

## Electronic Supplementary Information (ESI)

# pH and Glucose Responsive Nanofibers for the Reversible Capture and Release of Lectins

*Yinan Wang<sup>1, 4</sup>, Yohei Kotsuchibashi<sup>2</sup>, Koichiro Uto<sup>3</sup>, Mitsuhiro Ebara<sup>3</sup>, Takao Aoyagi<sup>3</sup>, Yang  
Liu<sup>4</sup>, Ravin Narain<sup>1\*</sup>*

<sup>1</sup>Department of Chemical and Materials Engineering, University of Alberta, 116 St and 85  
Ave, Edmonton, AB T6G 2G6, Canada

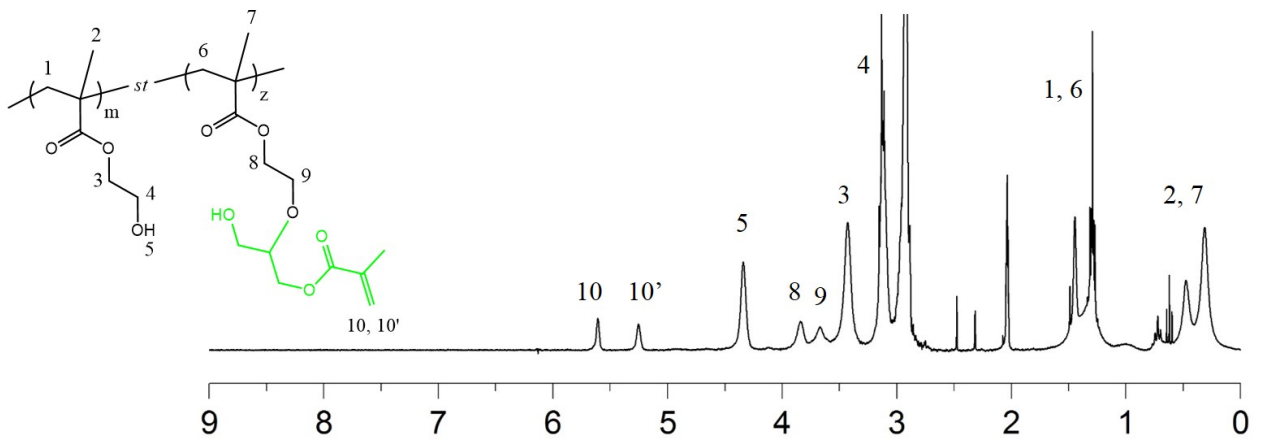
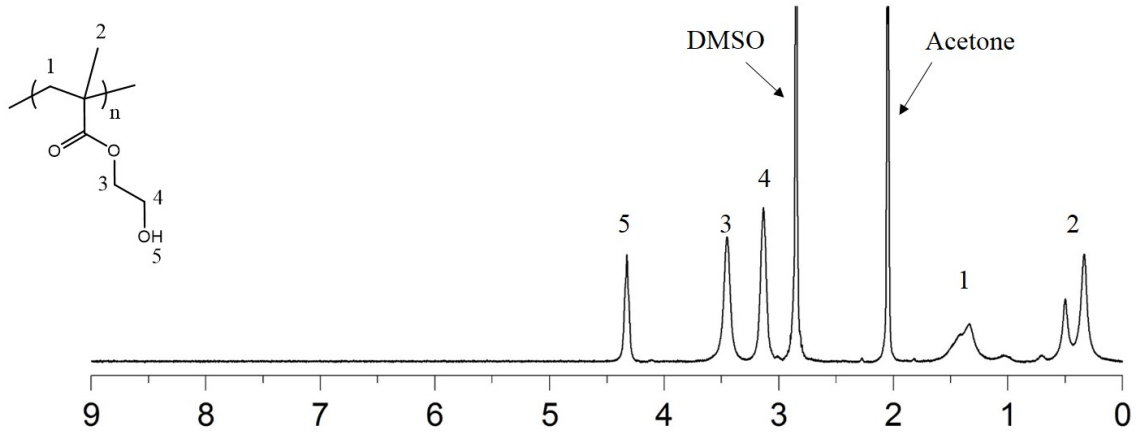
<sup>2</sup>International Center for Young Scientists (ICYS), National Institute for Materials Science  
(NIMS), 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan

