



TECHNICAL PROGRAM

As of 6-7-18 - Subject to change – please check the conference app for updates.

Monday 11 June 2018	
9:00am-10:30am	Forest Products Laboratory Tour #1
9:00am 12:00pm	Practical Safety Strategies for Bio/Nano Technology Commercialization Workshop <i>Room: Hall of Ideas F</i>
12:00pm-1:30pm	Student Committee Lunch <i>Room: Hall of Ideas G</i>
1:00pm – 4:00pm	Cellulose Nanomaterials Characterization Workshop – Primary Characterization <i>Room: Hall of Ideas F</i>
2:00pm-3:30pm	Forest Products Laboratory Tour #2
4:00pm-5:30pm	Session 1: OPENING SESSION AND KEYNOTE <i>Driving the Automotive Industry Using Sustainable Materials</i> Alper Kiziltas, Ford Motor Company <i>Room: Ballroom ABCD</i>
5:30pm-7:00pm	Welcome Reception <i>Room: Grand Terrace</i>
6:30pm-7:30pm	Young Professionals Mixer <i>Room: Capitol Club @ Hilton Monona Terrace</i>

Tuesday 12 June 2018			
8:30am – 10:00am	<p>Session 2: Particle Size Measurement <i>Session Chair: Paul Russo, Georgia Tech</i> <i>Room: Hall of Ideas EH</i></p>	<p>Session 3: Nanolignin and Ligno-Nanocellulose: Production and Application Prospects <i>Session Chair: Nathalie Lavoine, North Carolina State University</i> <i>Room: Hall of Ideas FI</i></p>	<p>Session 4: Responsive & Functional Materials I <i>Session Chair: Emily Cranston, McMaster University</i> <i>Room: Hall of Ideas GJ</i></p>
8:32	<p>Proof-of-Concept of Gel Fractionation of Bleached Eucalyptus Kraft MFC Braz Demuner, Fibria Cellulose</p>	<p>Bio-Nanomaterials Development: Linking R&D Activities and Industrialization of Lignin Micro - and Nanoparticles Orlando Rojas, Aalto University</p>	<p>Cellulose Nanomaterial in High Performance Water-Based Drilling Fluid Qinglin Wu, Louisiana State University</p>
8:54	<p>Commercializing Cellulose Nano Market Opportunities and Challenges Jack Miller, Biobased Markets</p>	<p>Exploring the Interactions That Drive the Assembly of Cellulose Nanofibers Produced from Australian Spinifex Arid Grass Katarzyna Kepa, University of Queensland, Australian Institute for Bioengineering and Nanotechnology</p>	<p>Encapsulation of Phase Change Materials in Cellulose Nanocrystals-Reinforced Poly(urea-urethane) Microcapsules and Their Incorporation in Asphalt for Snow and Ice Melting Carlos Martinez, Purdue University</p>
9:16	<p>Characterization of Concentrated Aqueous CNC Suspensions By Static Multiple Light Scattering: Equivalent Particle Size and Suspension Stability Zygmunt Jakubek, National Research Council of Canada</p>	<p>Microfibrillated Cellulose Production from Various Lignocellulosic Fines Warren Batchelor, Monash University</p>	<p>Sensing Water Diffusion and Its Effects in CNC-Epoxy Composites Using Aquafloor Jeremiah Woodcock, National Institute of Standards and Technology</p>
9:38	<p>Investigations into Low Level Quatification Techniques for CNC Brian O'Connor, FPIInnovations</p>	<p>Anisotropic Cellulose Nanofibers/Lignin Foams for Thermal Insulation Nathalie Lavoine, North Carolina State University</p>	<p>Unusual Approaches to Cellulose Nanocrystal Modification: Allomorph Transition and End-to-End Connections Eero Kontturi, Aalto University</p>
10:00am- 10:30am	Break		

