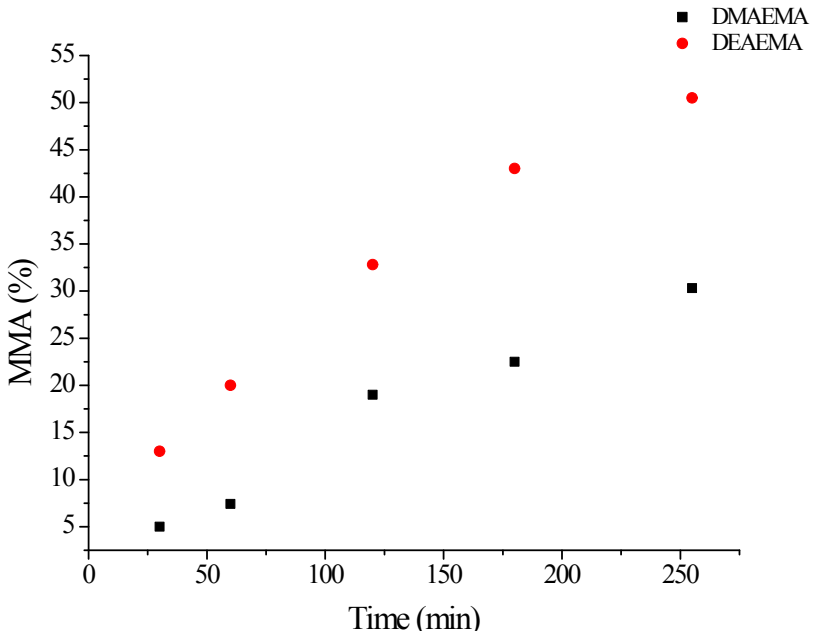
Electronic Supplementary Information

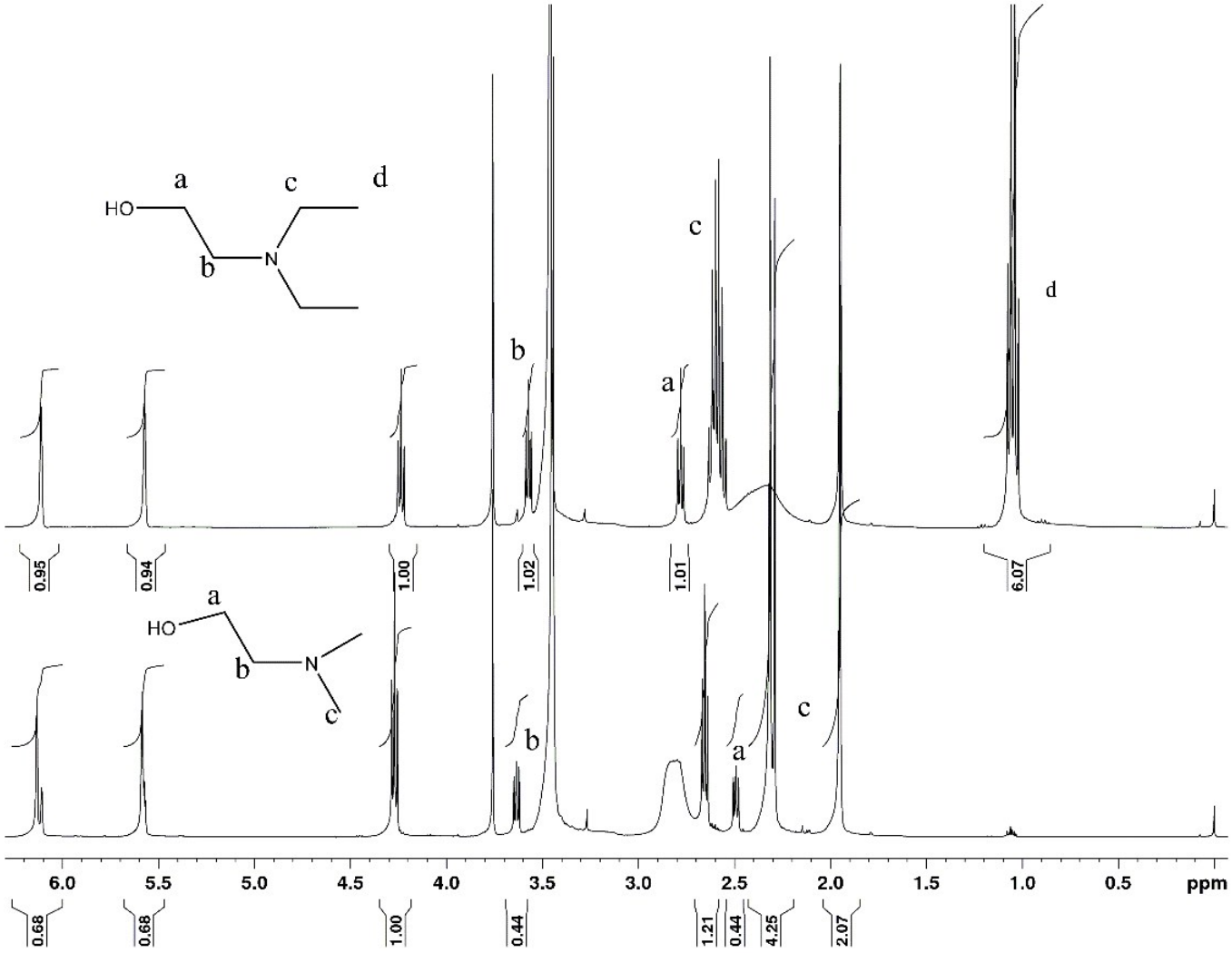
For

Synthesis of Carbon Dioxide Responsive Cellulose