Electronic Supplementary Information

Value-additive utilization of agro-biomass: Preparation of cellulose triacetate directly from rice straw as well as other cellulosic materials

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120

110 100 90 80 70 60 50

210

200 190 180 170 160 150 140 130

¹H- and ¹³C-NMR spectra of CTA obtained from Ac₂O-MeSA method

-10 ppm

40

20 10 0

30





X-ray diffractograms of CTA obtained by the direct acetylation of rice straw: (A) The crude product straight after the aqueous workup of the reaction mixture; (B) After removing the CHCl₃- insolubles



X-ray diffractograms of CTA obtained by the direct acetylation of rice straw: (A) The crude product straight after the aqueous workup of the reaction mixture; (B) After removing the CHCl₃- insolubles

SEM Images of the variously obtained CTA



Scanning electron microscopic (SEM) images of the variously obtained CTA preparations reported in this study: (a) CTA prepared by *Method A* from rice straw directly; (b) CTA prepared from MCC by *Method A*; (c) CTA prepared from MCC by *Method B*; (d) CTA prepared from MCC by *Method C*