

Supplementary information

Lyotropic liquid crystalline phases formed in ionic liquid

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Supplementary information 1

Table 1 Lattice spacings (d) of anisotropic phases formed in [Bmim]PF₆ at different temperatures.

Concentration (%)	Temperature (°C)	Phase	d (nm)
45	25	H ₁	12.30
	45	H ₁	12.70
	65	H ₁	13.34
75	25	L _{α}	10.50
	45	L _{α}	10.65
	65	L _{α}	10.79

Supplementary information 2

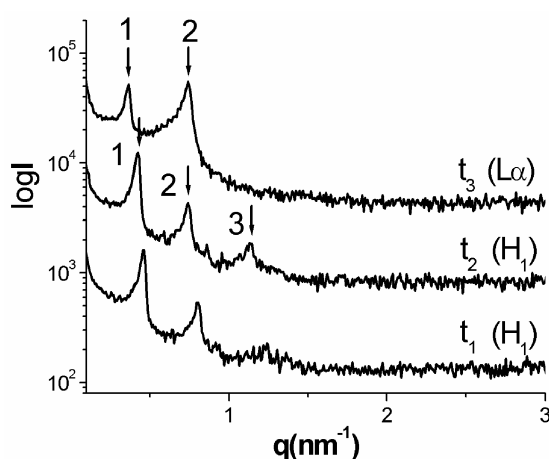


Fig. 1 SAXS diffraction patterns of anisotropic phases formed in water with 45% P123 concentration. t_1 , t_2 and t_3 represent 25, 45 and 65 °C respectively. The hexagonal phase is changed to a lamellar phase at 65 °C.

Supplementary information 3

Textures of anisotropic phases are observed using Motic polarized optical microscope with CCD camera. SAXS is performed on a HMBG-SAX X-ray small angle system (Austria) with Ni-filtered Cu K α radiation (0.154 nm) operating at 50 kV and 40 mA.