Nanocrystals by Surface-Initiated Cu(0)-Mediated Polymerisation

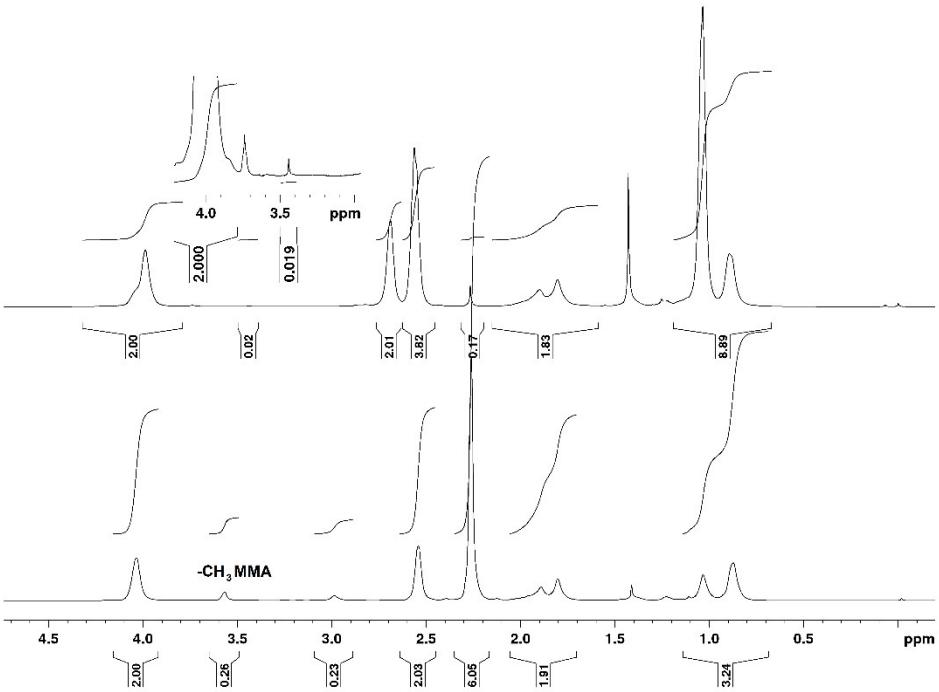
J. Arredondo, P. G. Jessop, P. Champagne, Jean Bouchard, M. F. Cunningham



