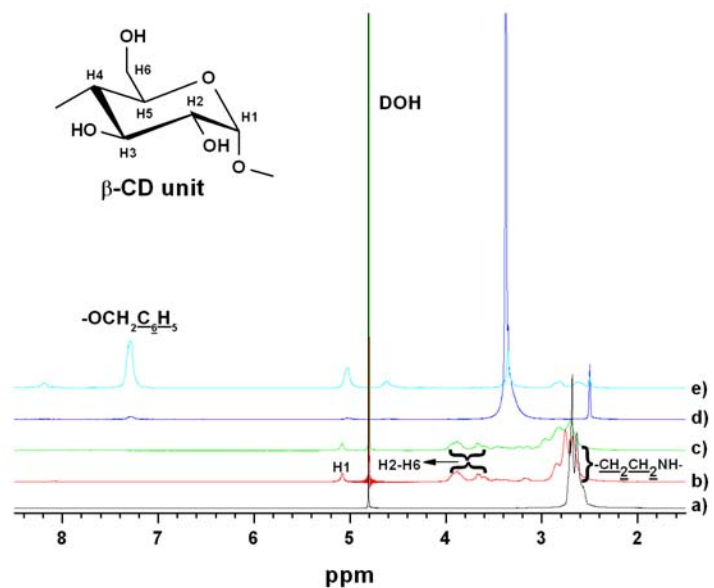


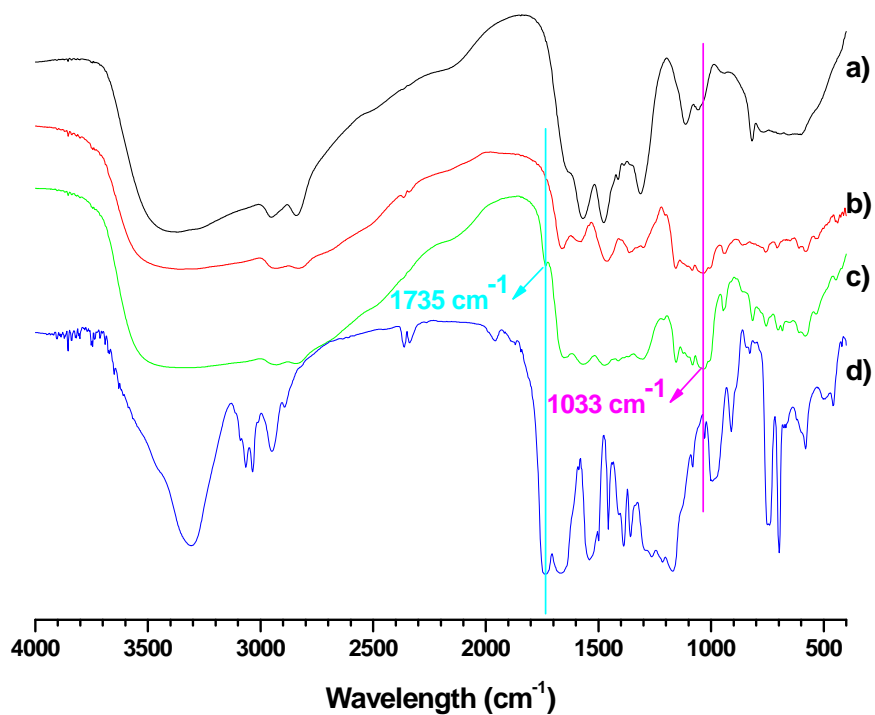
**Supporting Information:**

**Host-guest Interactions Mediated Polymeric Assemblies:  
Multifunctional Nanoparticles for Drug and Gene Delivery**

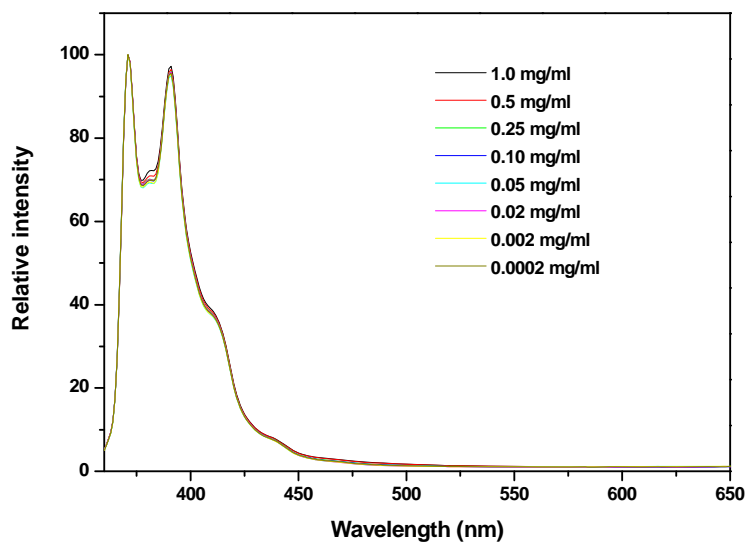
*By Jianxiang Zhang, Hongli Sun, Peter X Ma\**