10:30am-12:00pm	Session 5: 3D Printing & Coatings Session Chair: Stephanie Beck , FPInnovations Room: Hall of Ideas EH	Session 6: Industrial Applications Session Chair: Gordon Giles , Alberta Innovates Room: Hall of Ideas FI	Session 7: Foams & Gels I Session Chair: Marc Dubé , University of Ottawa Room: Hall of Ideas GJ
10:32	Interaction in Cellulosic Fiber-Fiber Joints at Humid and Wet Conditions by AFM and Confocal Raman Microscopy, Agne Swerin , RISE Research Institutes of Sweden	Towards Enhanced Durability and Sustainable Construction Through Tuned Cellulose Nanofibres Vivek Bindiganavile , University of Alberta	Towards Nanoenabled Bio-Based Future Solutions by Foam Technologies Katariina Torvinen , VTT Technical Research Centre of Finland Ltd.
10:54	Towards 3D Printing of ABS-Cellulose Nanocrystal Composite Materials Matthew Hartings , American University	Cellulose Filament Reinforced Cement Board Xiaolin Cai , FPInnovations	Ultralight Weight Kapok Fiber Derived Aerogels for Oil Spill Cleaning Indu Chauhan , Indian Institute of Technology Delhi
11:16	Improved Wood Coatings via CNC Addition Jeffrey Youngblood , Purdue University	The Potential of TEMPO-Oxidized Cellulose Nanofibrils as a Rheology Modifier in Food Systems Ragnhild Aaen , Norwegian University of Technology and Science	Fiber-level Simulation of Microcellulose Suspensions Jing-Yao Chen , University of Wisconsin-Madison
11:38	SEE CONFERENCE APP	Hygiene Product Application Utilizing Cellulose Based Absorbent Material Made by Tempo Oxidation Jani Lehmonen , VTT Technical Research Centre of Finland Ltd.	Design Principles to Create Porous Light-Weight Materials, Anurodh Tripathi , North Carolina State University
12:00pm - 2:00pm	Session 8: Lunch with Presentation Sponsored by Cellulforce Inc. <i>FogKicker from Nanocellulose: A Journey from Lab to Market</i> Speaker: Yinyong Li Treaty, BioTech Room: Ballroom CD		

2:00pm-3:30pm	Session 9: Industrial Production I Session Chair: Sean Ireland , FiberLean® Technologies Ltd. Room: Hall of Ideas EH	Session 10: Transport Properties of Nanocellulose-Based Films and Membranes Session Chair: Warren Batchelor , Monash University/BioPRIA Room: Hall of Ideas FI	Session 11: Tissue Engineering and Implants Session Chair: Kimberly Ong , Vireo Advisors, LLC Room: Hall of Ideas GJ
2:02	Use of Membrane to Recover Sulfuric Acid Used in CNC Production Emily Sharata , Membrane Specialists	Nanocellulose Functionalization Using Silsesquioxane Particles Sol Gel Formation in Aqueous Conditions and Their Application for Superhydrophobic Coated Paper Julien BRAS , Univ. Grenoble Alpes, Grenoble INP, LGP2	New Production Strategies for Tissue Scaffolds Containing Cellulose Nanocrystals and Their Fate in Vivo Emily Cranston , McMaster University
2:24	Demonstration of CNC Production at Dramatically Lower Acid Ratios James Lockhart , NORAM	Recyclability of Nanocellulose Films Warren Batchelor , Monash University/BioPRIA	Mechanically Adaptive Bio-Nanocomposites for Implantable Sensing Johan Foster , Virginia Tech
2:46	Cellulose Nano Crystals Production and Development of Innovative Products Shaul Lapidot , Melodea, Ltd.	Zwitterionic Nanocellulose-Based Membranes Prepared by Grafting of PCysMA Luis Valencia , Stockholm University	SEE CONFERENCE APP
3:08	Cost Effective Production of CNC at InnoTech Alberta, Behzad Ahvazi , InnoTech Alberta, Inc.	Study of Structure Dependence of Barrier Properties in Nanofibrilated Cellulose Films for Intelligent Food Packaging Applications Vadim Kislitsin , University of Alberta	SEE CONFERENCE APP
3:30pm-4:00pm	Break		

