Tuesday, September 24

**Breakfast Connections**
8:00 am - 8:30 am

**RISE® 2019 STUDENT POSTERS**
8:30 am - 5:00 pm

**Surface modification of nonwovens for water filtration**
Yang Yu, Ph.D. Student - Fiber & Polymer Science, North Carolina State University

**Evaluations and engineering of skin comfort and tactile properties of nonwoven fabrics**
Lanjun Yin, Graduate Student, North Carolina State University

**Advanced Meltblown Structures**
Erin Roberts, Graduate Student, North Carolina State University

**Hydrogel Functionalized Polypropylene Membranes**
Camden Cutright, Graduate Student, North Carolina State University

**Fundamental Study of Polymer Compatibility of Polymer Blends and Their Effects on Melt-Spinning Process and Fiber/Nonwoven Properties**
Imon Khan, Graduate Student, North Carolina State University

**Effects of filter media structures on particle capture and dust holding capacity**
Yu Song, Graduate Student, North Carolina State University

**PVDF Nonwovens Structure-property relationships**
Salvatore Luiso, Graduate Student - PhD - Chemical & Biomolecular Engineering, North Carolina State University

**Micro-mechanics of Thermal Nonwoven Bonds via Micro Digital Image Correlation**
Alireza Garmabi, Graduate Student, North Carolina State University

**Elastomeric Multifunctional Nonwoven**
Yanan Wang, Ph.D. Student - Fiber & Polymer Science, North Carolina State University

**Recycled PET Characterization, Fiber Formation & Applications**
Avoni Gharde, Graduate Student, North Carolina State University

**Self-repairing nonwoven fabrics using stimuli-responsive hydrogels**
Srivatsan Ramesh, Graduate Student, North Carolina State University
Patent Landscape in Nonwovens
Angela D’Orio, Student, The Nonwovens Institute At North Carolina State University

Fuzz Formation in Nonwovens
Eunyoung Kim, Ph.D. Student - Fiber & Polymer Science, North Carolina State University

PLA Nonwovens
Hamid Ebrahimi, Ph.D. Student - Fiber & Polymer Science, North Carolina State University

New tools for understanding charge on nonwovens
Sooik Im, Ph.D. Student - Chemical & Biomolecular Engineering, The Nonwovens Institute At North Carolina State University

Blends of Most Commonly Used Polymers in Nonwovens and Their Interface
Tomik Moradi, Ph.D. Student - Fiber & Polymer Science, North Carolina State University

WELCOME
8:30 am - 8:35 am
Moderator: Dave Rousse, President, INDA, Association of The Nonwoven Fabrics Industry

SUSTAINABLE ADDITIVES I
8:35 am - 10:20 am
Moderator: Dave Rousse, President, INDA, Association of The Nonwoven Fabrics Industry

CiCLO Sustainable Textile Technology
Andrea Ferris, CEO, Intrinsic Advanced Materials

Demystifying Biodegradation and the Circular Economy of Nonwoven Synthetic Materials
Teresa Clark, Vice President - Product Development And Sustainability, ENSO Plastics, LLC

Adding Value and Circularity to Nonwovens through Masterbatch Additives
Brett Watkins, Business Innovations - Americas, Sukano Polymers Corporation

Coffee & Networking Break
10:20 am - 11:00 am

SUSTAINABLE ADDITIVES II
11:00 am - 12:00 pm
Moderator: Dave Rousse, President, INDA, Association of The Nonwoven Fabrics Industry

Biodegradation-Promoting Additives for Plastics – Questions You Should Ask
Susan Selke, Ph.D., Director & Professor, Michigan State University - School of Packaging

Maximizing the Molecule: Why Recycling Plastic is the Best Option
Sandi Childs, Film and Flexible Programs Director, Association of Plastics Recyclers (APR)

Lunch (Buffet Lunch Provided)
12:00 pm - 1:00 pm
SUSTAINABLE POLYMERS
1:00 pm - 2:00 pm
Moderator: Paul Rollin, Ph.D., Global Team Lead - Nonwovens, ExxonMobil Chemical Company

Nodax™ PHA Copolymers
Isao Noda, PhD, DSc, Chief Science Officer, Senior VP of Innovation, Danimer Scientific

New & Novel Environmentally Friendly Fibers and Polymers – What’s Available Now and What’s Under Development?
Behnam Pourdeyhimi, Ph.D., William A. Klopman Distinguished Professor, And Executive Director, North Carolina State University, The Nonwovens Institute

CIRCULAR INNOVATION
2:00 pm - 3:30 pm
Moderator: Davis Lee, Ph.D., Senior Marketing Scientist, Exponent

Microfibers from Laundering and Their Fate in Aquatic Environments
Richard Venditti, Ph.D., Professor, NC State University - Department of Forest Materials

The First 100% Recycled, Biodegradable Performance Synthetic Fiber for Textile Applications
Vanessa Mason, Senior Vice President of Engineering, PrimaLoft, Inc.

