Electronic Supplementary Material (ESI) for RSC Advances.

Alkali and Alkaline Earth Metal Ions Detection Using Birefringence of Hyperswollen Lamellar Phase

Koki Sasaki, Shotaro Matoba, Yoshiaki Uchida,* and Norikazu Nishiyama

Graduate School of Engineering Science, Osaka University, 1-3 Machikaneyama-cho, Toyonaka, Osaka 560-8531, Japan

Supporting Information

Table of Contents

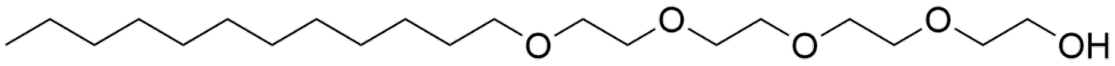

Fig. S1 Molecular structure and schematic illustration of the interaction. Molecular structure of $C_{12}E_4$, the main component of Brij L4.

Fig. S2 Polarized photographs of hyperswollen lamellar phases of decane solution of water (5.6×10^{-4} M), Brij L4 (1.5×10^{-4} M), and HCl (6.1×10^{-5} M).

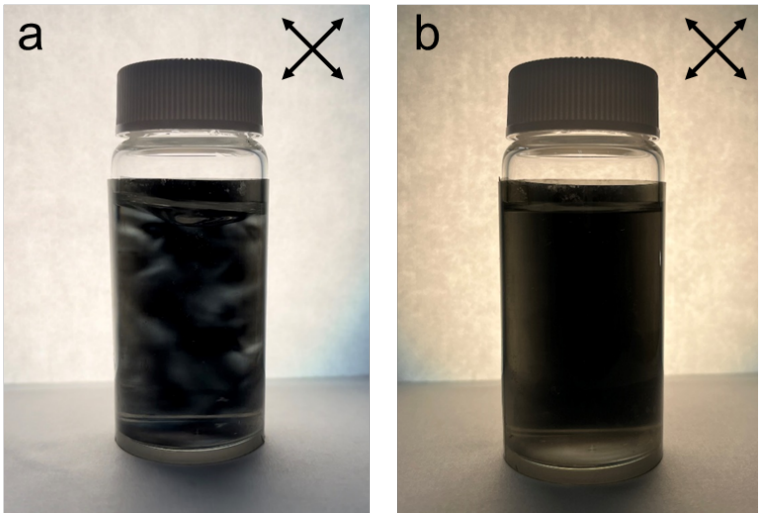

Fig. S3 Polarized photographs of decane solution of water (5.6×10^{-4} M) and Brij L4 (1.5×10^{-4} M). Polarized photographs (a) without additives and (b) with $CaCl_2$ (9.0×10^{-6} M).

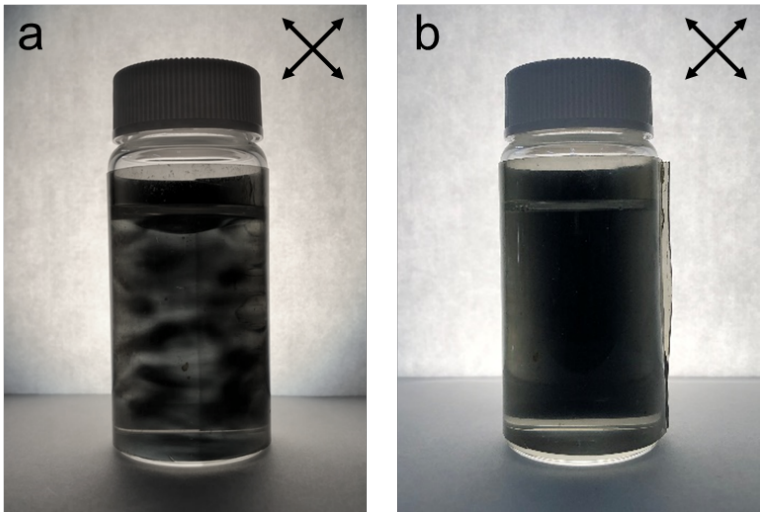

Fig. S4 Polarized photographs of decane solution of water (5.6×10^{-4} M) and Brij L4 (1.5×10^{-4} M). Polarized photographs (a) without additives and (b) with NaOH (4.9×10^{-6} M).