

Details of ESI: Movie Files available by Download

1. movie_1.avi

- Particle concentration: $\phi = 0.505$
- Pump speed (\equiv applied pressure): $v_2 = 0.612 \text{ ml min}^{-1}$

This movie shows a sub-set of the sequence of images recorded. The images have been cropped to show a small section of the frame containing the lower part of the entrance to the capillary. The movie starts a few seconds after the vortices have formed. Tracer/dust particles can clearly be seen circulating in a clockwise direction near the capillary entrance.

2. movie_2.avi

- Particle concentration: $\phi = 0.52$
- Pump speed (\equiv applied pressure): $v_2 = 0.612 \text{ ml min}^{-1}$

This movie shows a sub-set of the sequence of images recorded. The images have been cropped to show a small section of the frame containing the upper part of the entrance to the capillary. The movie starts a few seconds after the vortices have formed. Tracer/dust particles can clearly be seen circulating in a anti-clockwise direction near the capillary entrance. At this particle concentration the recirculation zone is larger than at $\phi = 0.505$ and is not fully observable in this movie.