

## Ordering at the surface of an isotropic liquid crystal

Liquid-vapour surface of a pure liquid crystal 5CB as the temperature is lowered through the isotropic-to-nematic phase transition  $T_C$ . The signal indicates an increasing alignment of the molecules as  $T_C$  is approached, the sign of the signal showing that the molecules are oriented preferentially perpendicular to the surface.

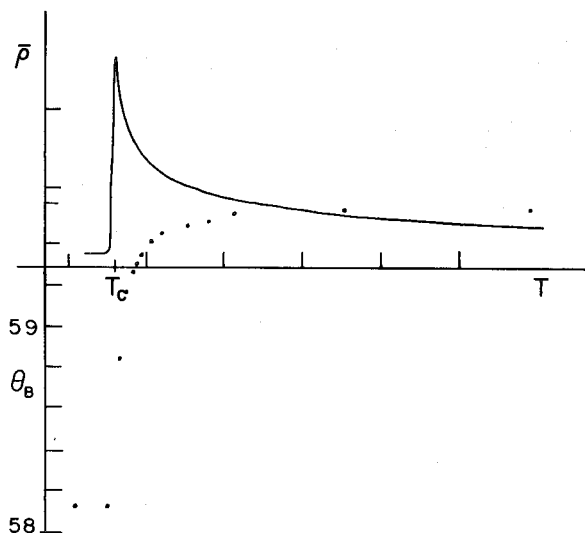


FIGURE 1 The experimental recording of  $\bar{\rho}$  versus  $T$ . 1 division of  $\bar{\rho}$  equals 0.0155, while 1 division of  $T$  equals 0.24°C. The black dots indicate the Brewster angle  $\theta_B$  variation with temperature.

D.B. Pretransition order on the surface of a nematic liquid crystal  
Mol. Crystals and Liquid Crystals Vol 89, p319, 1982