

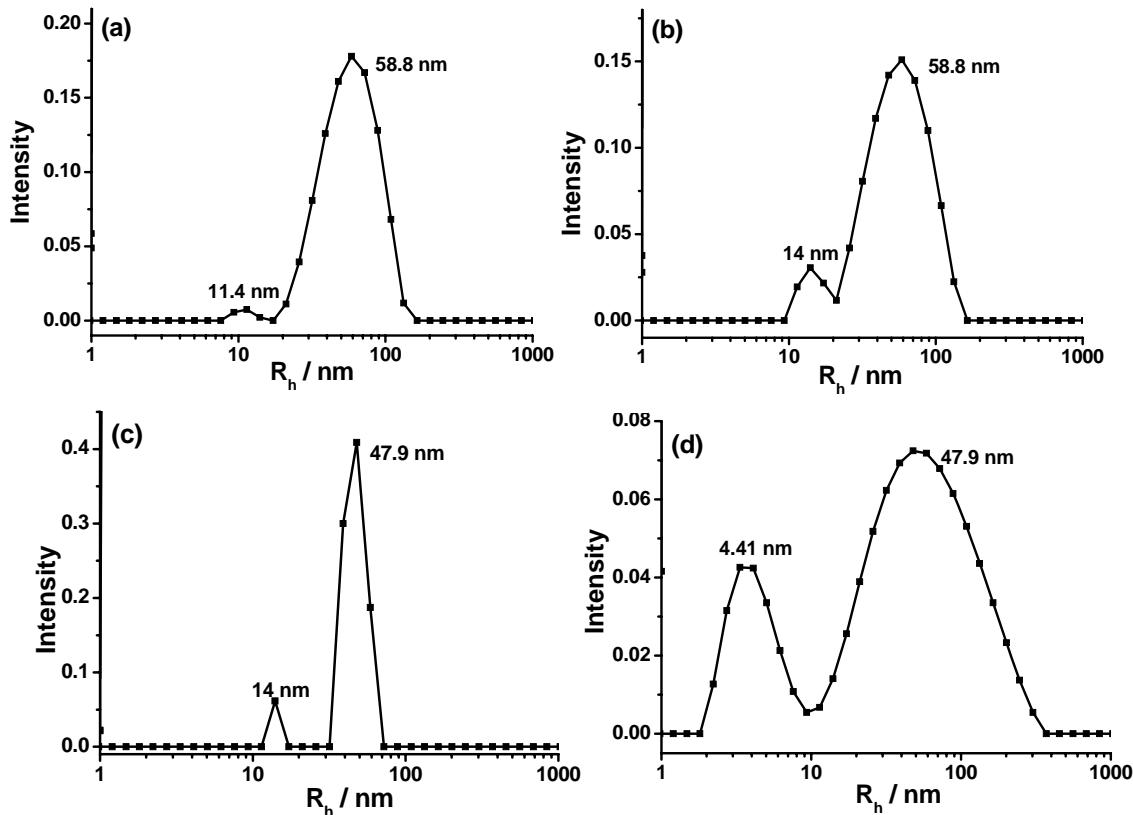
# Controllable vesicular structure and reversal of a surfactant-encapsulated polyoxometalate complex

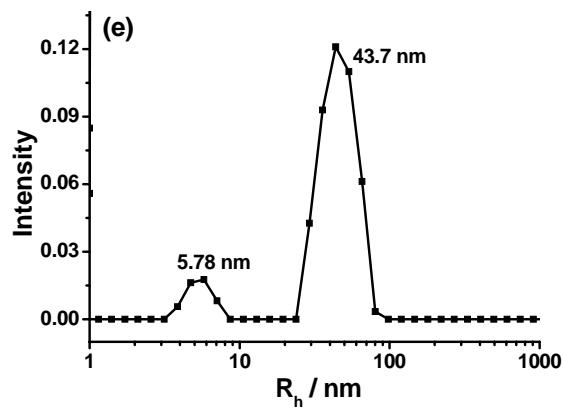
Yi Yan, Bao Li, Wen Li, Haolong Li, and Lixin Wu\*

*State Key Laboratory of Supramolecular Structure and Materials, Jilin University, Changchun 130012, China*