<sup>3</sup>Biomaterials Unit, International Center for Materials Nanoarchitectonics (WPI-MANA),  
National Institute for Materials Science (NIMS), Tsukuba, Ibaraki 305-0044, Japan

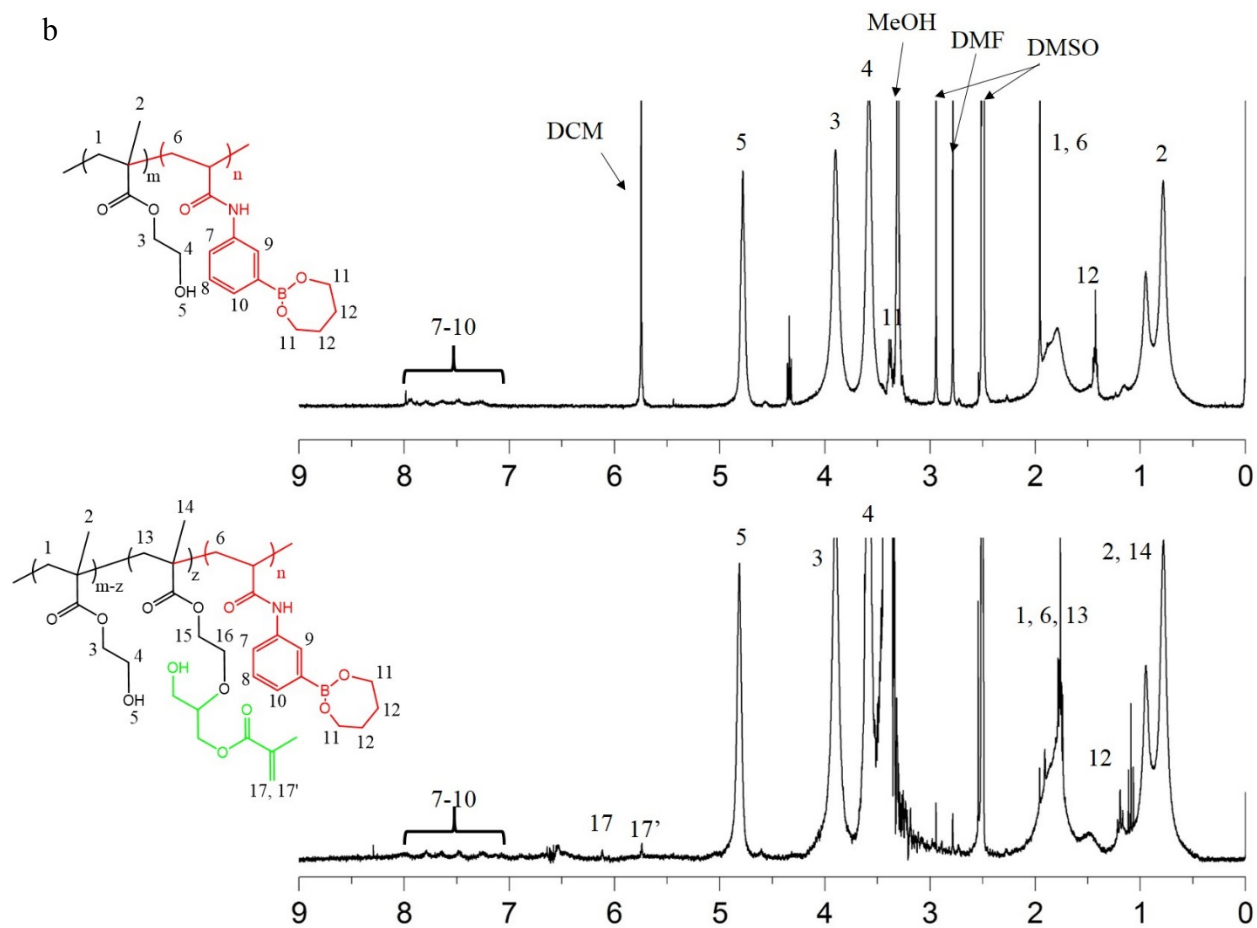
<sup>4</sup>Department of Civil and Environmental Engineering, University of Alberta, 116 St and 85  
Ave, Edmonton, AB T6G 2G6, Canada

