

Supplementary Information for “Phase-Dependent Shear-Induced Order of Nanorods in Isotropic and Nematic Wormlike Micelle Solutions”

Ramona Mhanna¹, Jonghun Lee², Suresh Narayanan², Daniel H. Reich¹, Robert L. Leheny¹

¹Department of Physics & Astronomy, Johns Hopkins University, Baltimore, MD 21218, USA.

²X-Ray Science Division, Argonne National Laboratory, Lemont, IL 60439, USA.

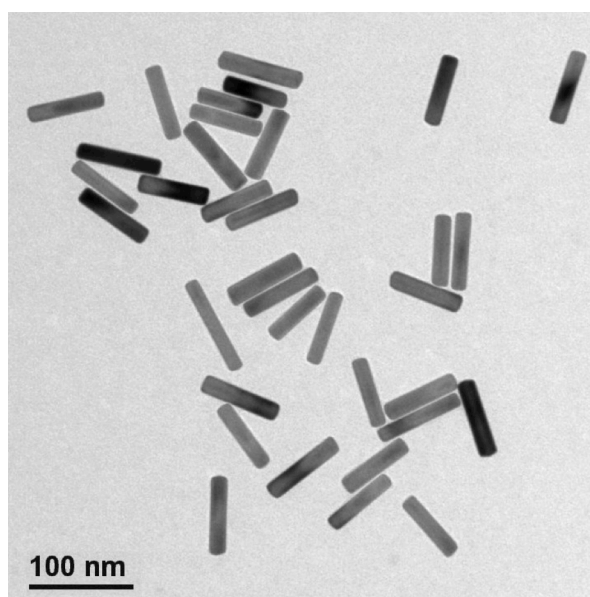


Figure S1: Transmission electron microscopy image of Au nanorods used in the experiment. Analysis of this and similar images gives a mean length of the rods of 75.0 nm with a standard deviation of 4.4 nm and a mean radius of 7.5 nm with a standard deviation of 0.8 nm.

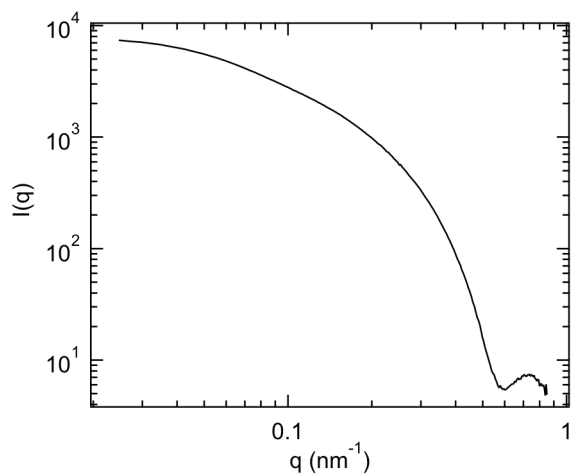


Figure S2: X-ray scattering intensity from a dilute aqueous solution of Au nanorods.

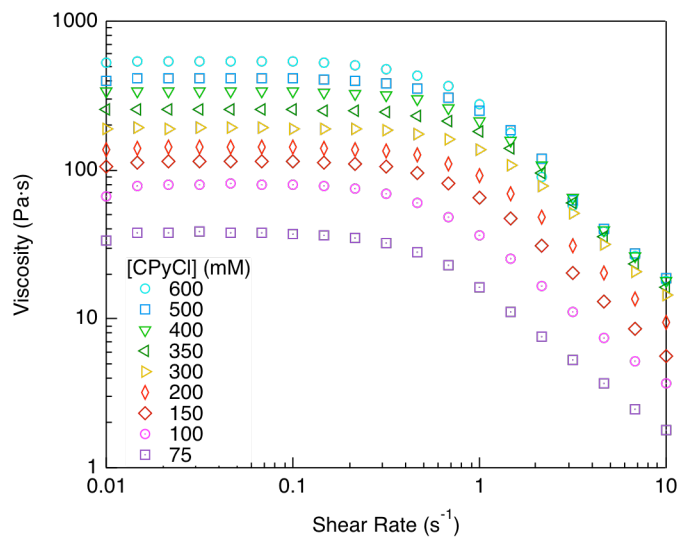


Figure S3: Flow curves (viscosity versus shear rate) of a set of CPyCl/NaSal wormlike micelle solutions with CPyCl concentrations specified in the caption. In each case the NaSal concentration is tuned to maximize the solution viscosity, as described in the text.