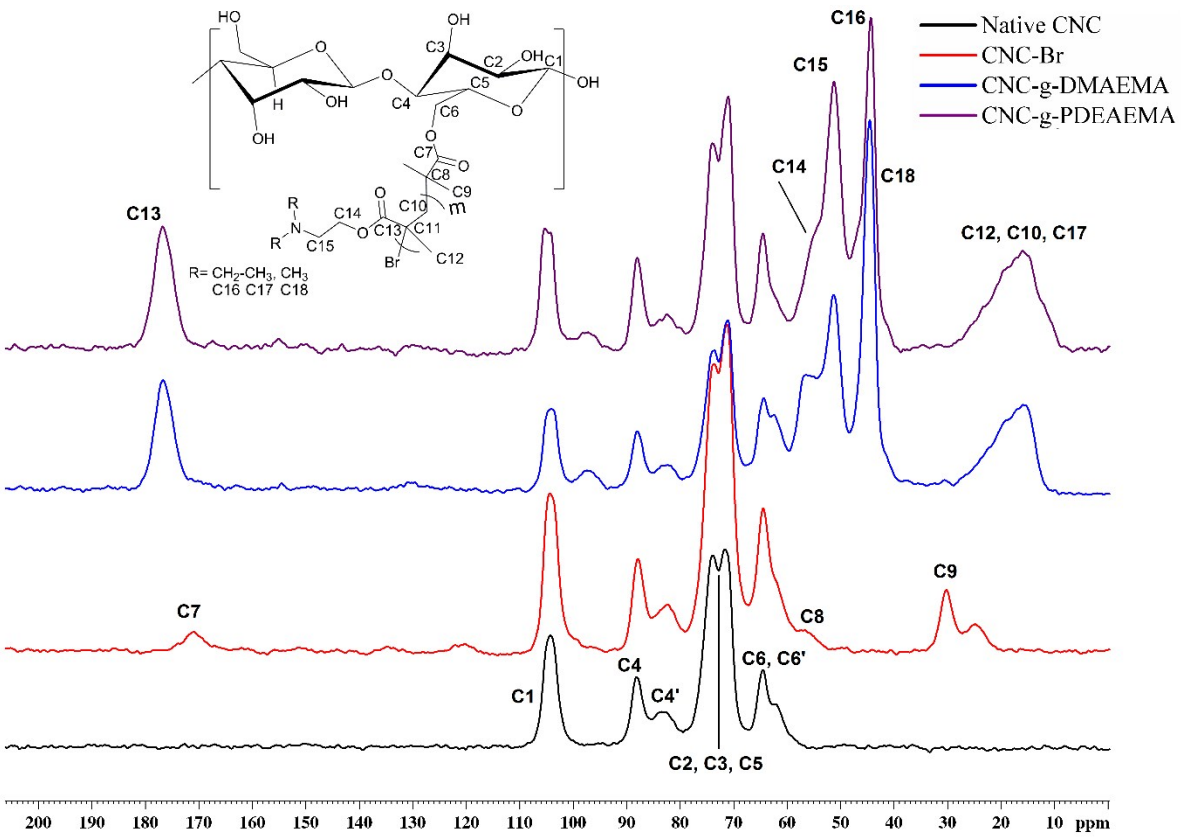
S1. Degree of transesterification MMA vs. time of DMAEMA and DEAEMA [aminoethyl methacrylate]:[MeOH] = 1:1 v/v at 60 C.



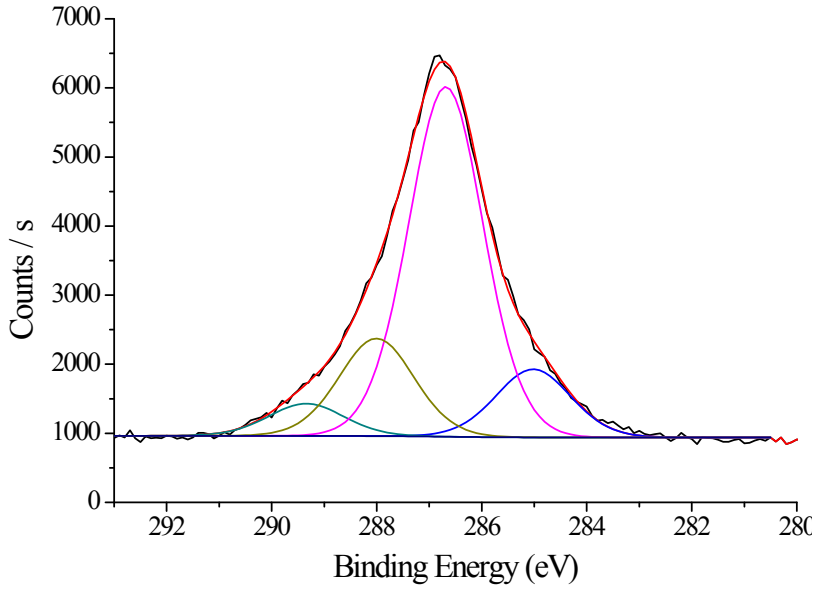
S2. ^{1}H NMR spectra of DEAEMA (a) and DMAEMA (b) after 250 min of transesterification in methanol.



