Supporting information

Rapid uniaxial actuation of layered bacterial cellulose/ poly(N-

isopropylacrylamide) composite hydrogel with high mechanical strength

Qidong Wang, Taka-Aki Asoh, and Hiroshi Uyama*

Department of Applied Chemistry, Graduate School of Engineering, Osaka

University

2-1 Yamadaoka, Suita, Osaka 565-0871, JAPAN

Phone: +81-6-6879-7364, Fax: +81-6-6879-7367

e-mail: uyama@chem.eng.osaka-u.ac.jp



Fig. S1 FT-IR spectra of BC/PNIPAAm hydrogel with different MDI ratios.



Fig. S2 DSC traces of swollen hydrogel samples



Fig. S3 SEM images of dried COM3: (a) horizontal and (b) vertical images are on the left and right columns, respectively.