

## **Supporting Information**

### **Study of Compression Induced Supramolecular Nanostructures of an Imidazole**

#### **Derivative by Langmuir-Blodgett Technique**

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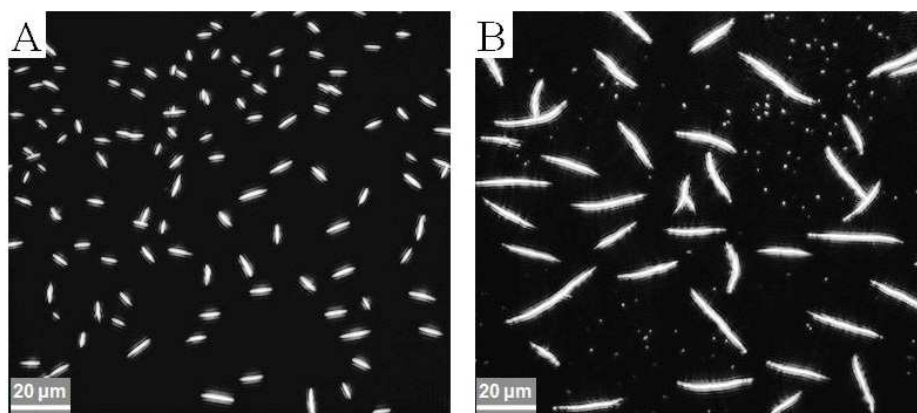
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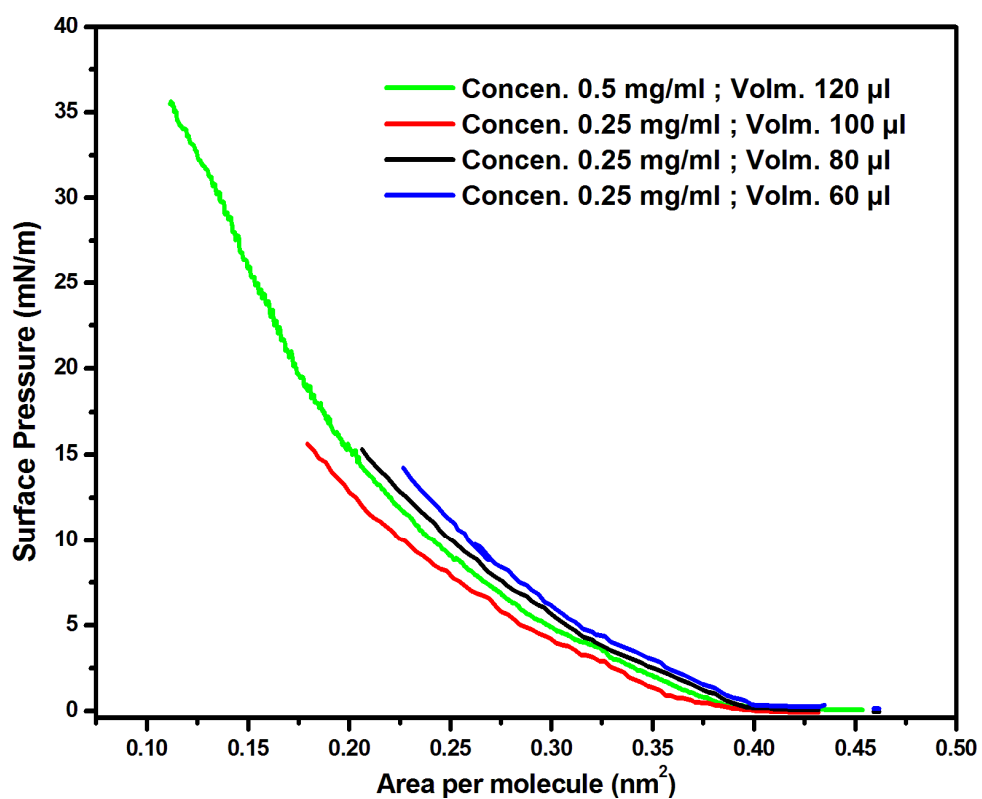