4:00pm-5:30pm	Session 12: End Users Panel Moderator: Hamdy Khalil , Woodbridge Foam Corporation Room: Hall of Ideas FIGJ	Session 13: Tissue Engineering, Implants and Drug Delivery Session Chair: Johan Foster , Virginia Tech Room: Hall of Ideas EH	
4:02	Dr. Alper Kiziltas , Ford Motor Company	Shape-Memory 3D Printable Hydrogels with Anti-Microbial Properties Gilberto Siqueira , Applied Wood Materials Lab. - Empa	
4:22	Dr. Toivo Kodas , Cabot Corporation	Cellulose-Based Lateral Flow Devices for Low-Cost Point-of-Care Blood Coagulation Monitoring Hua Li , University of Cincinnati	
4:46	Dr. Raj Wallajapet , Kimberly Clark Corporation	Evaluating Mucoadhesion Properties of Nanocellulose in Gastrointestinal Tract Yu-Ju Lin , University of Georgia	
5:02		Vitamin B Complex Encapsulated on Bacterial Nanocellulose Diego Gómez-Maldonado , Auburn University	
5:30pm-7:30pm	Session 14: Poster Session and Student Poster Competition Room: Ballroom A/Grand Terrace		
Wednesday 13 June 2018			
7:30am – 8:30am	NANO Research Committee Meeting (Invitation Only) Room: Doty @ Hilton Monona Terrace		
8:30am-10:00am	Session 15: Automotive & Other Manufacturing Processing Session Chair: Keith Gourlay , Performance BioFilaments Room: Hall of Ideas EH	Session 16: Processing and Applications of Nanocellulose-Based Coatings Session Chair: Julien Bras , Grenoble INP-LGP2 Room: Hall of Ideas FI	Session 17: Responsive & Functional Materials II Session Chair: Elina Niinivara , McMaster University Room: Hall of Idea GJ
8:32	Role of CNC in the Glass Fiber-Epoxy Interphase Ejaz S. Haque , Georgia Institute of Technology	Chitin and Cellulose Spray Coated Nanomaterials for Sustainable Barrier Applications Chinmay Satam , Georgia Institute of Technology	Mechanical Behavior of Polymer Conjugated Cellulose Nanocrystal Films Sinan Keten , Northwestern University
8:54	High Performance (nano)Cellulose – Polyamides Fabiola Vilaseca , University of Girona	Roll-to-Roll Fabrication of Transparent Cellulose Nanocrystal Coatings on a	Development of Cellulose Fibre Yarns for Hormone Capture From Aqueous Matrices

		Flexible Substrate with Controlled Anisotropy Reaz Chowdhury , Purdue University	Hannes Orelma , VTT Technical Research Centre of Finland
9:16	Toward the Applications of CNFs Materials for Automotive Parts Hiroyuki Yano , Kyoto University	Coatability of CNC Suspensions in a High-throughput Continuous Process Rajesh Koppolu , Åbo Akademi University	Individually Dispersed Gold Nanoshell-Bearing CNCs with Tailorable Plasmon Resonance Nikolay Semenikhin , Georgia Institute of Technology
9:38	Towards CNC-Enabled Lightweighting of Automotive Components Craig Clemons , USDA Forest Products Laboratory	Comparison of Coating Methods for the Application of Cellulose Nanofibrils (CNF) as Coating on Paperboard Doug Bousfield , University of Maine	Novel Tunable Amphiphilic to Hydrophobic Nanocelluloses Via a Multi-functional Reagent You-Lo Hsieh , University of California, Davis
10:00am-10:30am	Break		
10:30am-12:00pm	Session 18: Melt & Dry Processing I Session Chair: Behzad Ahvazi , Innotech Alberta Room: Hall of Ideas EH	Session 19: Self-and Directed Assembly of Nanocellulose Session Chair: Agne Swerin , RISE Research Institutes of Sweden Room: Hall of Ideas FI	Session 20: Foams & Gels II Session Chair: Eero Konturri , Aalto University Room: Hall of Ideas GJ
10:32	Melt-Blended Cellulose Nanocrystal – Thermoplastic Composites Douglas Fox , American University	Confinement Driven Organization of CNF and CNC Gustav Nyström , Empa	Fabrication of Cellulose and Whole Biomass Aerogels Directly from Ground Douglas Fir Using a Molten Salt Hydrate as Solvent Yang Liao , University of Wisconsin-Madison
10:54	Nanocellulose/Poly(lactic acid) Composites Delivered by Poly(ethylene glycol) Caitlyn Clarkson , Purdue University	Self-Assembled Cellulose Nanocrystal Testbeds to Glean Composite Design Lessons from Nature Bharath Natarajan , National Institute of Standards and Technology	Ultralight, Highly Thermal Insulating and Fire Resistant Aerogel by Encapsulating Cellulose Nanofiber with Two-dimensional MoS ₂ Hongli Zhu , Northeastern University
11:16	Embedding Cellulose Nanocrystals (CNCs) into Polymer Particles for Enhanced Processing Priya Venkatraman , Virginia Tech	Nanocellulose Biofabrication: A Versatile Toolbox for Self-Assembled Functional 3D Structures Orlando Rojas , Aalto University	Cellulose Nanocomposites: Vacuum Infusion of Cellulose Nanofiber Preforms with Bio-Based Epoxy Kristiina Oksman , University of Oulu
11:38	Modification and Compounding of Cellulose Nanomaterials in PLA Ronald Sabo , USDA Forest Service, Forest Products Laboratory	Engineering the Self-assembly of Cellulose Nanocrystals on Complex Topography to Obtain Advanced Hybrid Materials Blaise Tardy , Aalto University	Cellulose Nanofibrils Aerogel: Development and Application in Water Treatment Feng Jiang , The University of British Columbia