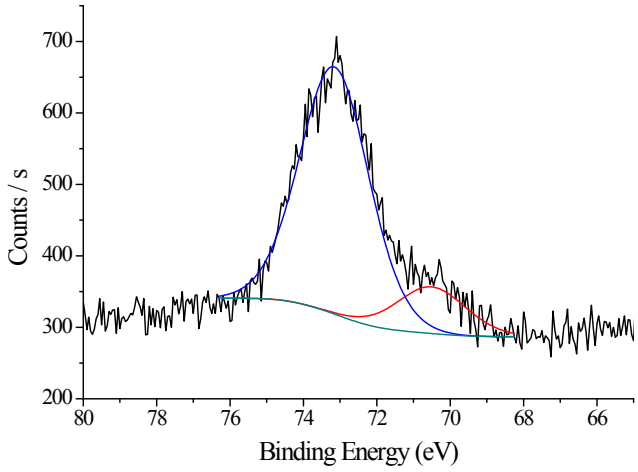
S3. ^{1}H NMR spectra of DEAEMA (a) and DMAEMA (b) polymerisation after 60 min via Cu(0)-ATRP at 60°C.



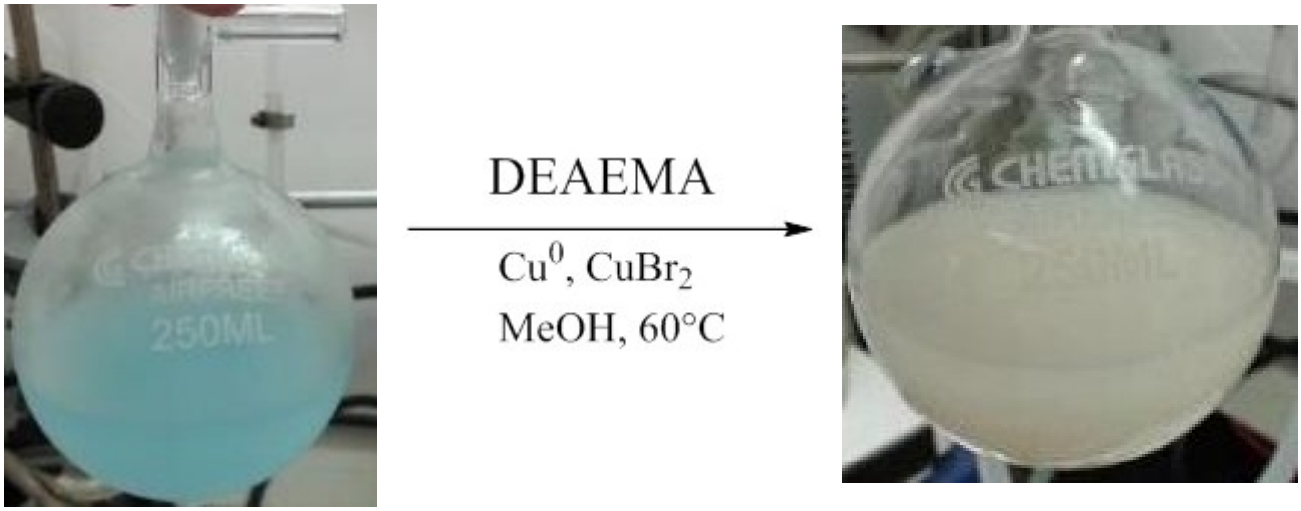
S4. Solid-state CP-MAS ^{13}C NMR spectra of native CNC and surface-modified CNC with BIBA, PDMAEMA and PDEAEMA.



S5. XPS C1s high resolution spectrum of CNC-Br.



S6. XPS Br3d high resolution spectrum of CNC-Br.



S7. SI-Cu(0)-ATRP of DEAEMA from CNC-Br.