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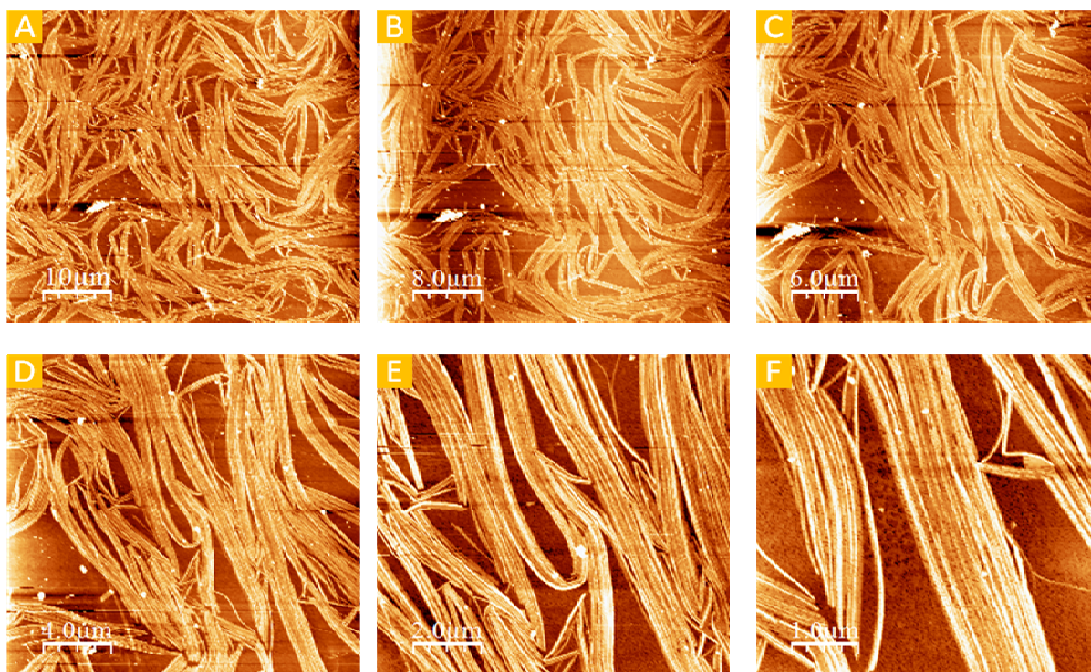
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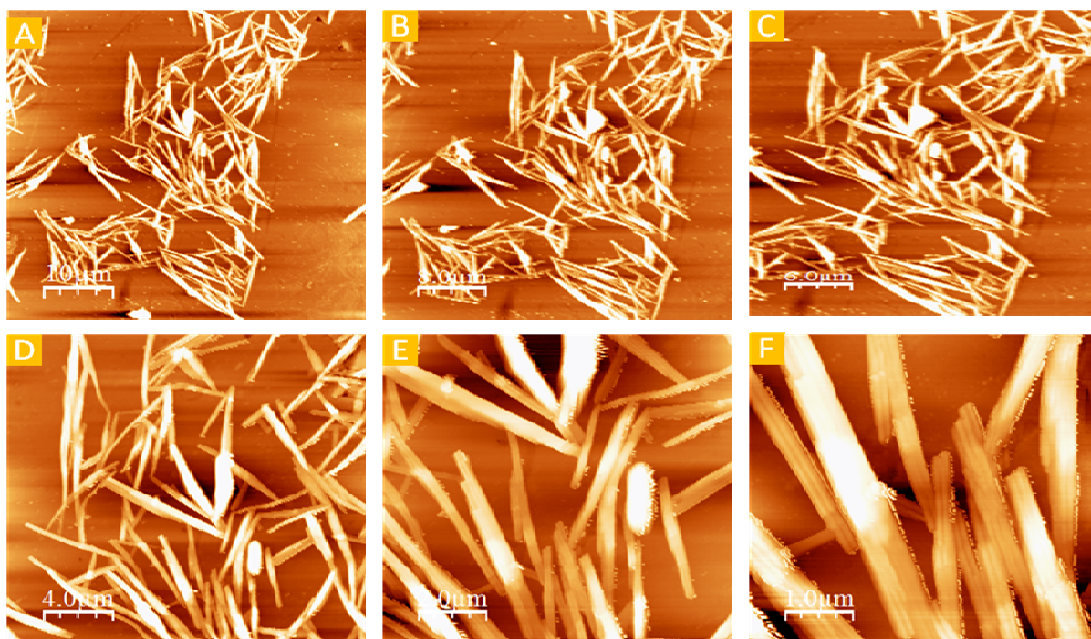
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**Figure S2.** Surface pressure ( $\pi$ ) vs area per molecule (A) isotherm of **1** at various concentration and spreading volume.

