

NANOTECHNOLOGY AND PRINTS RECYCLING

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Abstract: *The influence of print made on the paper with nanoparticles on the efficiency of deinking flotation process and on the characteristics of the recycled fibers is presented in the paper. The prints on fine art paper, mat and glossy, on uncoated paper with the recycled or virgin fibres as well on papers of the same composition but the different grammage have been submitted to the same experimental conditions. The handsheet brightness made of fibres from different phases of deinking flotation process has been discussed in the paper and the obtained results are explained by the image analysis. Except the mentioned the investigation results show somewhat greater values of the tensile index of handsheet made from the recycled fibers from prints on the substrate with the nanoparticles in relation to those on other substrates, which could be attributed to better mutual binding of fibers.*

Key words: *printing substrates, nanoparticles, recycling, brightness, tensile index*



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