

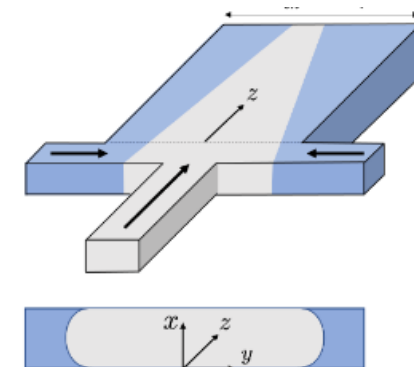
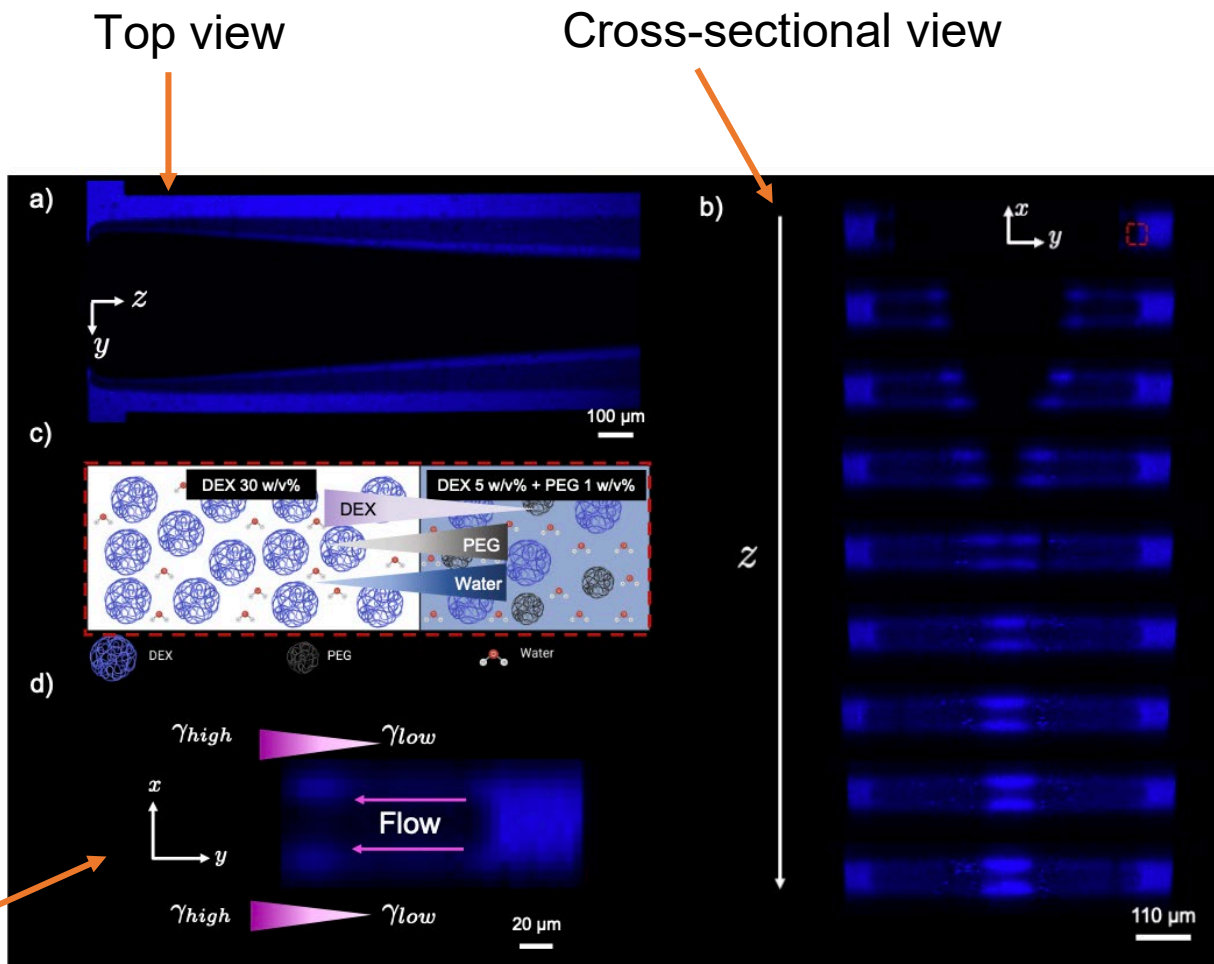
Parallel flows of non-equilibrated two-phase materials create Marangoni effects and transverse motions

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Co-flow of a non-equilibrated aqueous two-phase system yields a 3D flow downstream. The invasion front is driven by Marangoni flow, induced by a transverse polymer concentration gradient due to phase separation.

N. Abbasi, **J.K. Nunes**, Z. Pan, T. Dethe, H.C. Shum, **A. Košmrlj** and **H.A. Stone**, "Flows of a non-equilibrated aqueous two-phase system in a microchannel," *Soft Matter*, 2023.

Phase separation and gradients of interfacial tension gradients.



■ DEX 5 w/v% + PEG 1 w/v% (+Alexa Fluor Dye) (solution 1)
■ DEX 30 w/v% (solution 2)