

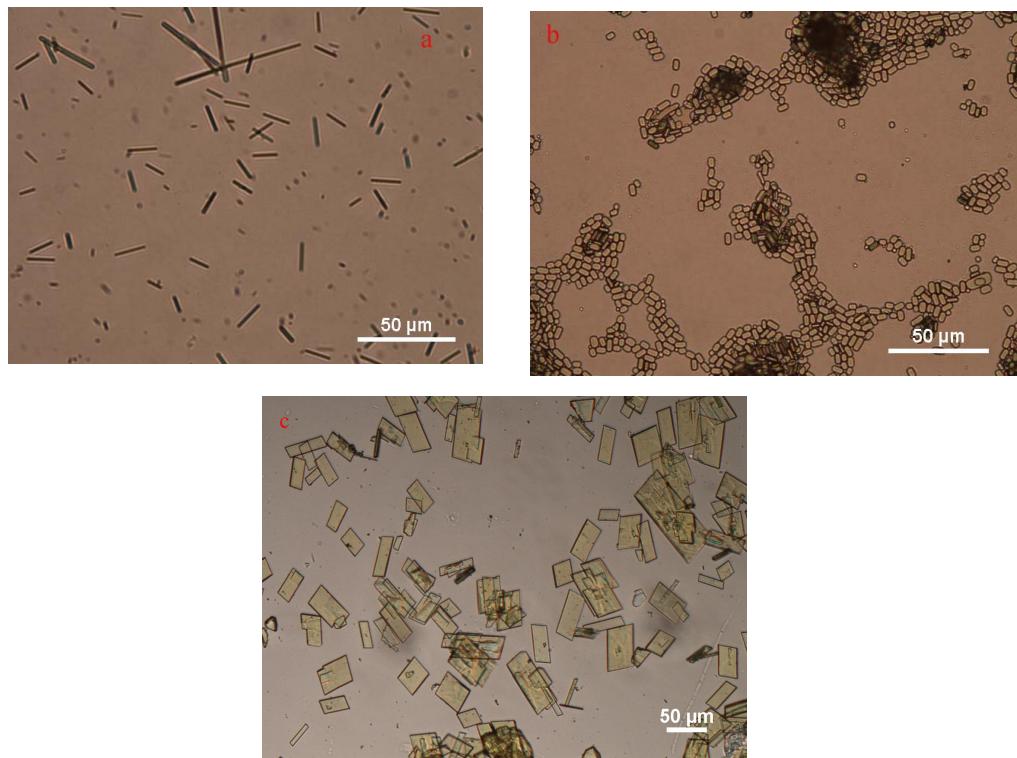
## Supporting information

### Morphology directing synthesis of 1-pyrene carboxaldehyde microstructures and their photo physical properties

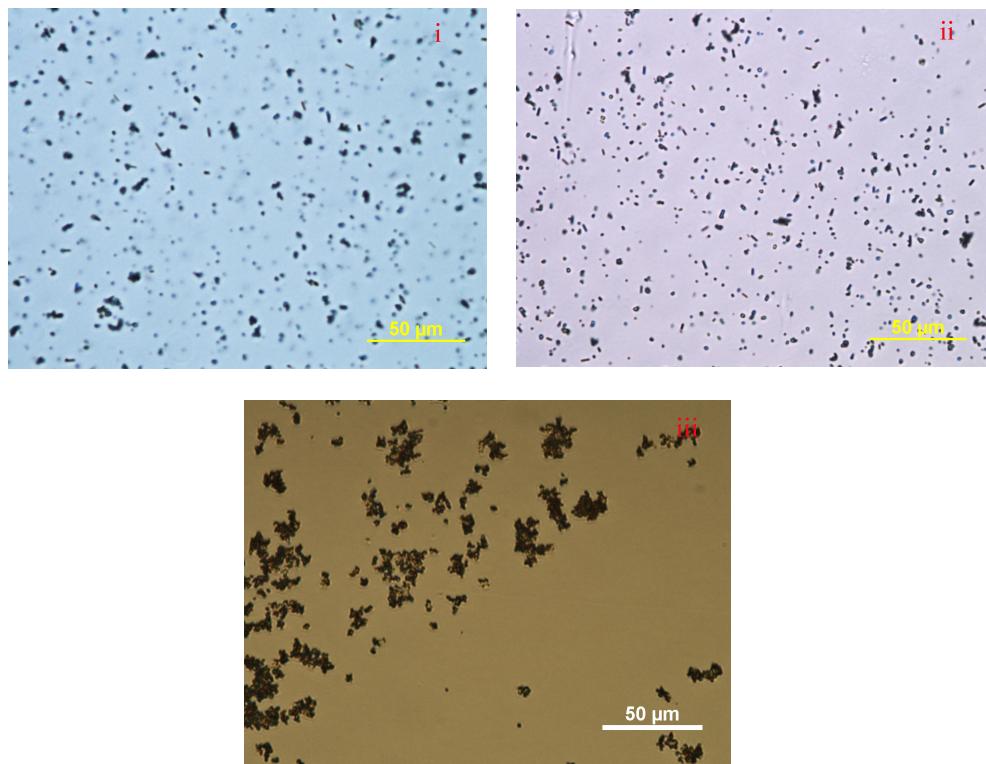
Gobinda Prasad Sahoo,<sup>a</sup> Debasish Das,<sup>a</sup> Partha Sarathi Sheet,<sup>a</sup> Hasibul Beg,<sup>a</sup> Guillermo Salgado-Morán<sup>b</sup> and Ajay Misra,<sup>\*a</sup>

