

Abstract Submitted  
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**Strain induced alignment of particles in an elastomer host**<sup>1</sup> BEN SPOTT, JEREMY NEAL, PETER PALFFY-MUHORAY, Liquid Crystal Institute, Kent State University — The properties of composite materials consisting of anisometric nanoparticles dispersed in a host depend on the orientation of the nanoparticles. It is interesting to ask how mechanical strain of the composite affects their orientation. We have carried out experiments stretching both two- and three-dimensional rubber samples containing rigid rod-like particles and measured their orientational order parameter as a function strain. We discuss these results, and make connections with theoretical models.

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