

Novel polysaccharide additives for inkjet printing of paper and board

Dr. Samit Chevli, John Fisher and Natnael Behabtu

Abstract

DuPont has applied its expertise in producing cost effective industrial biomaterials to design a family of new polysaccharide materials called glucan polysaccharides with unique morphologies. These materials are produced from natural, sustainable feedstocks, and will be fully recyclable. The biopolymer offers great latitude such that it can be designed to give different morphologies and further chemistry can be performed to make it non-ionic, cationic or anionic.

The growth in inkjet market has created demand for ongoing improvements in paper and coatings to meet the increasing performance targets related to colour and dry time.

The biopolymer in our testing has shown advantages in inkjet paper coatings to improve several properties including dry time, optical density and colour gamut.

This presentation will discuss the structure and properties of this new biopolymer in detail, and how we are able to make use of the unique properties in paper coatings for inkjet.