#### Contents

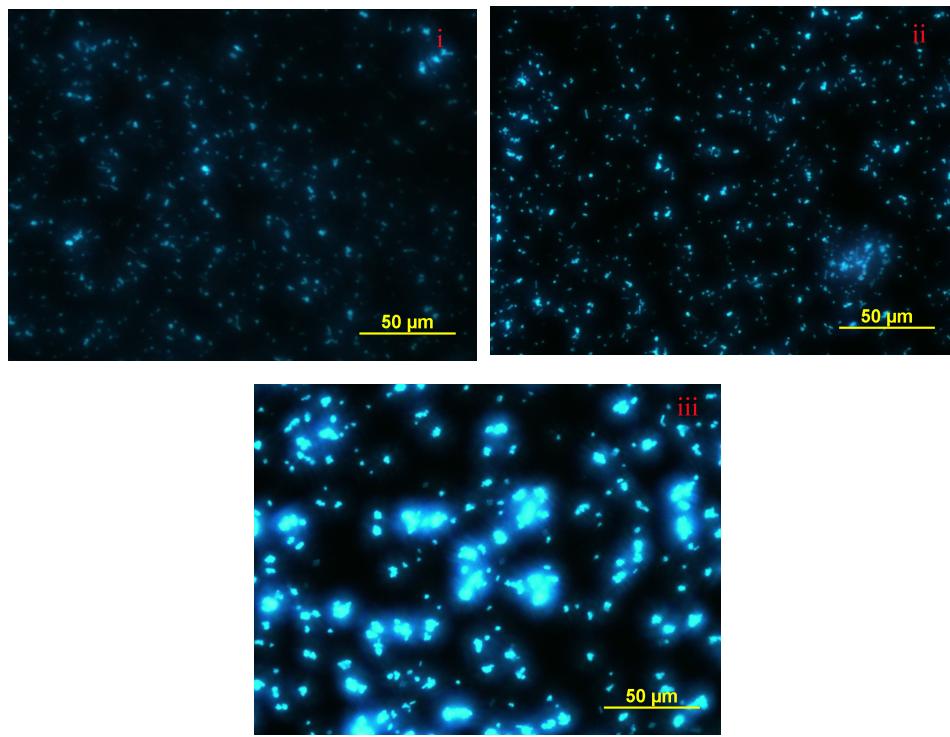
Picture	Details of:
S1	Optical micrographs of 1-PyCHO microstructures
S2	Optical micrographs of Pyrene microstructures
S3	Optical fluorescence micrographs of Pyrene microstructures
S4	SEM images of Pyrene microstructures
Experimental	Synthesis of Pyrene microparticles



