



GUEST EDITORIAL 5

Forest products: The nanocellosics frontier

Art J. Ragauskas

NANOCOMPOSITES 9

A review of cellulose nanocrystals and nanocomposites

Elaine C. Ramires and Alain Dufresne

NANOCOMPOSITES 19

Novel all-cellulose composite displaying aligned cellulose nanofibers reinforced with cellulose nanocrystals

Washington Luiz Esteves Magalhães, Xiaodong Cao, Magaly Alexandra Ramires, and Lucian A. Lucia

NANOCELLULOSE WHISKERS 29

Thermal gravimetric analysis of in-situ crosslinked nanocellulose whiskers – poly(methyl vinyl ether-co-maleic acid) – polyethylene glycol

Lee A. Goetz, Aji P. Mathew, Kristiina Oksman, and Arthur J. Ragauskas

MOLECULAR MODELING 37

Calculation of single chain cellulose elasticity using fully atomistic modeling

Xiawa Wu, Robert Moon, and Ashlie Martini

**SPECIAL
NANOTECHNOLOGY
ISSUE**