

TABLE OF CONTENTS

MATERIAL SCIENCE DEVELOPMENTS FOR SUSTAINABLE NONWOVENS

- [Biopolymers for Use in Fibers](#)
Jeff Dugan, *Fiber Innovation Technology*
- [Hemp Fibers in Nonwovens - Ready for The Big Time?](#)
Paul Latten, *Southeast Nonwovens, Inc.*
- [Introduction to PHA](#)
Michael Mang, Ph.D., *Danimer Scientific*

ROUNDTABLE - SUSTAINABILITY

- [Sustainability](#)
Vanessa Daelman, Ph.D., *Devan Belgium*
- [Sustainability](#)
Kay McCoy, *Pulcra Chemicals LLC*

INCREASING CIRCULARITY IN NONWOVENS

- [Sustainable Solutions for our Plastic Planet Predicament](#)
Marc Hillmyer, Ph.D., *University of Minnesota*
- [Closed-Loop Recycling Pilot of Single-Use Face Masks](#)
Peter Dziezok, Ph.D., *Procter & Gamble Service GmbH*
- [Molecular Recycling: Crafting a Circular Materials Future](#)
Jon Woods, *Eastman Chemical Company*
- [Biotransformation Technology in Polyolefin Fibers and Nonwoven Fabrics, Focus on Fugitive Used Articles](#)
DeeAnn Nelson, Ph.D., *Avgol Nonwovens*
Nick Carter, *Avgol Nonwovens*

PROMISING INNOVATIONS IN NONWOVENS I

- [Promising Materials Development Using PLA](#)
Behnam Pourdeyhimi, Ph.D., *North Carolina State University, The Nonwovens Institute*
- [Innovating a Sustainable Future for Nonwovens; A European Perspective](#)
Matthew Tipper, Ph.D., *Nonwovens Innovation & Research Institute (NIRI)*
- [Phantom Platform: The Polyolefin-cellulose Coformed Substrates Technology at Its Best](#)
Fabio Zampollo, *Teknoweb Materials S.r.l.*

PROMISING INNOVATIONS IN NONWOVENS II

- [Filtration Media Functionalized with Zinc Oxide](#)
Kevin Urman, Ph.D., *Ascend Performance Materials*
- [A Novel Antipathogenic Agent for Nonwoven Fabric](#)
Bryan McEntire, Ph.D., *SINTX Technologies, Inc.*

PROCESS INNOVATIONS IN NONWOVENS

- [Cummins LCA Journey](#)
JJ Webb, *Cummins Inc.*
William Murray, *Cummins Inc.*
- [Guiding Environmentally Sustainable Innovations From Reactive to Proactive Life Cycle Management](#)
Valentina Prado, Ph.D., *EarthShift Global LLC*
- [ANDRITZ Nonwoven NeXeco Dry S1 & S2 Energy Savings with Metris Monitoring & Optimization](#)
Mark Janulis, *Andritz, Inc.*

MATERIAL INNOVATIONS IN NONWOVENS

- [High-Loft, Ultra-Soft Hygiene Solutions](#)
Paul Rollin, Ph.D., *ExxonMobil Chemical Company*
- [Which to Filter Out? A Comparative Assessment of Various Face Masks with a Focus on Sustainability](#)
Natasha Di Fiore, *Metaxi SimBioSys LLC*
Olaf Isele, Ph.D., *Metaxi SimBioSys LLC*

RISE® INNOVATION AWARD PRESENTATIONS

- [Canopy Respirator](#)
Joe Rosenberg, *Canopy*
- [Evalith® 1000 Series](#)
Rui Ferreira, *Johns Manville*

- [Fiber Coated, Heat Sealable, Breathable, Hybrid Membrane, Fabric Protection](#)
Joel Martz, *TiGuard, LLC*

GOVERNMENT/NGO CHALLENGES TO SINGLE-USE PLASTICS

- [Single-Use Plastics Policy Developments in North America](#)
Jessica Franken, *INDA, Association of the Nonwovens Fabrics Industry*
- [European Single Use Plastic Directive](#)
Gil Stevens, *EDANA*
- [Canadian Plastic Policy Update](#)
Karyn Schmidt, *American Chemistry Council (ACC)*

MACHINE-LEARNING-ASSISTED DEVELOPMENT OF BIOPOLYMERS FOR NONWOVEN APPLICATIONS

- [Application of Machine Learning to Develop PHA Polymer Solutions for Nonwoven Applications](#)
Bryan Haynes, Ph.D., *Kimberly-Clark Corporation*

MARKET INTELLIGENCE & ECONOMIC INSIGHTS

- [US Economic Outlook: Reopening and Recovery](#)
Michael Aguilar, Ph.D., *University of North Carolina - Chapel Hill*
- [Understanding the State of North American Nonwoven's Market and a Market Gone Mad](#)
Brad Kalil, *INDA*