

Paper-grade pulp as raw material for regenerated cellulosic fibres in an ionic-liquid based process

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The commercial production of man-made cellulosic fibres relies currently on the use of dissolving-grade pulp. Wider raw material base holds potential in further improving the environmental sustainability of man-made cellulosic fibres. In this work, hemicellulose-rich paper-grade pulps from eucalyptus and softwood were used as raw material for spinning regenerated fibres using an ionic liquid-based process. Enzymatic and chemical pretreatments were used for making the pulps suitable for further processing. After fibre spinning high hemicellulose content was found in the regenerated fibres. This work elaborates on the effect of high hemicellulose content on fibre properties.