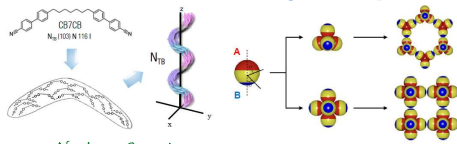
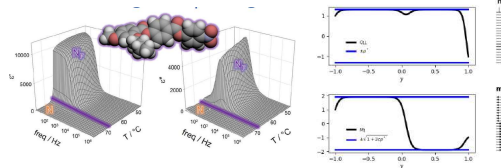


How does molecular/particle shape/symmetry influence phase/spice fill?



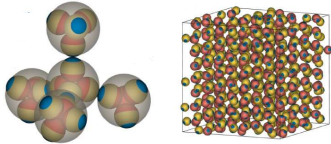
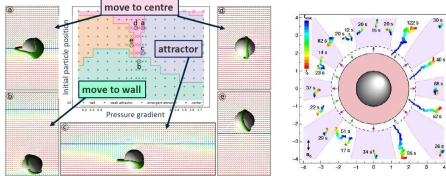
Aberdeen, Birmingham + ...  
Are there similarities in molecule → phase and particle → self-organisation processes?  
Can we translate design principles?

Electromagnetic properties + interaction in bulk and at surfaces



Aberdeen, Strathclyde, Glasgow, Birmingham  
How does large  $\epsilon$  value influence bulk ( $D = \epsilon E + \epsilon_0 E^2 + \dots$ ) and surface (anisotropy/surface polarisation) effects?  
How do magnetic inclusions interact with nematic ordering?

Colloids: self-organisation, patchiness, weak/strong interactions, interactions through defects



Birmingham, Glasgow, Strathclyde  
How does symmetry of particle (patches of interaction/alignment) influence local particle/particle interaction and then influence mesoscopic self-assembly?  
How might flow affect this?  
How can the hierarchy of organisation be used in applications?

**Wednesday 2nd November**

**12-12.30pm: Lunch**  
12.30-1.00pm: Nigel Mottram (Glasgow)  
1.00-1.30pm: Joseph Cousins (Strathclyde & Glasgow)  
1.30-2.00pm: Joseph Ijupiti Kwajighu (Glasgow)

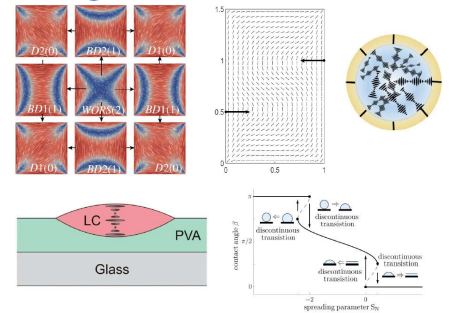
**2.00-2.30pm: Coffee**  
2.30-3.00pm: Yucen Han (Strathclyde)  
3.00-3.30pm: James Dalby (Strathclyde)  
3.30-4.00pm: Rebecca Walker (Aberdeen)  
4.00-4.30pm: Ewan Cruickshank (Aberdeen)  
4.30-5.00pm: Open Session

**5.00-7.00pm: Dinner at The Bothy, Ruthven Lane (5 mins walk)**

**Thursday 3rd November**

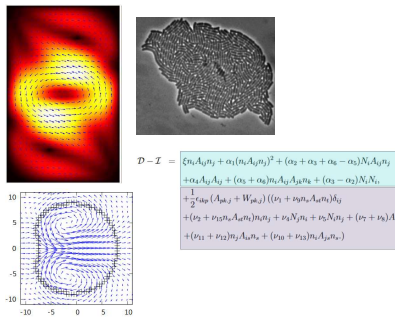
**10.00-10.30am: Coffee**  
10.30-11.00am: Dwaipayan Chakrabarti (Birmingham)  
11.00-11.30am: Jay Morris (Birmingham)  
11.30-12.00pm: Phil Hands (Edinburgh)  
**12.00-1.00pm: Lunch and Discussion**

Effects of confinement, multistability and topological change of free surfaces



Glasgow, Strathclyde, Edinburgh  
How does shape of confinement influence director structure?  
Understand feedback between director and free surface slopes  
How can these effects be utilised in applications?

Active nematics and influence on and from confinement



Glasgow, Edinburgh  
How do active nematics behave in microconfinement?  
How do active nematics influence the confining free surface