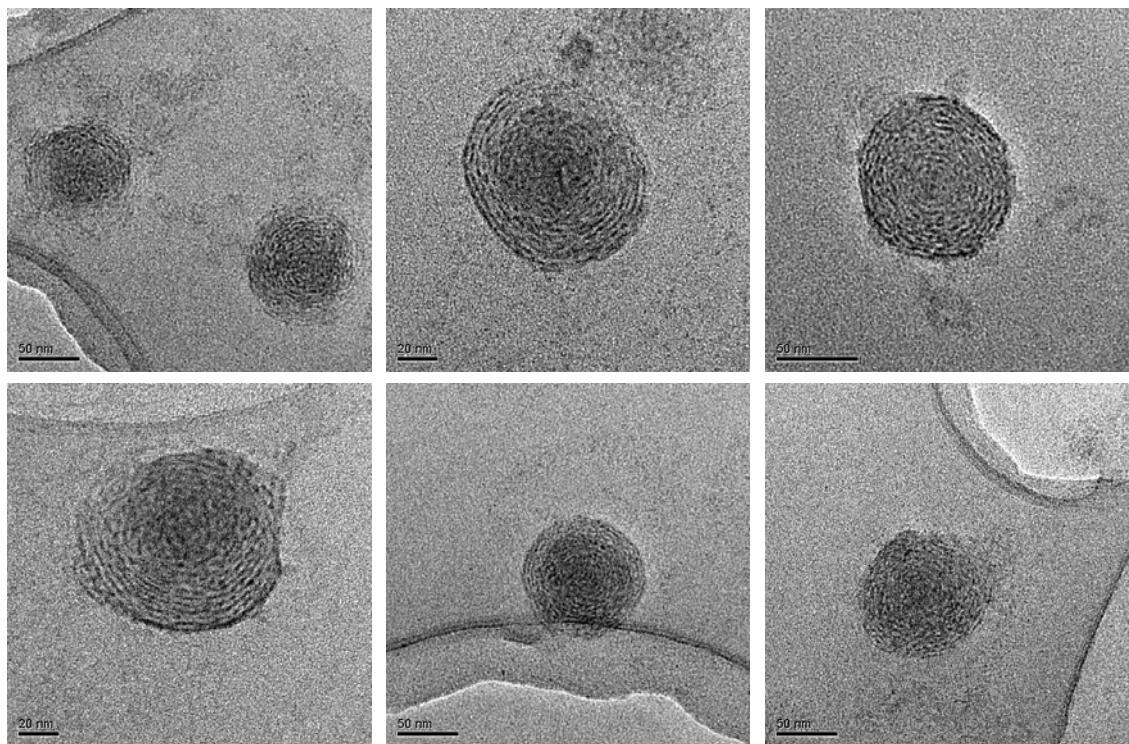
To whom correspondence should be addressed. E-mail: [wulx@jlu.edu.cn](mailto:wulx@jlu.edu.cn).

## Supporting Information

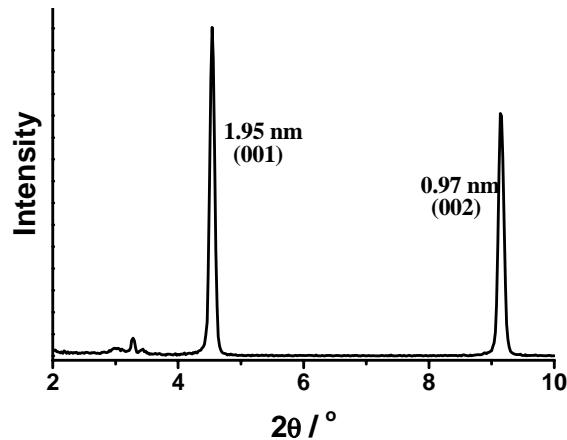




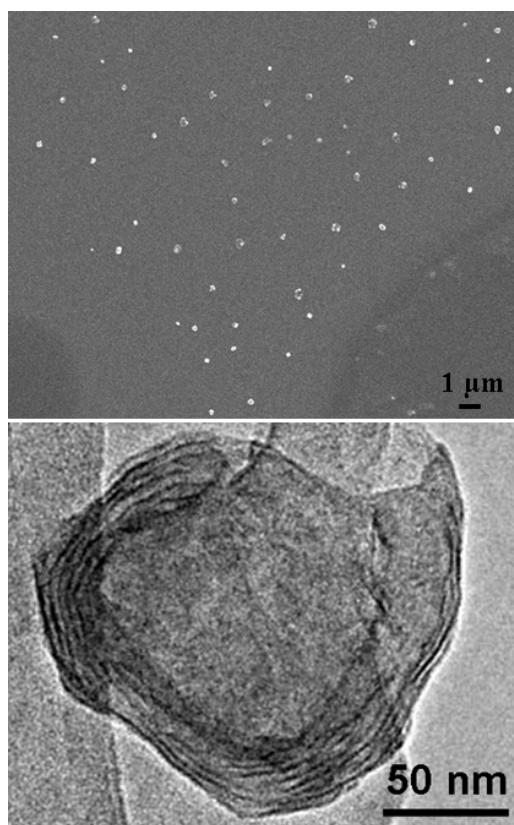
**Figure S1.** DLS results of SEP-1 aqueous solution with different concentrations and preparation time: (a)  $0.1 \text{ mg mL}^{-1}$ , (b)  $0.1 \text{ mg mL}^{-1}$  prepared at another day, (c)  $0.1 \text{ mg mL}^{-1}$  stored at RT for more than 5 months, (d)  $0.5 \text{ mg mL}^{-1}$ , (e)  $1.0 \text{ mg mL}^{-1}$ .