12:00pm - 2:00pm	<p align="center">Session 21 - Lunch with Presentation Sponsored by NanoCellulose Forum <i>Present Situation and Future Prospects of Nanocellulose R&D in Japan</i> Speaker: Akira Isogai University of Tokyo Room: Ballroom CD</p>		
2:00pm- 3:30pm	<p>Session 22: Photonics and Optical Applications Session Chair: Umesh Agarwal, USDA Forest Products Laboratory Room: Hall of Ideas EH</p>	<p>Session 23: Nanocellulose Based Composites Session Chair: Xiaolin Cai, FPIInnovations Room: Hall of Ideas FI</p>	<p>Session 24: Nanocellulose For Enhancing Paper Session Chair: Nathalie Lavoine, North Carolina State University Room: Hall of Ideas GJ</p>
2:02	Circularly Polarized Light Detection on Transistors Using Cellulose Photonic Dielectrics Luis Pereira , CENIMAT/13N and CEMOP/UNINOVA	Controlling Cellulose Nanocrystal Location Within Latex Systems by Tuning Interfacial Compatibility Elina Niinivaara , McMaster University	Surface Application of Microfibrillated Cellulose (MFC) David Cowles , GL&V USA Inc.
2:24	“Patchy” Modification of CNCs with a Thermoresponsive Polymer for a "Switchable" Liquid Crystal Bailey Risteen , Georgia Institute of Technology	Dry-Spun Neat Cellulose Nanofibril Filaments: Effect of Process Variables on Filament Properties Shokoofeh Ghasemi , University of Maine	Enhancing Coating Holdout with Cellulosic MicroFibrils Donna Johnson , University of Maine
2:46	UV-blocking Hybrid Nanocellulose Films Containing Ceria and Silica Nanoparticles Tiffany Abitbol , RISE Research Institutes of Sweden	Understanding the Impact of Cellulose- and Chitin-Based Nanomaterials in Various Polymer Matrix Constructs Cameron Irvin , Georgia Institute of Technology	LCA of Packaging Containing Microfibrillated Cellulose From Spruce Ellen Soldal , Ostfold Research
3:08	Electrophoretic Deposition of CNC-Containing Photonic and Semi-Conductive Films Wadood Hamad , PInnovations	Surface Modifications of Nanocellulose for Assembly of a Stable Organogel Support for Drug Crystallization Manali Banerjee , Georgia Institute of Technology	Industry Adopted Production of Nanocellulosic Material Optimized for Increased Strength of Packaging and Printing Paper Anna Svedberg , MoRe Research

