

ELECTRONIC SUPPLEMENTARY INFORMATION

CO₂ Dissolution and Design Aspects of a Multi-Orifice Oscillatory Baffled Column

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SUPPLEMENTARY RESULTS AND DISCUSSION

Figure S1 and S2 support the discussion of flow patterns analysis in the MOBC, detailed in section 3.4 of the manuscript. This data was extracted from the flow visualisation films recorded with a high speed camera also available free of charge as additional Electronic Supporting Information.

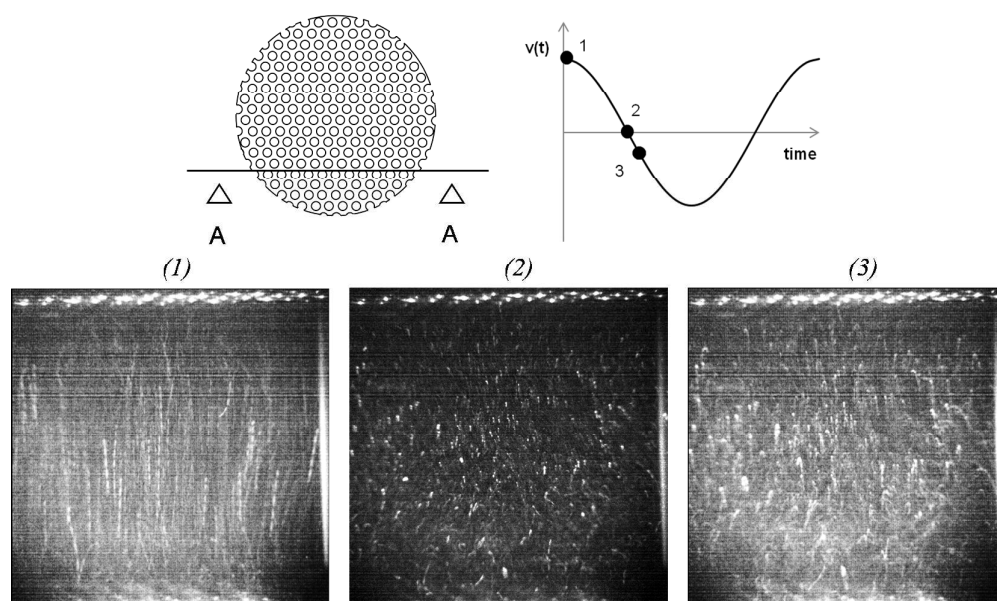


Figure S1. Flow visualisations of liquid mixing in the MOBC configured with baffle design 2 using tracing polyamide particles ($f = 4$ Hz, $x_0 = 5$ mm, $Re_o' = 2310$, $St' = 0.2$). Images are shown for 3 stroke positions throughout an oscillation cycle (a film containing a long image sequence is shown in supplementary data).

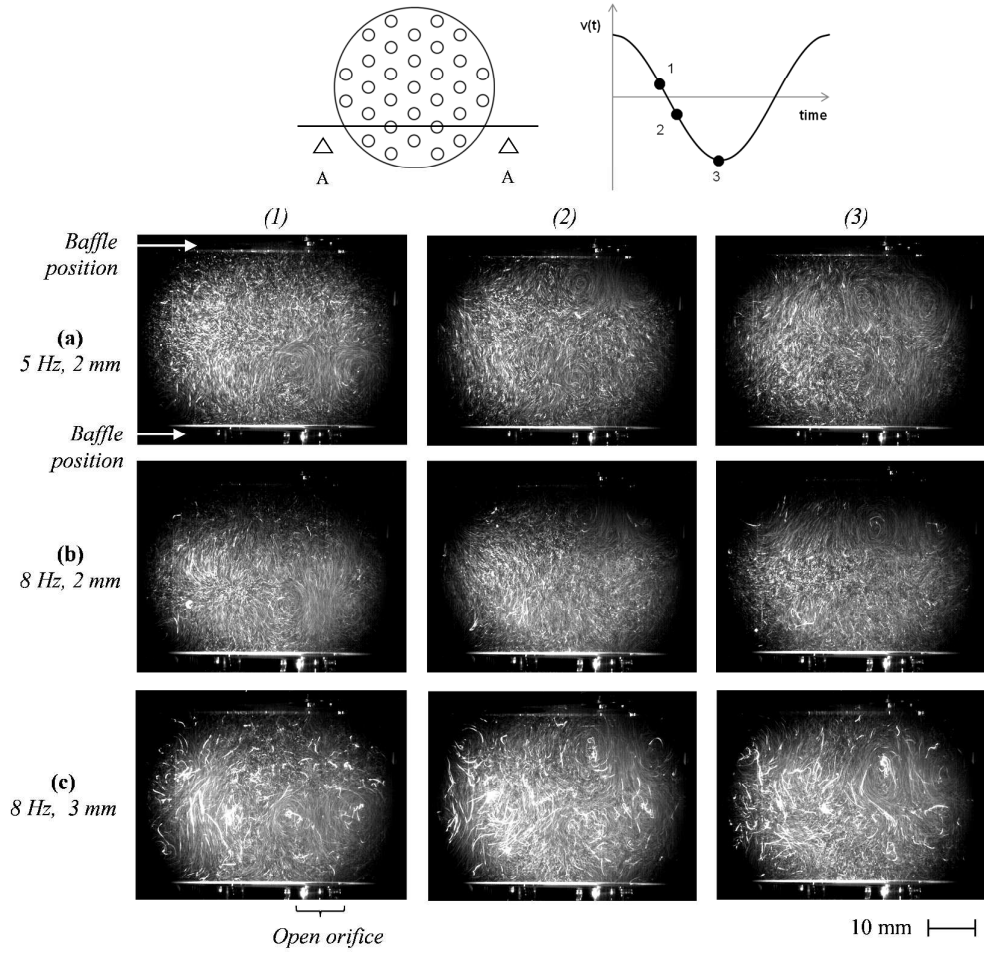


Figure S2. Flow visualisation of liquid mixing in the MOBC configured with baffle design 3 using tracing polyamide particles. Three different fluid oscillation conditions are shown: (a) $f = 5$ Hz, $x_0 = 2$ mm, $Re_o' = 10110$, $St' = 1.1$; (b) $f = 8$ Hz, $x_0 = 2$ mm, $Re_o' = 16170$, $St' = 1.1$; (c) $f = 8$ Hz, $x_0 = 3$ mm, $Re_o' = 24260$, $St' = 0.7$ (the full image sequences are shown in film files supplied as supplementary data).