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## Self-Assembled Core-Shell Nanospheres and Dendritic Nanostructure of Novel Tetra-(3-phenyprop-2-allyloxy) phthalocyanine in Different Solvents

Yinghui Bian, Jinshe Chen, Shaotang Xu, Lijun Zhu, Yulu Zhou, Yuzhi Xiang, and Daohong Xia\*

State Key Laboratory of Heavy Oil Processing, College of Chemical Enginerring, China University of Petroleum, Qingdao 266580, China

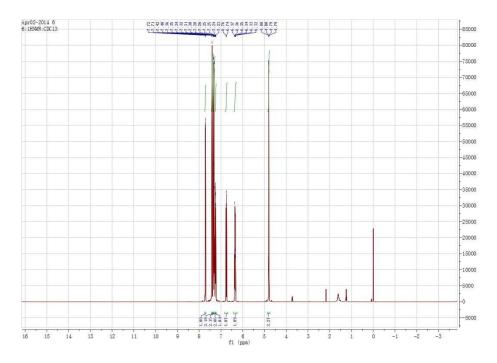


Fig .S1  $^1\text{H}$  NMR spectrum of compound 3

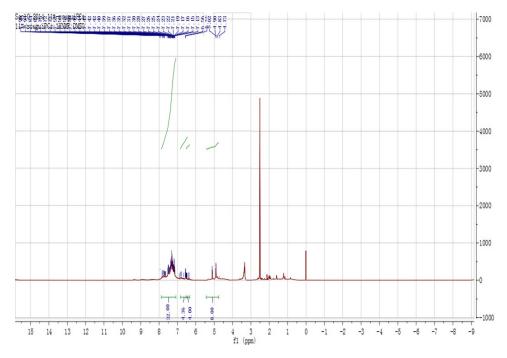
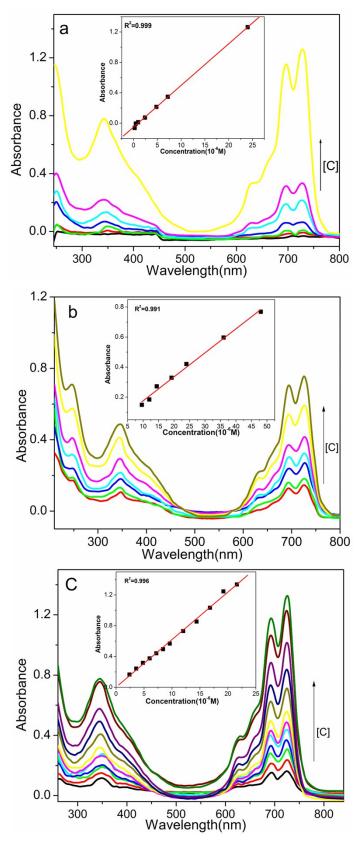
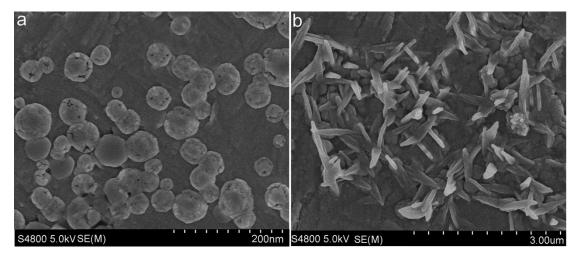


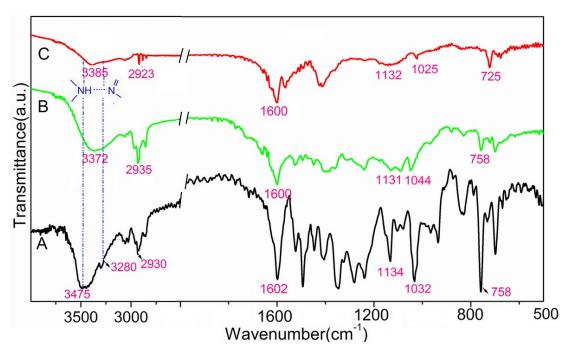
Fig. S2 <sup>1</sup>H NMR spectrum of compound 4



**Fig.S3** Absorption spectra changes of TPAO-Pc in dichloromethane (a), ethanol (b) and ethyl acetate (c)at different concentrations:  $2.4 \times 10^{-6}$  (A),  $3.6 \times 10^{-6}$  (B),  $4.8 \times 10^{-6}$  (C),  $6.0 \times 10^{-6}$  (D),  $7.2 \times 10^{-6}$  (E),  $8.4 \times 10^{-6}$  (F),  $9.6 \times 10^{-6}$  (G),  $12 \times 10^{-6}$  (H),  $14.4 \times 10^{-6}$  (I),  $16.8 \times 10^{-6}$  (J),  $19.2 \times 10^{-6}$  (K),  $21.6 \times 10^{-6}$  (L). (Insets: Plot of absorbance versus concentration in Q-band.)



**Fig. S4** SEM images of the morphologies self-assembled from DMSO/water (a) and acetone/water (b) after 12 h.



**Fig. S5** FT-IR spectra of TPAO-Pc (A), aggregates of TPAO-Pc with dendritic morphology formed in acetone/water(B) and core-shell nanospheres morphology formed in DMSO/water (C) in the region 500-2000 cm<sup>-1</sup> and 2500-4000 cm<sup>-1</sup> with 2cm<sup>-1</sup> resolution.