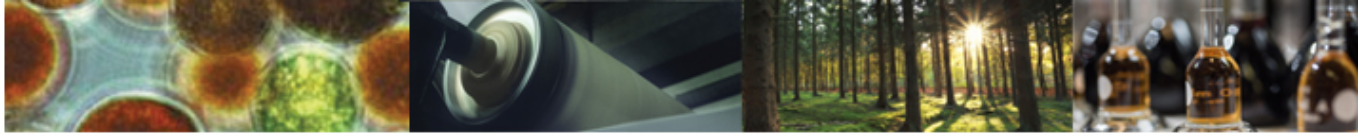
Georgia Tech Renewable Bioproducts Institute



The Endowment in Action

Students	Degree	School	Advisor(s)	Project Title
Wang, Songcheng	PhD	ChBE	Behrens/Meredith	Encapsulation of the Liquid Paper Sizing Agent ASA
Kwok, Thomas Tai-Min	PhD	CHBE	Bommarius/Realff	Process Systems Engineering of Novel Mild Chemical Pretreatment Options of Lignocellulosics
Du, Xu	PhD	CHBE	Deng	Lignin Based Green Polyurethanes from 100% Sustainable Natural Materials
Mulyardi, Arie Tri Nugroho	PhD	ChBE	Deng	High-Performance Cellulose Nanofibrils Composites Aimed Light Weight Automotive
Liu, Wei	PhD	ChBE	Deng	Design of Natural Nanofiber Composites: An Integrated Approach to Control Barrier and Mechanical Properties of Cellulose- and Chitin- Based Nanomaterials
Li, Vincent Chi-Fung	PhD	ChBE	Deng / Qi	Paper Substrates for Advanced Technologies and Analyses
Jiang, Lu	PhD	ChBE	Hess/Breedveld	Scalable Technologies to Control Liquid Wetting and Adhesion on Paper Substrates
Du, Xiaotang (Tony)	PhD	ChBE	Hsieh	Novel Liquid Phase Plasma Technology for Fatty Acids and Microstickies Removal in Waste Water Treatement and De-inking of Inkjet Printed Paper
Ellebracht, Nathan C.	PhD	CHBE	Jones	Nanocellulose-based Biomimetric Chemocatalysts for Conversion of Furan Compounds to Fuels
Satam, Chinmay	PhD	ChBE	Meredith	Design of Natural Nanofiber Composites: An Integrated Approach to Control Barrier and Mechanical Properties of Cellulose- and Chitin- Based Nanomaterials
Chiang, Leo Ya-Dong	PhD	ChBE	Nair/Lively	Advanced Porous Materials and Processes for Biorefinery Separations
Kevlich, Nikita Sergeevich	PhD	ChBE	Nair/Shofner	Advanced Membranes for Energy-Efficient Concentration of Spent Pulping Liquors in the Kraft Process
Risteen, Bailey Elizabeth	PHD	CHBE	Reichmanis/Russo	Protein Assisted Functional Active Packaging for Safety and Security: the Interesection of Cellulosics and Fungal Hydrophobins with Seminconducting Polymers
Brittain, Alex D	PhD	CHBE	Sievers	Mechanocatalytic Depolymerization of Lignin over Kaolin-based Catalysts
So, Jungseob	PhD	ChBE	Sievers/Sholl	Production of Lactic Acid from Monosaccharides over Solid Catalysts
Dutzer, Michael	PhD	ChBE	Walton	Low-Cost Carbide-Derived Carbons for Absorptive Removal of VOCs from Air Streams
TBD in Feb'16	PhD	Chem	Peralta-Yahya	Upgrading Lignin-derived Aromatic Monomers into Value-added Chemicals via Pterin-based Monooxygenases
Akinosho, Hannah O.	PhD	Chem	Ragauskas	Enhancing Cellulose Reactivity for Dissolving Grade Pulps via Pulping
Cannatelli, Mark	PHD	Chem	Ragauskas	Applications of Laccases in Green Chemistry
Tolbert, Allison K.	PhD	Chem	Ragauskas	Carbon Fibers from Kraft Black Liquor Lignin
Augustin, Trevar C.	PHD	ME	Aidun	Rheological and Thermal Transport Properties of High Solids Ratio BL
Lee, Vincent	PhD	ME	Aidun	Analysis of Multiphase Foaming and Flow Characteristics in the Forming Section
Oztekin, Dennis E.	PHD	ME	Aidun	Fiber Orientation in Multiphase Forming Technology
Zhu, Yuanzheng	PHD	ME	Aidun	Direct Analysis and Tracking of the Crystal Formation in Black Liquor Evaporators
Chilmonczyk, Mason	PHD	ME	Federov	Multimode Micro/Nanoscale Imaging to Enable Enhanced Pulp Washing
Le, Luc Hong	PhD	ME	Jacob/Kalaitzidou	Nanocellulose-Based Bio-nanocomposites
Liu, Yitao	PHD	ME	Jiao	Optimal Resource Balancing and Factory Loading for Energy Cost Reduction in the Pulp and Paper Industry
Hume, Chad Albert	PHD	ME	Rosen	Hole Design and Manufacture for Press Fabric Layers to Improve Dewatering
Qui, Ke	PHD	MSE	Jacob/Garmestani	Bio-inspired, Ultra-Strong Bioplymer-Based Nanocomposites
Chang, Huibin	PhD	MSE	Kumar	Carbon Fibers from Polyacrylonitrile (PAN) /Cellulose Nano Crystals
Dagg, Alex	PhD	MSE	Kumar	High Performance Cellulose Fibers Based on Cellulose Nano Crystals
Liu, Hsiang-Hao (Clive)	PhD	MSE	Kumar	Carbon Fibers from Lignin/Carbon Nanotube (CNT) Composites