3:30pm-4:00pm	Break		
4:00pm-5:30pm	<p style="text-align: center;">Session 25: Flexible Electronics <i>Session Chair: Wadood Hamad, FPIInnovations Room: Hall of Ideas EH</i></p>	<p style="text-align: center;">Session 26: Characterization Methods <i>Session Chair: Linda Johnston, National Research Council of Canada Room: Hall of Ideas FI</i></p>	<p style="text-align: center;">Session 27: Processing and Properties of Nanocellulose-based Films for Packaging Application <i>Session Chair: Maria Soledad Peresin, Auburn University Room: Hall of Ideas GJ</i></p>
4:02	<p>Cellulose Based Electrolytes as Dielectric in Oxide Semiconductor Transistors on Paper Substrates Luis Pereira, CENIMAT/13N and CEMOP/UNINOVA</p>	<p>Investigating the Influence of Fibril Size on Microfibrillated Cellulose (MFC) Suspension Morphology Under Flow: A Rheological Approach Michel Schenker, FiberLean Technologies Ltd.</p>	<p>All-Cellulosic Packaging From Cellulose Nanofibrils and Fatty Acid Esters Heli Kangas, VTT Technical Research Centre of Finland Ltd.</p>
4:22	<p>Launderable Conductive Fabrics with Nanocellulose Coating Yunsang Kim, Mississippi State University</p>	<p>Comparison of Supramolecular Structures of CNCs of Different Origins Umesh Agarwal, USDA Forest Products Laboratory</p>	<p>Hybrid Nanopaper of Cellulose Nanofibrils and PET Microfibers with High Tear Resistance Emil Gustafsson, Université Grenoble Alpes, LGP2</p>
4:46	<p>AlGaIn/GaN HEMT Based RF Power Amplifier on CNF Substrate for Environment-Friendly Flexible Electronics Huilong Zhang, University of Wisconsin-Madison</p>	<p>Chemically Labeling of Cellulose For Quantitative Tracking Jeremiah Woodcock, NIST</p>	<p>Structure-Property Relationships In Physical, Mechanical, and Barrier Properties of Hybrid Cellulose Nanofibril/Bentonite Films for Packaging Applications Mehdi Tajvidi, University of Maine</p>
5:02	<p>Energy-Saving Approach for Production of Cellulose Nanofibrils: Carboxymethylation of Pulp Wanhee Im, Seoul National University</p>	<p>Rheological Characterization and Testing Standards for Nanocellulose Materials Jianshan Liao, Renewable Bioproducts Institute, Georgia Institute of Technology</p>	<p>Agroindustrial Waste Valorisation into Advanced Microfibrillated Cellulose Fibers for Improving Packaging Materials Performance Pilar Albaladejo Sánchez, ITENE</p>
6:30pm-10:00pm	<p>Conference Dinner 6:30-10:00 Orpheum Theater Bus Transportation picks from the Monona Terrace Community and Convention Center at 6:00pm.</p>		

Thursday 14 June 2018			
8:30am – 10:00am	Session 28: Safety in Applications <i>Session Chair: Heli Kangas, VTT Technical Research Centre of Finland</i> <i>Room: Hall of Ideas EH</i>	Session 29: Applications of Nanocellulose/Inorganic Composites <i>Session Chair: Peter W. Hart, WestRock</i> <i>Hall of Ideas FI</i>	Session 30: Emulsions & Colloids <i>Session Chair: Carl Houtman, USDA Forest Products Laboratory</i> <i>Hall of Ideas GJ</i>
8:32	What Do We Know About the Safety of Cellulose Nanomaterials: Environmental Health and Safety Roadmap, Knowledgebase and Uncertainties Jo Anne Shatkin, Vireo Advisors, LLC	Aligned and Stable Metallic MoS ₂ on Plasma Treated Mass Transfer Channels for Hydrogen Evolution Reaction Hongli Zhu, Northeastern University	Medium and High Internal Phase Oil-in-Water Pickering Emulsions Stabilized by Cellulose Filaments Chuanwei Miao, FPInnovations
8:54	Toxicological Evaluation of Nanocellulose in Experimental Models of Occupational Respiratory Exposure Jenny Roberts, CDC/NIOSH	Modification of Cellulose Nanocrystals (CNC) for Fire Retardant Applications TriDung(TD) Ngo, InnoTech Alberta	Surprising Adhesive Property Modifications Using Cellulose Nanocrystals Marc A. Dubé, University of Ottawa
9:16	Physicochemical Characterization of Novel Cellulose Materials: Challenges and Opportunities for Environmental Health Science Christie Sayes, Baylor University	Processing and Performance of Clay-Nanocellulose Hybrids Lars Berglund, KTH Royal Inst. of Technology	Tuning Cellulose Nanocrystal Acid-Base Cooperative Organocatalysts for Upgrading Biomass-Derived Platform Molecules Nathan Ellebracht, Georgia Institute of Technology
9:38	An Update on the Science of Demonstrating the Safety of Cellulose Nanomaterials for Food Related Uses James Ede, Vireo Advisors, LLC	Retardation Effects of Cellulose Nanocrystals (CNCs) in Portland Cement Pastes Francisco Montes, Purdue University	SEE CONFERENCE APP
10:00am- 10:30am	Break		
10:30am- 12:00pm	Session 31: Industrial Production II <i>Session Chair: Kim Nelson, American Process Inc.</i> <i>Room: Hall of Ideas EH</i>	Session 32: Solvent Based Processing <i>Session Chair: Douglas Fox, American University</i> <i>Room: Hall of Ideas FI</i>	Session 33: Foams & Gels III <i>Session Chair: Chuanwei Miao, FPInnovations</i> <i>Room: Hall of Ideas GJ</i>
10:32	Mineral/Microfibrillated Cellulose Composite Materials: High Performance Products, High Solids Product Forms and Applications David Skuse, FiberLean® Technologies Limited	Counterion Design Of TEMPO-Nanocellulose Used as Filler to Improve Properties of Hydrogenated Acrylonitrile-Butadiene Matrix Akira Isogai, The University of Tokyo	Novel Method to Produce Cellulosic Lightweight Materials Camila Alves Rezende, University of Campinas

