

## Cellulose Nanomaterials Researchers Forum

August 22-24, 2023

Wells Conference Center, University of Maine, Orono, Maine

### PROGRAM

<b>Tuesday, August 22, 2023</b>		<b>Wells Conference Center</b>
<b>4:30 – 6:30 PM</b>	<b>Welcome Reception &amp; Poster Preview</b>	
<b>Wednesday, August 23, 2023</b>		<b>Wells Conference Center, Room 100</b>
<b>8:00 – 8:30 AM</b>	<b>Continental Breakfast &amp; Coffee</b>	
<b>8:30 – 8:32 AM</b>	<b>Welcome to Nanocellulose Valley, Forum Overview</b>	
<b>8:32 – 9:05 AM</b>	<b>Opening Keynote:</b> <b>“From Trees to Tires: Development and Scale-up of the Nanocellulose Dispersion Composite™”</b> <b>Kim Nelson, Ph.D., Ph.D., CTO, GranBio Technologies</b>	
<b>9:05 – 9:20 AM</b>	<b>“Sustainable, High-Performance, Cellulose-Based Thermal Insulation”</b> <b>Mark Fokema, VP R&amp;D Aspen Products Group</b>	
<b>9:20 – 9:35 AM</b>	<b>“CNF for Fire-fighting Applications”</b> <b>James Anderson, Sr. R&amp;D Program Manager II, Advanced Structures and Composites Center, University of Maine</b>	
<b>9:35 – 10:00 AM</b>	<b>“Path forward – Valmet’s MFC technology development”</b> <b>Heli Kangas, Valmet</b>	
<b>10:00 – 10:30 AM</b>	<b>Break</b>	
<b>10:30 – 11:00 AM</b>	<b>“Production of microfibrillated cellulose using stirred media mills and selected applications”</b> <b>David Skuse, FiberLean Technologies Limited, UK</b>	
<b>11:00 – 11:30 AM</b>	<b>“Cellulose Nanomaterial Production at the Forest Products Laboratory”</b> <b>Richard Reiner, USDA Forest Products Laboratory</b>	
<b>11:30 – 12:00 PM</b>	<b>“Introduction to Technical Collaborations within the Oak Ridge National Laboratory and University of Maine's Hub and Spoke Program”</b> <b>Greg Simms, University of Maine</b>	
<b>12:00 – 1:00 PM</b>	<b>Lunch</b>	
<b>1:00 – 2:00 PM</b>	<b>Student Rapid Fire Poster Presentations</b> <i>Student poster presenters will give short summaries of their posters</i>	

2:00 – 2:30 PM	<b>“PrinTimber”</b> Soledad Peresin, Auburn University
<b>2:30 – 3:00 PM</b>	<b>Break</b>
3:00 – 3:30 PM	<b>“Waterborne modifications to cellulose nanofibrils for biomaterials, coatings, and composites”</b> Will Gramlich, Ph.D., Associate Professor, Department of Chemistry, University of Maine
3:30 – 4:00 PM	<b>“P3Nano: Removing Barriers to Cellulose Nanomaterials Utilization”</b> Robert Moon, Ph.D., Forest Products Laboratory, USDA Forest Service
4:00 – 4:30 PM	<b>Pilot-Scale Preparation of a Surface Modified Cellulose Nanofibrils (CNF) Composite Feedstock</b> Meghan Lamm, Ph.D., R&D Associate Staff Member, Sustainable Manufacturing Technologies Group – Manufacturing Science Division, Oak Ridge National Laboratory
<b>4:30 – 6:30 PM</b>	<b>Students Poster Competition</b> <b>ART EXHIBITION</b> <b>Refined Intersections: Collaborations With Nanocellulose</b> <i>Open to the public</i>
	<b>Wells Conference Center</b> <b>Wells Conference Center</b>

<b>Thursday, August 24, 2023</b>		<b>Wells Conference Center, Room 100</b>
<b>8:00 – 8:30 AM</b>	<b>Continental Breakfast, Coffee</b>	
<b>8:30 – 9:15 AM</b>	<b>Opening Keynote:</b> <b>“Safety and Regulatory Aspects of Cellulose Nanomaterials: Challenges and Needs”</b> Jo Anne Shatkin, Ph.D., President, Vireo Advisors	
9:15 – 9:45 AM	<b>“Plants sustain plants: Multiple applications of nanocellulose in agriculture”</b> YongJiang Zhang, Ph.D., Assistant Professor of Plant Physiology, School of Biology and Ecology, University of Maine	
9:45 – 10: 15 AM	<b>“What is happening at UMaine’s Laboratory of Renewable Nanomaterials”</b> Mehdi Tajvidi, Ph.D., Associate Professor of Renewable Nanomaterials, School of Forest Resources, University of Maine	
<b>10:15 – 10:30 AM</b>	<b>Break</b>	
10:30 – 11:00 AM	<b>“Nanocellulose can reduce carbon emissions in food Packaging and construction”</b> Jeff Youngblood, Ph.D., Professor, School of Materials Engineering, Purdue University	
11:00 – 11:30 AM	<b>“Cellulose Nanocrystals (CNCs) as additives in polymeric membranes for water vapor and air separation”</b> Ling Li, Ph.D., Assistant Professor of Sustainable Bioenergy Systems, School of Forest Resources, University of Maine <b>“Techno-economic analysis and life cycle assessment of manufacturing a cellulose nanocrystal-based hybrid membrane”</b> Naveenkumar Rajendiran, Research Associate, University of Wisconsin	
11:30 – 12:00 PM	<b>“Hybrid Natural Fiber/CNF Thermoplastic Composites”</b> Katie Copenhaver, Ph.D., R&D Associate Staff, Manufacturing Science Division, Oak Ridge National Laboratory	
<b>12:00 – 1:00 PM</b>	<b>Lunch</b>	
1:00 – 2:00 PM	<b>Tour of PDC</b>	
2:00 – 3:00 PM	<b>Tour of ASCC</b>	