratios. A conceptual model of an oil drop developing appendages and its subsequent breakdown into much smaller droplets is also discussed.

Faraz Mehdi
Texas Tech University

Date submitted: 01 Aug 2014

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