10:54	Scaling up the CNC Production: Optimizing Cellulose Degradation with Gaseous HCl Timo Pääkkönen, Aalto University	Effect of Cellulose Nanofibril Addition on Gel Spinning of Continuous Polyacrylonitrile Fiber, and Their Corresponding Properties Jeffrey Luo, Georgia Institute of Technology	Nanocellulose Aerogels and Air Filters Junji Nemoto, Hokuetsu Kishu Paper	
11:16	Phosphorylated Cellulose Nanofibers Produced by Twin Screw Extrusion: Effect of Concentration and Phosphorous Salt Fleur Rol, Univ. Grenoble Alpes, CNRS, Grenoble INP	Acrylic-CNC Composites Formed by CNC Functionalization with Acryloyl Isocyanate and In Situ Copolymerization Carson Meredith, Georgia Institute of Technology	Tunable Cellulose Nanocrystal Structured Thin Film Hydrogels Kevin De France, McMaster University	
11:38	SEE CONFERENCE APP	Nanocellulose in Formable, Strong and Lightweight Structures For Interior Design Hannes Orelma, VTT Technical Research Centre of Finland Ltd.	Tailoring the Interactions Between Aminosilane and Cellulose Nanofibrils for the Processing and Drying of Hybrid Siliceous Foams Nathalie Lavoine, North Carolina State University	
12:00pm-2:00pm	Session 34: Keynote Presentation and Lunch <i>Beyond Nano: Why Tiny Bits of Trees Make a Big Difference for Forests</i> Keynote Speaker: Michael Goergen U.S. Endowment for Forestry & Communities, Inc. Room: Ballroom CD			
2:00pm-3:30pm	Session 35: LCA Manufacturing, Life Cycle & Product Safety Session Chair: Brian O'Connor, FPIInnovations Room: Hall of Ideas EH	Session 36: Adhesive and Bonding Properties of Nanocellulose Session Chair: Greg Schueneman, USDA Forest Products Lab Room: Hall of Ideas FG	Session 37: Films and Suspension Properties Session Chair: Tiffany Abitbol, RISE Research Institutes of Sweden Room: Hall of Ideas GJ	Session 38: Student Session: Career Roundtable Moderator: Nathan Ellbracht, Georgia Tech Room: MNQR
2:02	Microfibrillated Cellulose in Products: Calculation of Environmental Costs and Benefits using Life Cycle Assessment Ingunn Saur Modahl, Ostfold Research	Development of Resin Free Filters Using Cellulose Nanofibres Aysu Onur, Monash University	Characteristics of TEMPO-Oxidized Cellulose Nanofiber/Water Dispersions and Their Applications Yohsuke Goi, DKS Co. Ltd., the University of Tokyo	Feng Jiang, The University of British Columbia Kim Nelson, American Process Inc.
2:24	Microfibrillated Cellulose Ecotoxicological Effects to the Final Treated Industrial Effluent of a Pulp Mill Braz José Demuner, Fibria Cellulose	Binderless Cellulose Filament-Based Product Made by Compression Molding Natalie Pagé, FPIInnovations	Fractionation of Cellulose Nanocrystal by Asymmetric Flow Field Flow Fractionation (A4F) Maohui Chen, National Research Council Canada	Shaul Lapidot, Melodea, Ltd. Jo Anne Shatkin, Vireo Advisors, LLC

