Supporting Electronic Information (SEI):

pH-responsive Polymeric Nanoparticles with Tunable Sizes for Targeted Drug Delivery

Mengle Kong^a, Xinwen Peng^{a,b*}, Hao Cui^a, Peiwen Liu^b, Bo Pang^b, Kai Zhang^{b*}

^a College of Chemistry and Chemical Engineering, College of Life Science, Nanofiber Engineering Center of Jiangxi Province, Jiangxi Normal University, Nanchang, Jiangxi 330022, PR China

^b Wood Technology and Wood Chemistry, Georg-August-University of Goettingen,

Buesgenweg 4, 37077 Goettingen, Germany

*Corresponding authors:

xinwenpeng@jxnu.edu.cn (Xinwen Peng)

kai.zhang@uni-goettingen.de (Kai Zhang)

The calibrated plot

In the HPLC conditions (see Fig. S1), at concentrations of 0.02, 0.06, 0.08, 0.12, 0.16 and 0.2 mg mL⁻¹, with a mobile phase of 0.002 mol L⁻¹ sodium acetate buffer solution (pH 4.3) at a flow rate of 0.7 ml min⁻¹, and a mobile phase of methanol at a flow rate of 0.3 ml min⁻¹, the calibrated plot shows a good correlation coefficient of 0.999. The R² obtained from 10 consecutive injections of each concentration is < 0.1.



Fig. S1. The calibrated plot of DOX



Fig. S2. Integrated areas of HPLC showing the release of DOX in aqueous solutions of pH 4.0 from NPs in permeable membrane bags after 6 h, 12 h, 24 h and 48 h.



Fig. S3. Integrated areas of HPLC showing the release of DOX in aqueous solutions of pH 5.0 from NPs in permeable membrane bags after 6 h, 12 h, 24 h and 48 h.



Fig. S4. Integrated areas of HPLC showing the release of DOX in aqueous solutions of pH 7.4 from NPs in permeable membrane bags after 6 h, 12 h, 24 h and 48 h.