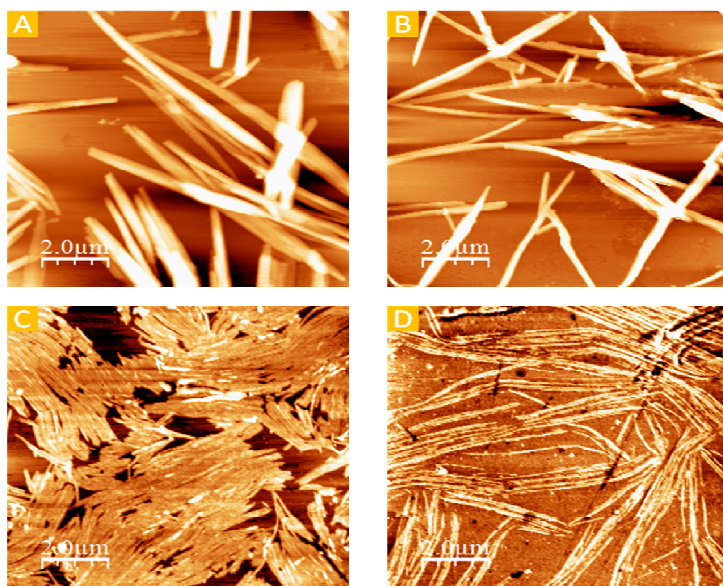


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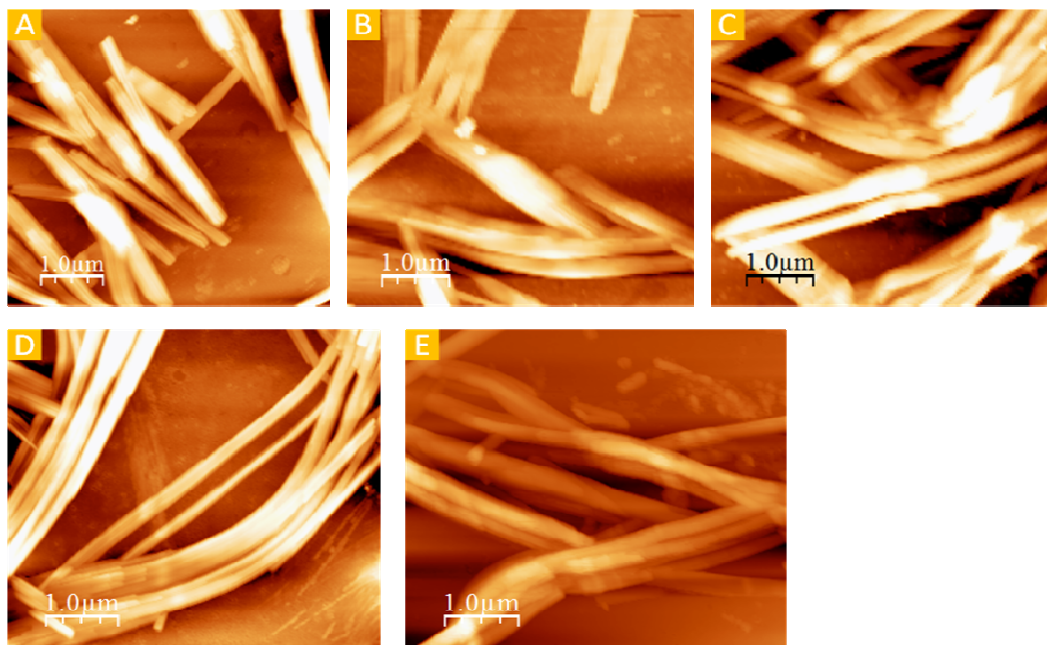


