

Realization of a lateral directional order in nematic and smectic A phases of rodlike molecules by using perfluoroarene-arene interaction

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Electronic Supplementary Information

Polarized microphotographs of F-BB-F

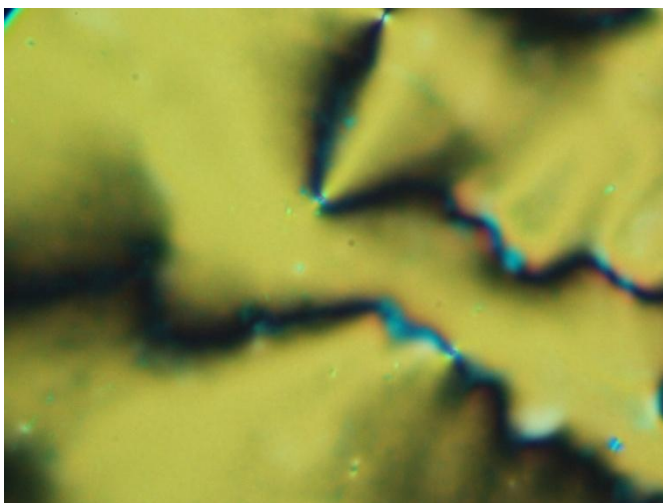


Fig. S1. Two-brush disclinations of **F-BB-F** in the nematic phase (210°C, 500x). There is a small light-blue area at each disclination center.

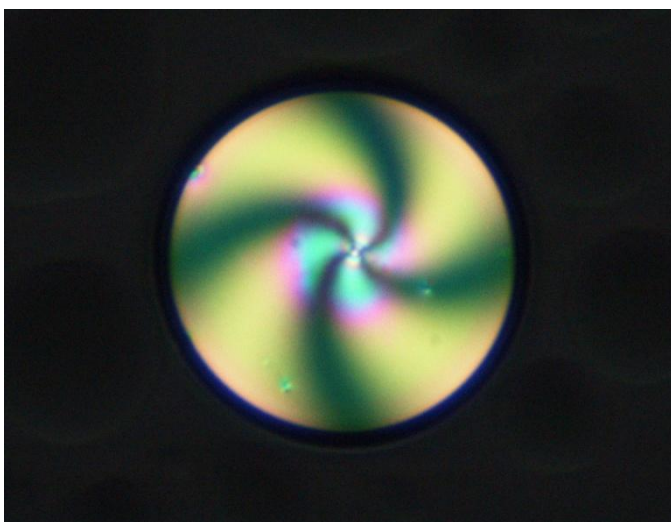


Fig. S2. A droplet of **F-BB-F** in the nematic phase (210°C, 500x) on cooling. The four-brush disclination has a bright center and it was surrounded by the light-blue part .

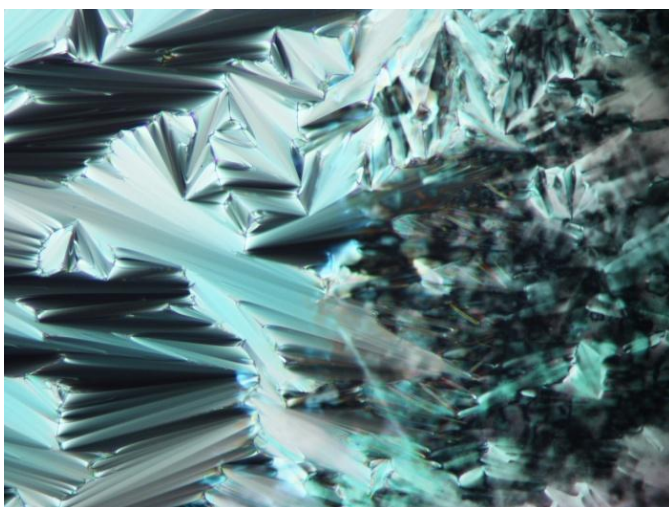


Fig. S3. The transition of **F-BB-F** from the smectic A phase (left) to the nematic phase (right) on heating. In the nematic phase, smectic-like texture remained after the transition. (205°C, 200x)

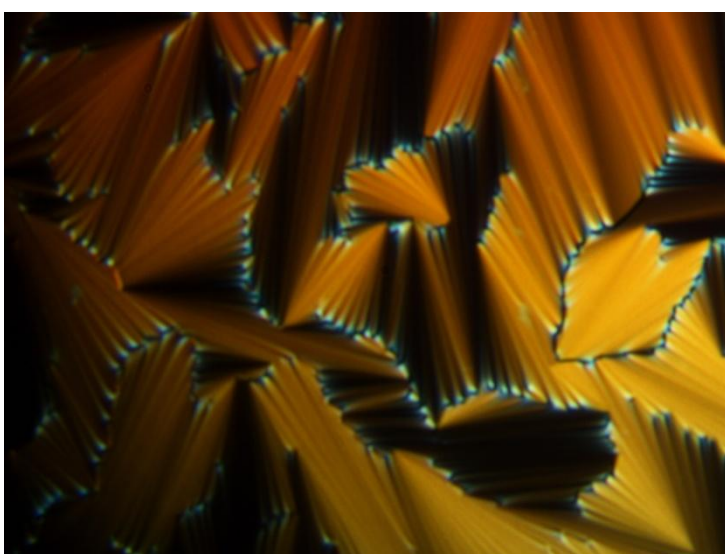


Fig. S4. Fan-shaped textures of **F-BB-F** in the smectic A phase on cooling under applying a vertical magnetic field to the glass plate. The smectic A phase could not be aligned by applying a magnetic field. (200°C, 500x)

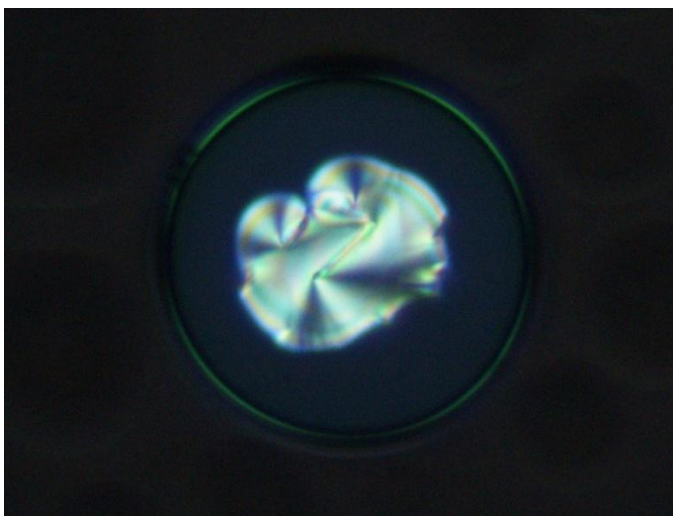


Fig. S5. A droplet of **F-BB-F** in the smectic A phase on cooling (200°C, 500x). There are focal-conic textures at the center of the droplet, and the homeotropically aligned part around the texture.