

Abstract Submitted  
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**The Effects of Multiwalled Carbon Nanotube Doped Poly(Ethyl Methacrylate) on Optical Field Induced Nematic Liquid Crystal Reorientation** MATTHEW KERR, DAVID STATMAN, Allegheny College — We have been investigating photoinduced gliding of the easy axis at the nematic liquid crystal/polymer interface. Gliding of the easy axis on polyethyl methacrylate (PEMA) surfaces has been observed when magnetic or electric fields are applied to the bulk liquid crystal. We have studied similar gliding when the surface is coated with a carbon nanotube/PEMA composite. Our experiments utilize polarimetry techniques and cross-polarized microscopy. The results of photoinduced gliding experiments on PEMA surfaces doped with multiwalled carbon nanotubes will be presented.

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