**Figure S4.** AFM images of one layer LB film of **1** at 5 mN/m on optically shown structures at scan area- (A)  $50 \times 50 \mu\text{m}^2$  (B)  $40 \times 40 \mu\text{m}^2$  (C)  $30 \times 30 \mu\text{m}^2$  (D)  $20 \times 20 \mu\text{m}^2$  (E)  $10 \times 10 \mu\text{m}^2$  (F)  $5 \times 5 \mu\text{m}^2$ .

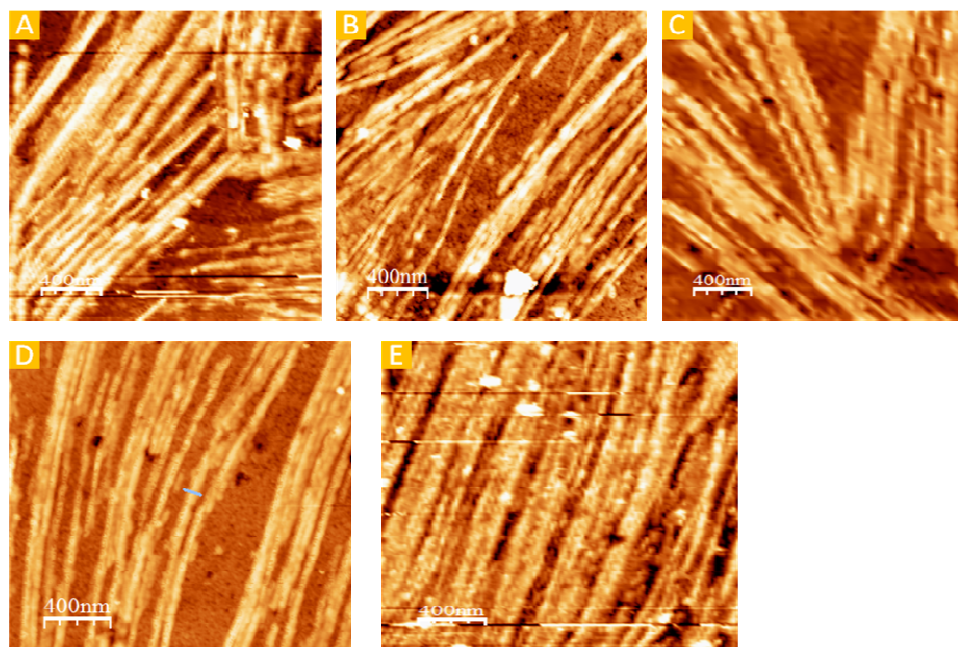




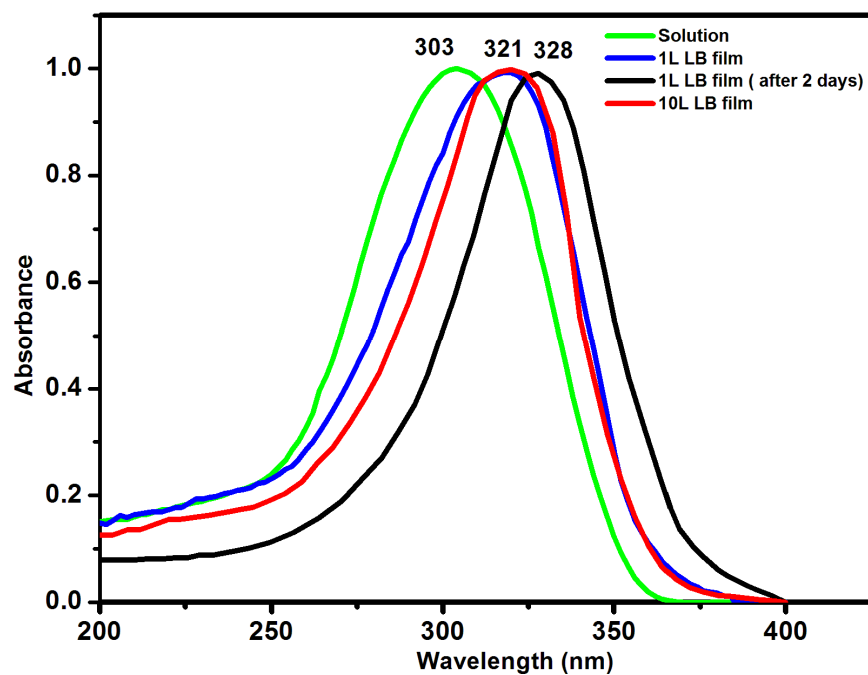
