Solvay Seminars in Macromolecular Science & Engineering

Macromolecules Innovation Institute (MII)

VIRGINIA TECH

Prof. Jeff Youngblood

"Nano-/Bio- is Not an Either/Or Choice for Composites"

Purdue University
Professor
School of Materials Engineering

Host: Michael Bortner

Abstract: In this presentation, an overview will be presented of research in the group of Prof. Youngblood with specific focus given to renewable/sustainable nanocomposites. Cellulose Nanomaterials (CN) are attractive materials for possible applications in nanocomposites, packaging and biomedicine as they are high strength and stiffness, yet are renewable, biodegradable, non-toxic, and low-cost. Here, we detail our efforts at preparing CN-based materials and composites and their properties. As well, our efforts at utilizing CN in a variety of application spaces will be detailed. Thus, we provide new elements to understand the interconnection among preparation variables towards optimal CN materials design.

Purdue University
School of Materials Engineering
West Lafayette, IN 47907
Phone: 765-496-2294
E-mail: jpyoungb@purdue.edu

Bio: Professor Jeffrey P. Youngblood accepted a position in the School of Materials Engineering at Purdue University in 2003. Promoted to Associate Professor in 2009 and Professor in 2015, he uses his polymer expertise to investigate nanotechnology, surface science, advanced processing and biomaterials. Of late, he has been specifically interested in ceramic processing using polymeric methods, advanced composites and fabrication, renewable resins and cellulose nanocomposites, the latter of which has been a particular area of interest over the past 10 years.

Sponsored by the
Solvay International Chemical Group

DATE: OCTOBER 10, 2018
TIME: 11:15AM-12:15PM
LOCATION: KELLY HALL 310