

MAR15-2014-020423

Abstract for an Invited Paper  
for the MAR15 Meeting of  
the American Physical Society

**Ecobionanocomposites: Hierarchical supramolecular materials incorporating stereocomplexation<sup>1</sup>**

JOHN DORGAN<sup>2</sup>, Colorado School of Mines

Poly lactides (PLAs) are a leading class of renewable plastics with several favorable sustainability metrics. However, for many applications basic PLA has insufficient properties. The combination of nanoscopic filler particles can be combined with the phenomena of stereocomplexation to create a new class of hierarchically structured materials. Recent progress on the development of these novel ecobionanocomposites is discussed.

<sup>1</sup>The following grants are deeply appreciated: USDA 2012-33610-19945 and NSF CMMI 1335338

<sup>2</sup>Chemical and Biological Engineering Department, 1500 Illinois Street, Golden, CO USA