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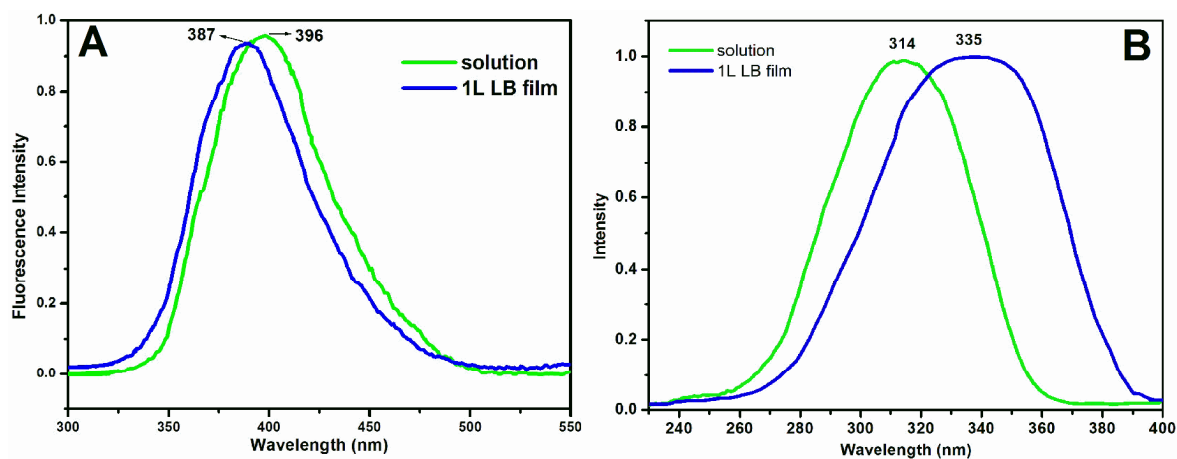
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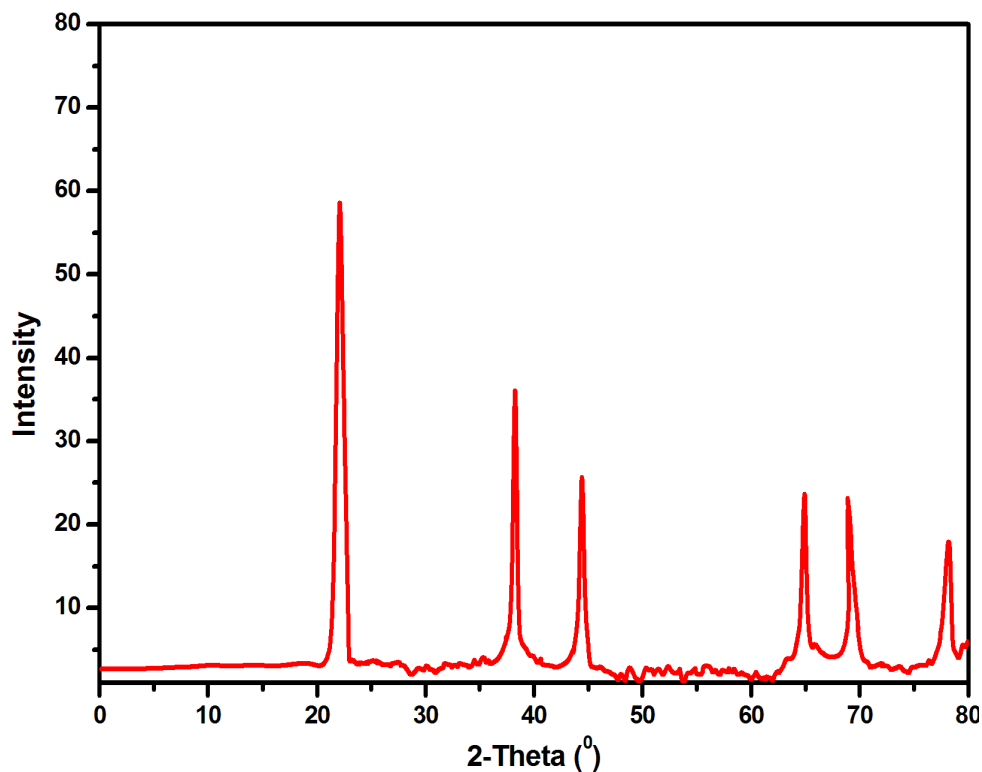
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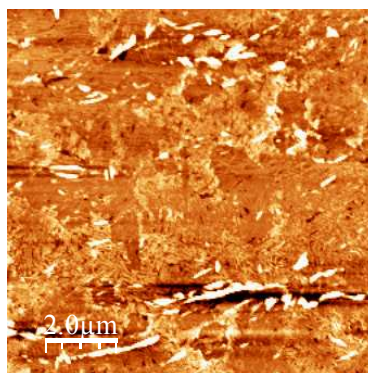
**Figure S8.** Normalized UV-vis absorption spectra of **1** in solution and one layer LB film lifted at surface pressure 5 mN/m.