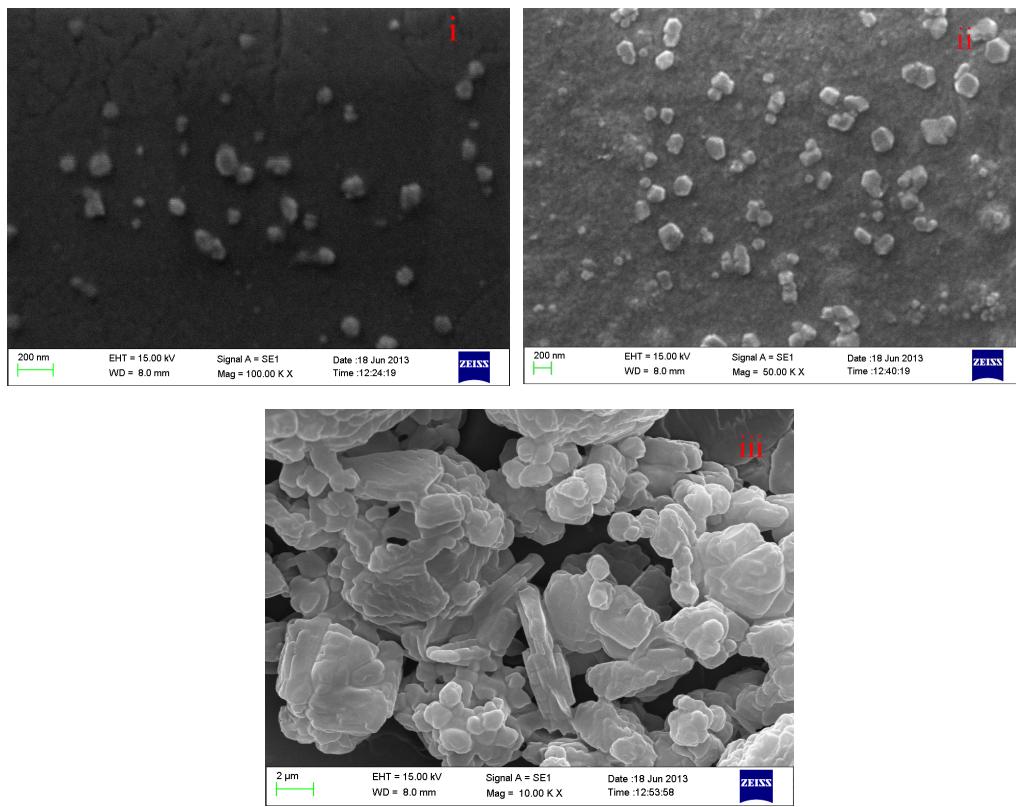
**Figure S1:** Optical microscopic images of 1-PyCHO microparticles (a) sample-a, (b) sample-b and (c) sample-c.



**Figure S2:** Optical microscopic images of pyrene microstructures (i) sample-1, (ii) sample-2 and (iii) sample-3.



**Figure S3:** Optical fluorescence microscopic images of pyrene microstructures with blue excitation filter (i) sample-1, (ii) sample-2 and (iii) sample-3.



**Figure S4:** SEM images of pyrene microstructures (i) sample-1, (ii) sample-2 and (iii) sample-3.

## Experimental

### Synthesis of Pyrene microparticles

**Sample-1:** 0.1 mL of 0.1 M pyrene in EtOH was injected into 10 mL 0.01(M) SDS with rigorous stirring. After 5 min of stirring the solution was kept undisturbed overnight at room temperature before characterization. Concentrations of SDS and Pyrene in the resulting solution were 9.9mM and 0.99mM respectively.

**Sample-2:** 0.5 mL of 0.1 M pyrene in EtOH was injected into 10 mL 0.01(M) SDS with a rigorous stirring. After 5 min stirring the solution was aged overnight at room temperature before characterization. Concentrations of SDS and Pyrene in the resulting solution were 9.9mM and 4.70 mM respectively.

**Sample-3:** 0.5 mL of 0.1 M pyrene in EtOH was added to 10 mL 0.05(M) SDS solution with rigorous stirring for 5 min. The as-prepared solution was left standing overnight before characterization. Concentrations of SDS and Pyrene in the resulting solution were 47.60 mM and 4.70 mM respectively.