2:46	Cellulose Nanomaterials in Products - Risk Assessment According to European Commission's Guideline Heli Kangas, VTT Technical Research Centre of Finland Ltd.	Cellulose Nanofibrils-Bonded Particleboards: Production, Property Evaluation and Dewatering Process Assessment Ezatollah Amini, University of Maine	Modified Cellulose Nanocrystal Production Routes for Increased Performance of Aqueous Suspensions at High Temperatures Oriana Vanderfleet, McMaster University	Maria Soledad Peresin, Auburn University Alan Rudie, USDA, FPL
3:08	Overview of NIOSH Field Studies for the Assessment and Control of Nanocellulose Materials Kevin Dunn, NIOSH	Enhancement of the Physical and Mechanical Properties of Mycelium-Bonded Composite Panels by Cellulose Nanofibrils Wenjing Sun, University of Maine	Spray Drying of Cellulose Nanocrystals: Dried Granular Particle Morphology and Redispersion in Aqueous Solutions Yussef Esparza, University of Alberta	
3:30pm-4:00pm	Break			
4:00pm-5:30pm	Session 39: Energy Storage Applications Session Chair: David Skuse, FiberLean® Technologies Limited Room: <i>Hall of Ideas EH</i>	Session 40: Functional Materials Session Chair: Robert Moon, USDA Forest Products Lab Room: <i>Hall of Ideas FI</i>	Session 41: Characterization and Quantification of Cellulose Nanomaterials Session Chair: Jo Anne Shatkin, Vireo Advisors, LLC Room: <i>Hall of Ideas GJ</i>	
4:02	Structure and Electrochemical Performance of Cellulose Nanocrystal (CNC) Derived Carbon Kyungho Kim, Purdue University	Application of Cellulose Nanocrystal (CNCs) Coatings on Polymers - A Pathway for Enhancement of Barrier Properties of Polymers MD Nuruddin, Purdue University	Global Regulatory Requirements Overview of Nanomaterial Safety Testing Kimberly Ong, Vireo Advisors	
4:22	Heavy Metal-Free Tannin from Bark for Sustainable Energy Storage Hongli Zhu, Northeastern University	Development of a Chitosane-Nanocellulose Based Biosorbent for an Efficient Adsorption of Copper Ions in Aqueous Solutions Ilse Cardenas, Université du Québec à Trois-Rivières	Metrology Challenges for Characterization of Cellulose Nanocrystals Linda Johnston, National Research Council Canada	
4:46	Nanocrystalline Cellulose Based Electroactive Polymer Maobing Tu, University of Cincinnati,	Preparation of Polypropylene Nanocomposites with Amphiphilic Janus ACC-Nanocellulose Created by Aqueous Counter Collision Tetsuo Kondo, Kyushu University	The Effect of Pretreatment on Key Properties of Cellulose Nanofibers from Hybrid Aspen as Characterized Using Response Surface Methodology Simon Jonasson, Luleå University of Technology	

5:02	<p>Robust Paper-Based Electrochromic Devices Enabled by Nanocellulose-Coated Paper and Chitin Nanofiber Barrier Layers Augustus Lang, Georgia Institute of Technology</p>	<p>The Green Fabrication and Investigation of Lignin Effect on the Anti-Degradation Property of Lignocellulosic Nanofibrils Yuan Chen, Chinese Academy of Forestry, Research Institute of Wood Industry</p>	<p>Cellulose nanocrystals from flax shives using HCl vapour hydrolysis : accessibility of the hydroxyl groups, crystallite shapes and three-dimensional arrangement M. Jonathan Leboucher, Normandie Univ/CNRS</p>
-------------	---	---	--

Friday 15 June 2018	
9:00am – 12:00pm	<p>Producers Committee Meeting (Invitation Only) <i>Room: Doty @ Hilton Monona Terrace</i></p>
1:00pm – 3:00pm	<p>2019 Nano Conference Planning Meeting (Invitation Only) <i>Room: La Follette @ Hilton Monona Terrace</i></p>