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Freely Suspended Drops Rising in Miscible Environments ENDRE JOACHIM MOSSIGE, VINNY CHANDRAN SUJA, DANIEL WALLS, GERALD FULLER, Stanford University — Our work focuses on an experimental investigation of droplets freely rising through a miscible, more viscous liquid. We report observations of droplets of water rising through glycerol and corn syrup. The drops continually grow more oblate and, as they mix with the ambient liquid, their volume increases and their velocity decreases, eventually following power laws at long times. We present scaling relations that explain the observed phenomena.

Endre Joachim Mossige
Stanford University

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