

Seminar

Liquid crystal elastomers

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Liquid crystal elastomers are rubbery solids with liquid crystal mesogens incorporated into their main chains. They display an isotropic to nematic phase transformation accompanied by a large spontaneous deformation. This in turn leads to rich variety of phenomena including ultra-soft behavior, stripe domains, shape-morphing etc. Further, when made as slender structures, the structural instability of slender structures and the material instabilities of liquid crystal elastomers combine and compete in interesting ways. This talk will provide an introduction to these materials and provide examples from contemporary research about opportunities these materials present.

Tuesday, Jul 30th 2019

4:00 PM (Tea/Coffee at 3:30 PM)

Auditorium, TIFR-H