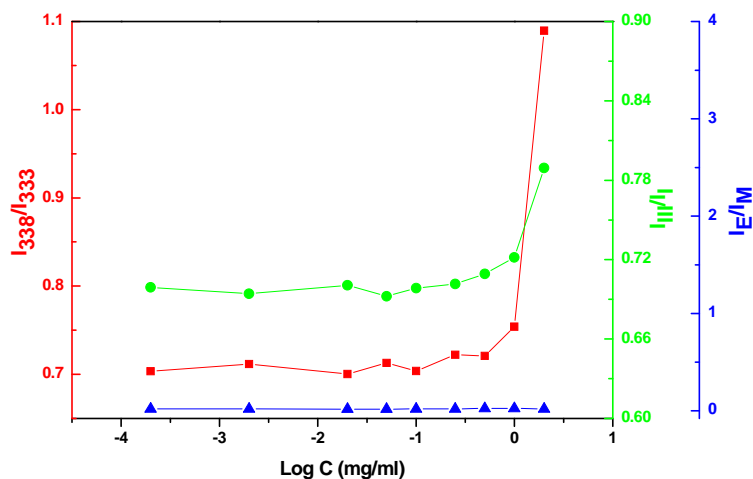
**Figure S1.**  $^1\text{H}$  NMR spectra of a) PEI in  $\text{D}_2\text{O}$ , b) PEI-CD in  $\text{D}_2\text{O}$ , c) PEI-CD/PBLA in  $\text{D}_2\text{O}$ , d) PEI-CD/PBLA in  $\text{DMSO-d}_6$ , and e) PBLA in  $\text{DMSO-d}_6$ .



**Figure S2.** FT-IR spectra of a) PEI, b) PEI-CD, c) PEI-CD/PBLA assemblies, and d) PBLA.

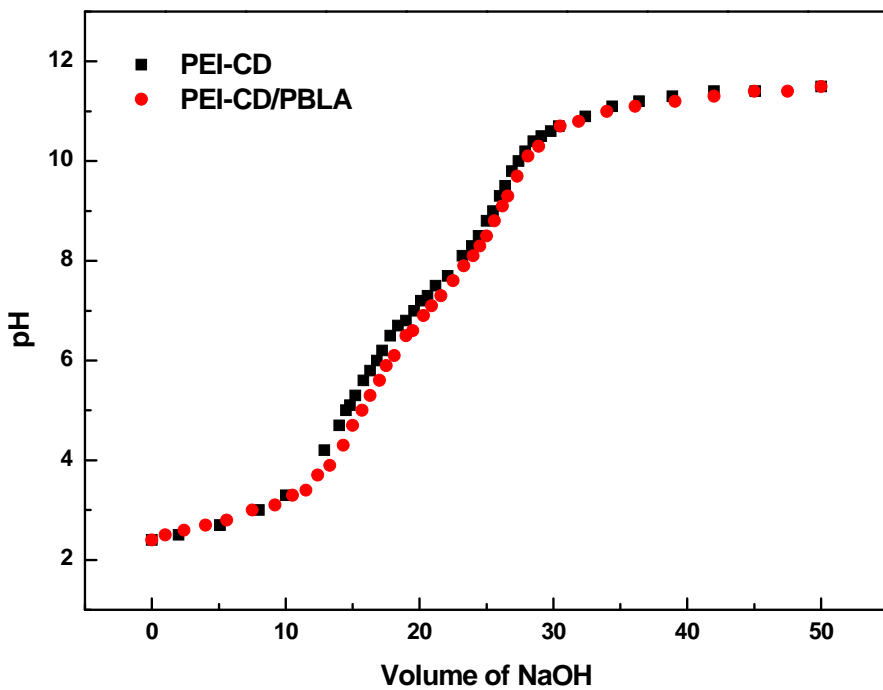


(a)



(b)

**Figure S3.** Normalized emission spectra of pyrene in aqueous solutions containing various concentrations of  $\beta$ -CD. (a), emission spectra with an excitation wavelength at 339 nm; (b), plots of  $I_{338}/I_{333}$ ,  $I_3/I_1$  and  $I_E/I_M$  as a function of  $\beta$ -CD concentration.  $I_{338}/I_{333}$  -- the intensity ratio of the (0, 0) band in pyrene excitation spectrum;  $I_3/I_1$  -- the intensity ratio between the third and first vibrational bands in pyrene emission spectrum;  $I_E/I_M$  -- the intensity ratio of the excimer (475 nm) to monomer (371 nm) in emission spectrum.  $[\text{Pyrene}] = 6.0 \times 10^{-7} \text{ M}$ .



**Figure S4.** Titration of PEI-CD and PEI-CD/PBLA aqueous solutions in 0.01 N HCl with 0.01 N NaOH solution.