

Electronic Supplementary Material

File caox.avi

Title Emerging precipitate pattern

Legend Calcium oxalate precipitate pattern emerges as a dense gravity current containing calcium ions spreads from the center inlet into sodium oxalate solution. The radial lines along which the precipitate accumulates results from the hydrodynamic instability at the tip of current. Field view: 21 cm x 18.5 cm, frame rate: 10 fps, acceleration rate: 30.

Keywords Precipitate pattern, self-organization, emergence of pattern, gravity current, hydrodynamic instability

File tip.avi

Title Growing tip of the precipitate

Legend Advancement of the gravity current showing the evolution of convection rolls at the tip that tends to accumulate the precipitate along radial lines. No significant precipitation occurs behind the front. Field view: 3.8 cm x 2.9 cm, frame rate: 10 fps, acceleration rate: 10.

Keywords Precipitate pattern, self-organization, emergence of pattern, gravity current, hydrodynamic instability