1125-76-2132 **Bagisa Mukherjee*** (`bgm102@psu.edu`), 120 Ridge View Drive, Dunmore, PA 18512.
Determination of Director angle for flow aligning Nematic Liquid Crystals under Couette geometry.

We consider steady state flow of nematic liquid crystals in a Couette geometry driven by the relative rotation of the two concentric cylinders. We use the standard Ericksen-Leslie continuum model. The director, a unit vector, represents the average molecular orientation. We assume strong anchoring boundary conditions and find an explicit expression for the director orientation in the bulk of the flow for low Ericksen number. (Received September 19, 2016)