FY2015 PSE Fellowships

Proposal Title & Author
1. Fiber orientation in multiphase forming technology – Aidun, Cyrus

2. Advanced froth flotation for the separation of water-soluble and mildly hydrophobic contaminants from aqueous pulps and slurries – Behrens, Sven; Meredith, Carson


4. Strain Field Mining: The Key to Engineering the Strength and Fracture Toughness of Paper and Packaging Products - Muhlstein, Christopher

5. High Performance Barrier Coating Packages from Well Designed InkJet Printing Using Cellulose Nanocrystal-Polymer Composite - Qi, Jerry; Deng, Yulin

6. Protein-assisted functional active packaging for safety and security: the intersection of cellulosics and fungal hydrophobins with semiconducting polymers - Russo, Paul; Reichmanis, Elsa

7. Process systems engineering of novel mild chemical pretreatment options of lignocellulosics - Bommarius, Andreas; Realff, Matthew

8. Nanocellulose based Biomimetic Chemocatalysts for Conversion of Furan Compounds to Fuels - Jones, Chris

9. Mechanocatalytic Depolymerization of Lignin over Kaolin-Based Catalysts - Sievers, Carsten

10. Bio-Inspired, Ultra-Strong Biopolymer-Based Nanocomposites - Jacob, Karl; Garmestani, Hamid

11. High Performance Cellulose Fibers Based on Cellulose Nano Crystals - Kumar, Satish; Moon, Robert

12. Rapid, Reliable Optical Analysis of Cellulose Nanocrystal Morphology/Size - Sandhage, Ken; Moon, Robert