Innovation Using the Natural Circularity of Cellulose to Reduce the Impact of Single Use Plastics
Thomas Carlyle, Global Project Manager - Special Projects, Lenzing Fibers Inc.

Coffee & Networking Break
3:30 pm - 4:00 pm

INNOVATION I
4:00 pm - 5:00 pm
Moderator: Vinikutmar Singh, Ph.D., Product Development Manager, Jacob Holm

Thermoplastic Based Nonwoven Composites – The New Promising Lightweight Materials for Automotive Structures
Sai Aditya Pradeep, Graduate Student, Clemson University

Developments On Next Generation Latex Binders for the Nonwoven Industry: A Novel Formaldehyde-free Self-cross-linking Technology Platform
Sören Butz, Ph.D., Head Of Technical Service-Textile, Synthomer Deutschland GmbH

RISE® 2019 INNOVATION AWARD PRESENTATIONS
5:00 pm - 5:30 pm
The RISE® Innovation Award will recognize innovation in areas within and on the periphery of the nonwovens industry which utilizes advanced science and engineering principles to develop unique or intricate solutions to problems. Areas for consideration may include: raw material advances, advances in process or manufacturing technologies including web forming and converting, new product or application development, or other areas that may extend or enhance the use of nonwovens. Join the finalists as they present their innovations to RISE attendees. The winner will be announced Wednesday afternoon.

THE NONWOVENS INSTITUTE - TOUR & RECEPTION
6:00 pm - 7:30 pm
RSVP Required - Limited to 50 attendees
Wednesday, September 25

**Breakfast Connections**  
7:30 am - 8:00 am

**INNOVATION II**  
8:00 am - 10:30 am  
**Moderator:** Dave Nelson, Director, Industry Engagement, The Nonwovens Institute

*Open Innovation and a Human-centered Approach for the Nonwovens Industry*  
**Matthew Tipper**, Operations Director, Nonwovens Innovation & Research Institute (NIRI)

*Potential of Additive Manufacturing and 3-D Printing for Nonwovens and Textiles (and absorbent cores/articles)*  
**Olaf Isele**, Ph.D., Nonwovens Consultant, Metaxi SimBioSys LLC

*3D Highloft Technology and Applications*  
**Tony De La Hoz**, Process & Product Development Engineer, Hills Inc.

*A Fully Flushable Wipe with Zero Issues in Sewage Treatment*  
**Richard Reid**, Regional Business Manager, Kelheim Fibres GmbH

**Coffee & Networking Break**  
10:30 am - 11:00 am

**INNOVATION III**  
11:00 am - 12:30 pm  
**Moderator:** James Loftus, Ph.D., Principal, Loftus Technical Consulting, LLC

*Intelligent Heating: A Flexible Conductive Coating for Nonwovens*  
**Drake Goolsby**, Director, Intellectual Property Commercialization, Battelle

*Novel Approach to Developing Very Effective Antimicrobials*  
**Nicholas Swain**, CEO, Rep-L Antimicrobials, Inc.

*Material Science + Medicine = Wellness Re-imagined*  
**Jordan Schindler**, CEO, Nufabrx

**Lunch** (Buffet Lunch Provided)  
12:30 pm - 1:30 pm
MARKET DATA & INTELLIGENCE TRENDS
1:30 pm - 3:45 pm
Moderator: Jeffrey Bassett, Managing Director, Fi-Tech Inc.

U.S. Economic Outlook
John Connaughton, Ph.D., Barings Professor of Financial Economics, UNC-Charlotte

Market Dynamics and Trends That Are Driving Innovation in Nonwovens
Brad Kalil, Director of Market Intelligence and Economic Insights, INDA

A Patent Landscape Methodology for Nonwovens in Filtration
Angela D’Orio, Student, The Nonwovens Institute At North Carolina State University

Using the US Patent Database as a Strategic Tool
James Loftus, Consultant, Loftus Technical Consulting, LLC

INNOVATION IV
3:45 pm - 4:45 pm
Moderator: Chris Plotz, Director Of Technical Affairs, INDA

Fiber Finish/Component New Product Development for the Diaper / Hygiene Market
Kay McCoy, Technical Sales Representative, Pulcra Chemicals LLC

Sustainability and the Circular Economy: What X Are We Solving For?
Chris Plotz, Director of Technical Affairs, INDA

RISE® 2019 INNOVATION AWARD ANNOUNCEMENT
4:45 pm - 5:00 pm
Moderator: Dave Rousse, President, INDA, Association of the Nonwoven Fabrics Industry

CONFERENCE ADJOURNS
5:00 pm