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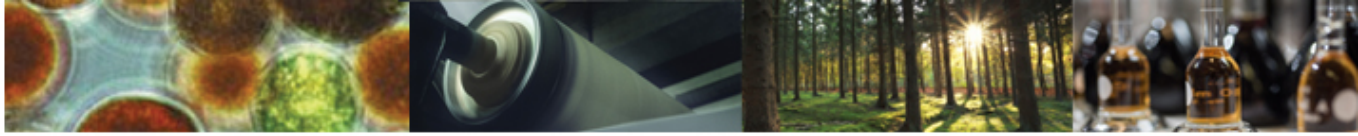

The Endowment in Action

Venkatram, Shruti	PhD	MSE	Kumar	Bi-component, Functional and Eco-friendly Textile Fibers with Synthetic Polymers as the Sheath and Lignin as the Core
Na, Yoon Joo	PhD	MSE	Muhlstein	Strain Field Mining: The Key to Engineering the Strength and Fracture Toughness of Paper and Packaging Products
Lang, Gus	PhD	MSE	Reynolds/Moon	Electrofunctional Paper: Highly Conductive and Switchable Displays
Semenikhin, Nikolay	PhD	MSE	Sandhage	Rapid, Reliable Optical Analysis of Cellulose Nanocrystal Morphology/Size
Irvin, Cameron	PhD	MSE	Shofner	Design of Natural Nanofiber Composites: An Integrated Approach to Control Barrier and Mechanical Properties of Cellulose- and Chitin- Based Nanomaterials
Orr, Matthew P	PHD	MSE	Shofner	Tensegrity -Inspired Microstructures for Cellulose Nanocrystal Composites in Film and Packaging Applications
Baykal, Aydin Bedi	PhD	MSE	Singh	Role of Natural Inhibitors and Extractives on Black Liquor Corrosivity
Hanson, Kasey	PhD	MSE	Singh	Corrosion Control in Superheaters to Increase Kraft Recovery Boiler Efficiency
He, Liang	PhD	MSE	Singh	Corrosion Behavior of New Lean Duplex Stainless Steels in Changing Pulp and Paper Mill Environments
Wu, Gaoxiang (Garrett)	PhD	MSE	Singh	Effect of Strain on Repassivation and Corrosion Behavior of Duplex Stainless Steels in Pulp and Paper Mill Environments
Beatty, Brian Robert	PhD	MSE	Vogel/Shofner	Assessing the Use of Paper and Cellulosic Materials as Flexible Substrates for 2D Electronic Materials