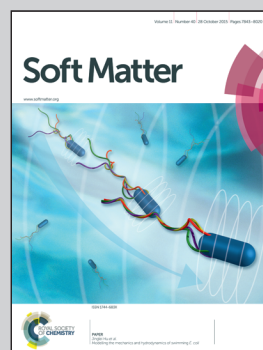


Highlighting research results from Mechanics, Materials and Computing group and Soft Machines Lab at Carnegie Mellon University, Pittsburgh, USA and Soft and Nanoscale Materials group at Northeastern University, Boston, USA.

Gelation and mechanical response of patchy rods

We perform Brownian dynamics simulations to study the gelation of suspensions of attractive, rod-like particles. We show that if the attraction is sufficiently corrugated or patchy, over time, a rigid space-spanning network will form. Surprisingly, the structural and mechanical properties are non-monotonic in the fraction of the surface that is allowed to bind.

As featured in:



See Craig E. Maloney *et al.*,
Soft Matter, 2015, **11**, 7878.