



BNC Seminar

**In Search of More Sustainable Biomass
Based Polymeric Materials**

Mark D. Soucek

*Sudar Aggarwal Endowed Research Chair and Chair Department of Polymer Engineering
University of Akron | Akron, OH*

Wednesday, January 29, 2019
11:00am, BRK 1001

Abstract: Thusfar, my group has focused on seed oil based materials for composites, tires, films and coatings; and some work corn based PLA materials for coatings. We will report on enzyme strippable PLA coatings that have the potential to be easily developed into composable films. Our work on norbornylized seed oils has resulted in new materials for tires in terms of replacement of aromatic oils, and as the subsequent epoxidation of these norbornylized oils into biobased cycloaliphatic epoxides has resulted in new materials for replacement of unsaturated/styrene polymers (UPE) in UPE composites, and for the replacement of bisphenol-A can coatings. We will also report on recent work on UV-curable alkyds as possible candidates for films technology.