
Keywords

Cellulose • Chitosan • Blend • Cellulose dissolution

The NaOH/urea/thiourea systems have been further modified to enable dissolution of wood cellulose and high DP cellulose and obtain stable spinning solutions [13Zha]. Up to 87 % solubility was obtained for wood cellulose with a DP of 648 using NaOH/acetamide/tetraethylammonium chloride [13Zha]. Morphology and thermal stability of the fibers obtained using the multicomponent system were studied, but the tensile properties were not reported.

NMMO process was used to produce regenerated blend fibers from bacterial cellulose and hydroxypropyl chitosan [13Lu]. The addition of chitosan improved strength and modulus but decreased elongation substantially. Blend fibers also had higher antibacterial activity compared to fibers produced from bacterial cellulose alone.

References

- [13Lu] Lu, X., Tang, S., Huang, B., Shen, X., Hong, F.: *Fibers Polym.* **14**(6), 935 (2013)
[13Zha] Zhao, D., Liu, M., Ren, H., Li, H., Fu, L., Ren, P.: *Fibers Polym.* **14**(8), 1261 (2013)