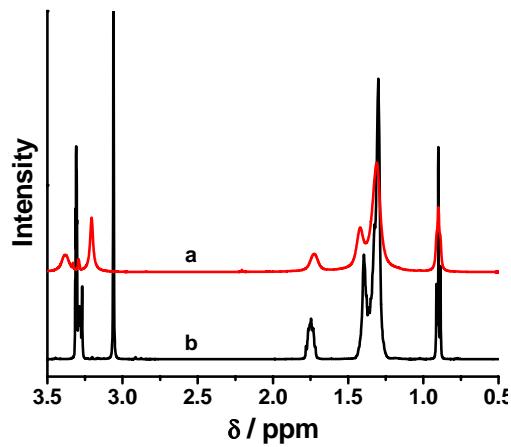
**Figure S2.** More TEM images of SEP-1 aggregates in aqueous solution.



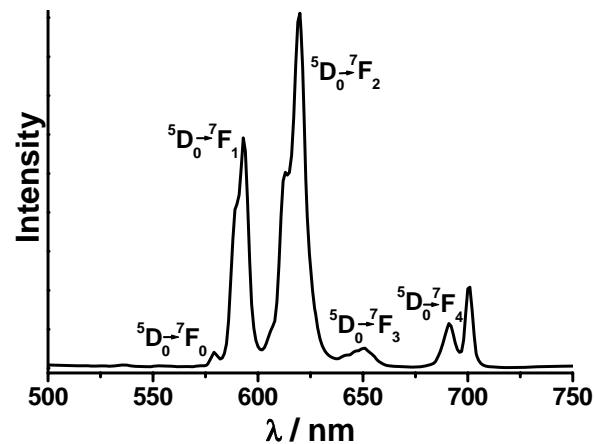
**Figure S3.** XRD pattern of DDDA·Br vesicle in water.



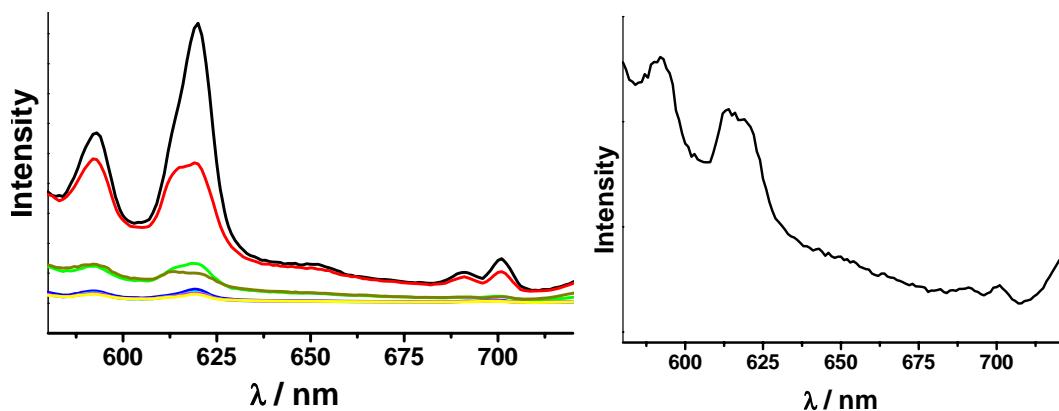
**Figure S4.** SEM and HRTEM image of SEP-1 in 1.0 mg mL<sup>-1</sup> of ethanol solution.



**Figure S5.**  $^1\text{H}$  NMR spectra of DDDA·Br in (a)  $\text{D}_2\text{O}$  and (b)  $\text{CD}_3\text{OD}$ .



**Figure S6.** Fluorescent spectrum of SEP-1 aqueous solution (excited at 289 nm).



**Figure S7.** Fluorescent spectra of SEP-1 solution (a) from top to down are aqueous solution after different time of extracting with  $\text{CHCl}_3$  and (b)  $\text{CHCl}_3$  solution after extracting.