

Supplementary Information:

Microfluidic magnetic self-assembly at liquid-liquid interfaces

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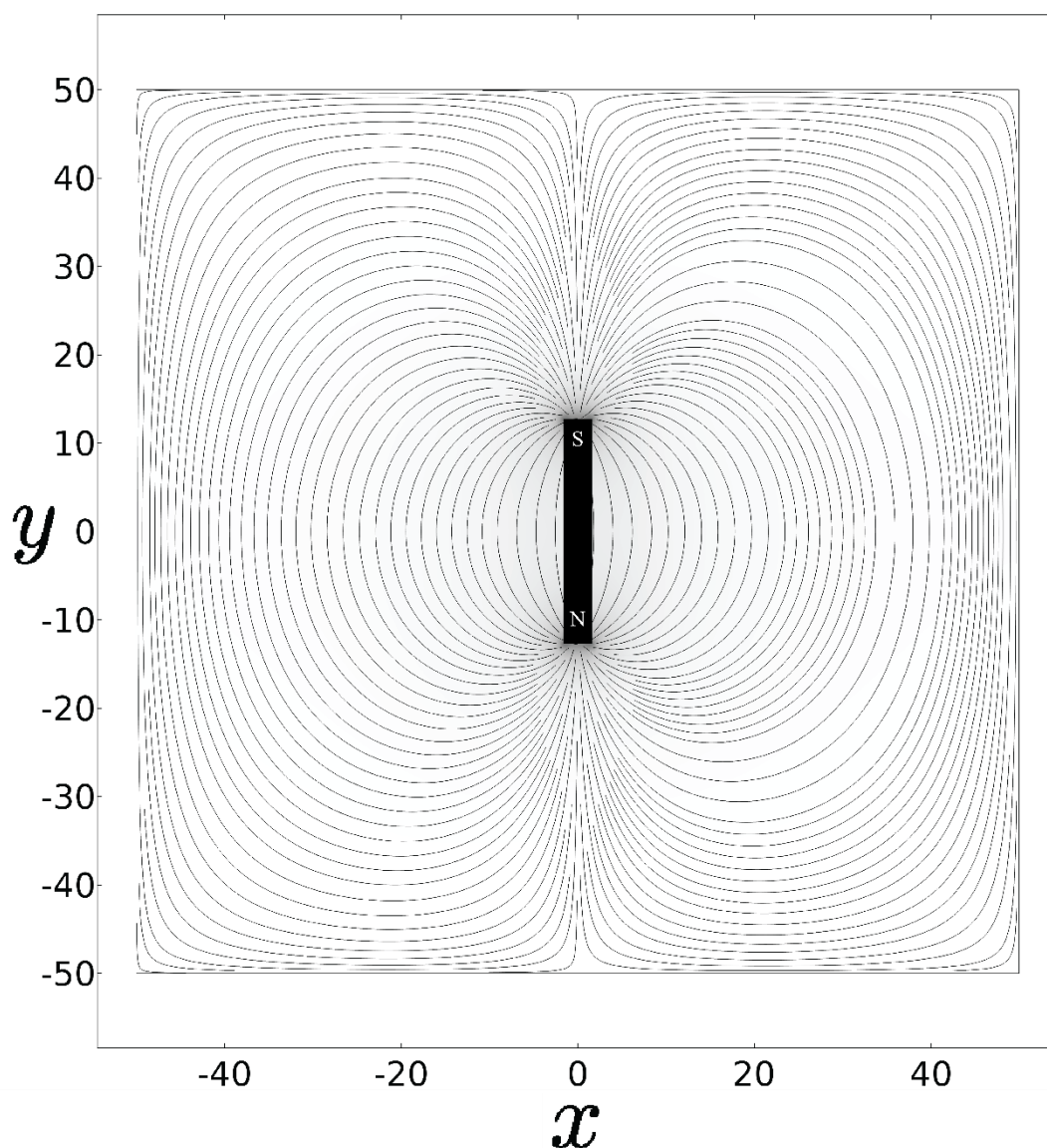


Figure S1. A plot of the magnetic field, H . The x and y axes are in units of mm. The origin on this plot is situated at the center of the magnet. The apex of the liquid-liquid interface in our experiments is in the range of 0.8 – 1.4 mm from the north or south poles of the permanent magnet. This plot is generated using COMSOL Multiphysics.

Supplementary Information Movies Captions:

Supplementary Information Movie 1:

Video shows the self-assembly of paramagnetic microparticles. Here, we have used ATPS 4, so the liquid-liquid interfacial tension $\gamma = 0.082$ mN/m between the DEX phase (top) and PEG phase (bottom). The magnet distance $l_m = 1,400$ μm . Scale bar is 50 μm .