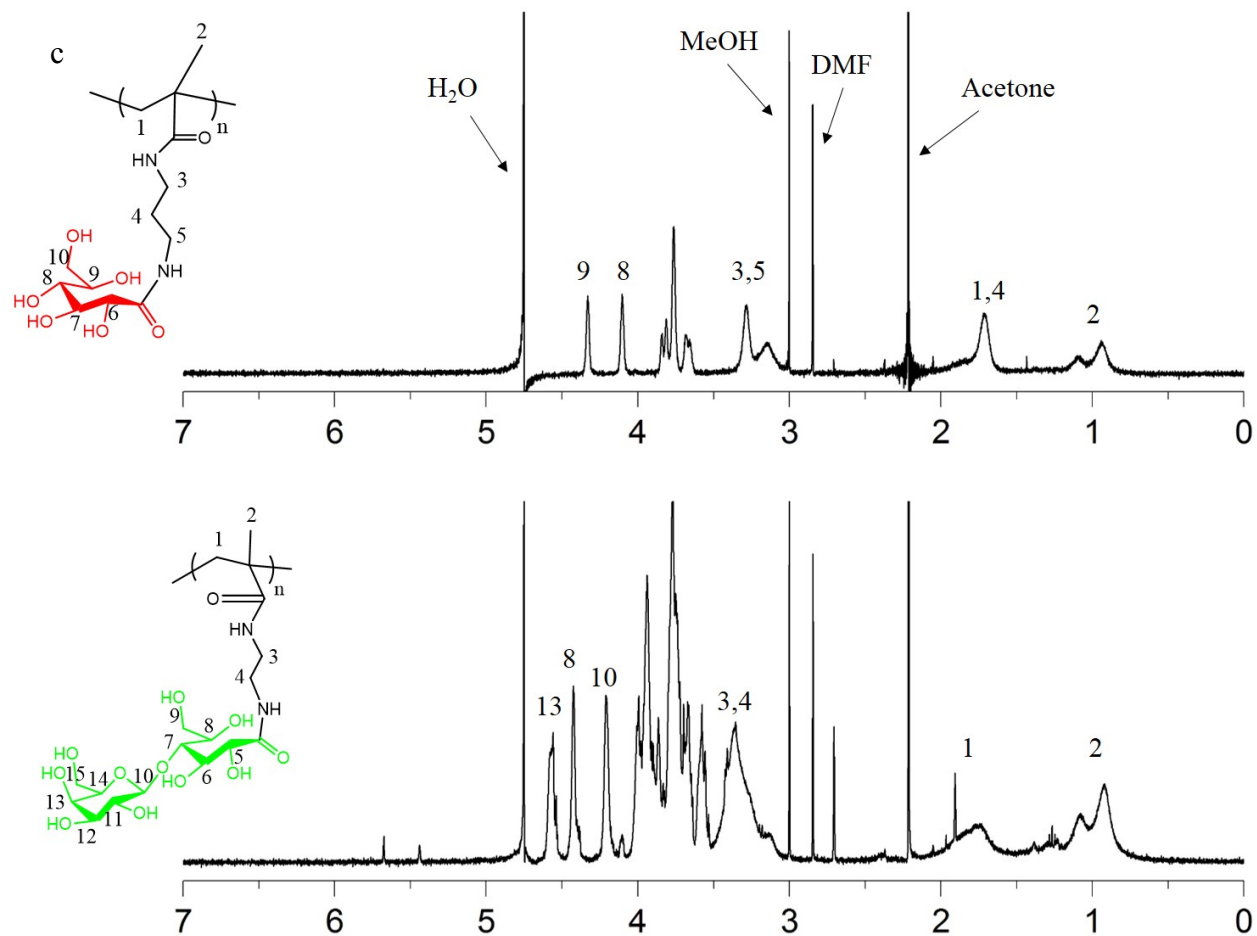
\* To whom correspondence should be addressed: [narain@ualberta.ca](mailto:narain@ualberta.ca)

a



b





**Figure S1.**  $^1\text{H}$  NMR spectra of P(HEMA<sub>321</sub>) (a) and 1,4-butanediol protected P(HEMA<sub>780</sub>-st-AAPBA<sub>38</sub>) before and after the introduction of GMA. (c)  $^1\text{H}$  NMR spectra of PGAPMA and PLAEMA.