Impact of Photo-Induced Surface Adsorption of Azo-Dyes on the Liquid Crystal Anchoring Conditions DAVID STATMAN, Allegheny College — Using optical techniques, we measured the anchoring conditions of azo-dye doped nematic liquid crystals on rubbed polyimide surfaces. Linearly polarized light induces the formation of a second easy axis on the polymer surface oriented toward the polarization direction of the pump laser beam. This additional easy axis is the result of photo-induced adsorption of the $cis$ isomer of the azo dye. An effective easy axis is the weighted average of the original easy axis and this new easy axis.

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