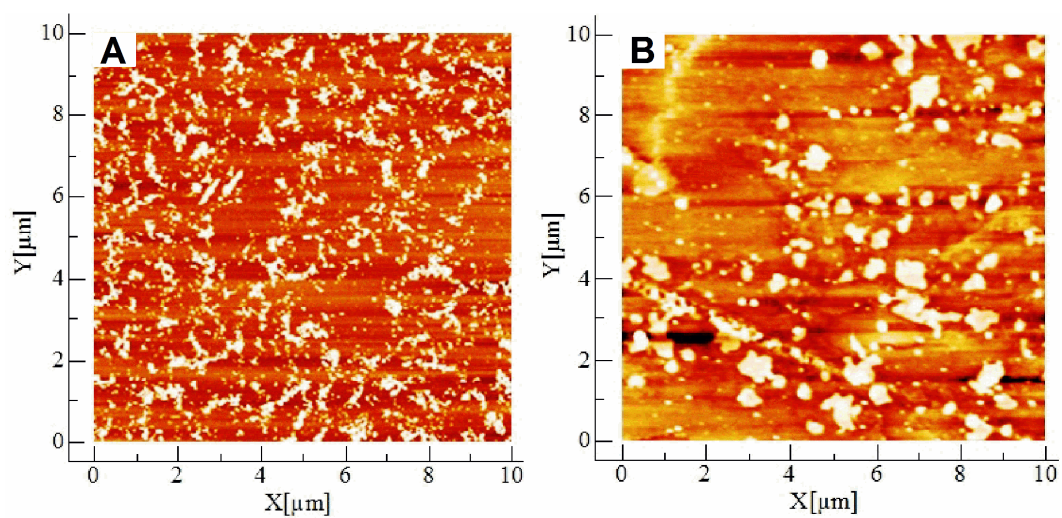
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**Figure S10 :** XRD spectra of compound **1** in 10 layer LB film deposited at surface pressure 5 mN/m.



**Figure S11.** AFM images of **1** in one layer LB film at 0 mN/m.



**Figure S12.** AFM images of compound **1** for spin coated film (A) and drop cast film (B).