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Authors: Liqing Wei, Umesh P. Agarwal, Kolby C. Hirth, Laurent M. Matuana, Ronald C. Sabo, Nicole M. Stark



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Chemical Modification of Nanocellulose with Canola Oil Fatty Acid Methyl Ester

Liqing Wei,^a Umesh P. Agarwal,^a Kolby C. Hirth,^a Laurent M. Matuana,^b Ronald C. Sabo,^{a*}

Nicole M. Stark^{a*}

^aUSDA Forest Service, Forest Products Laboratory, One Gifford Pinchot Drive, Madison, WI 53726, United States

^bSchool of Packaging, Michigan State University, East Lansing, MI 48824, USA

Corresponding authors

*E-mail: nstark@fs.fed.us (N.M. Stark). Tel.: +1 (608) 231 9392. Fax: +1 (608) 231 9262.

*E-mail: rsabo@fs.fed.us (R.C. Sabo). Tel.: +1 (608) 231 9530. Fax: +1 (608) 231 9262.

Highlights

- Cellulose nanocrystal was modified by canola oil fatty acid methyl ester (CME)
- CME performs as both the reaction reagent and solvent
- Hydrophobic long chain hydrocarbons (C16 and C18) were grafted onto CNC surfaces
- Sizes of transesterified CNCs were smaller than unmodified CNCs
- 3-D crystalline structure of CNCs was not altered by modification

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