## WEOMovie1.mpg

This movie corresponds to the sequential images shown in Fig. 1(a), acquired via bright field microscopy. The STAC concentration in the aqueous phase during this trial was 20 mmol/L and a 0.5  $\mu$ L oil droplet was applied to the aqueous phase. The movie is accelerated to three times normal speed and the total duration corresponds to 60 s. A sample area of (2 × 2) mm was observed.

## WEOMovie2.mpg

This movie corresponds to the image shown in Fig. 1(b), acquired via crossed Nicols polarized microscopy. The STAC concentration in the aqueous phase during this trial was 20 mmol/L and a 0.5  $\mu$ L oil droplet was applied to the aqueous phase. The movie is accelerated to three times normal speed and the total duration corresponds to 30 s. A sample area of (2 × 2) mm was observed.

## WEOMovie3.mpg

This movie corresponds to the sequential images shown in Figs. 2(b) and (c-1). The STAC concentration in the aqueous phase during these trials was 20 mmol/L. The movie is accelerated to ten times normal speed and the total duration corresponds to 300 s. A sample area of  $(20 \times 7.5)$  mm was observed.

## WEOMovie4.mpg

This movie corresponds to the sequential images shown in Fig. 2(c-2). The STAC concentration in the aqueous phase during these trials was 50 mmol/L. The movie is accelerated to ten times normal speed and the total duration corresponds to 300 s. A sample area of  $(20 \times 7.5)$  mm was observed.