

ISBBB 2018 Program (Draft Updated as of July 23, 2018 1:00 PM)

Program is in Eastern Standard Time

Monday, July 23rd, 2018

6:30 pm – 8:30 pm	Advanced registration desk open
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Tuesday, July 24th, 2018

6:30 am – 8:45 am	Registration and Networking Breakfast			
8:45 am – 10:00 am	Opening Ceremony and Conference Inauguration <i>Royal City Ballroom</i>			
10:00 am – 10:10 am	Transition to Parallel Session			
	Parallel Session			
10:10 am – 12:40 pm	<p style="text-align: center;">S1 <i>Royal City Ballroom A</i> Hybrid Natural Fiber Composites <u>Session Co-Chairs:</u> Rajesh Anandjiwala Shinji Hirai</p>	<p style="text-align: center;">S2 <i>Flanders Room</i> Biopolymers, Films, and Foams <u>Session Co-Chairs:</u> Aman Ullah Christopher Barrett</p>	<p style="text-align: center;">S3 <i>John McCrae Room</i> Bio-fuels, Bioproducts, and Bioenergy <u>Session Co-Chairs:</u> Kecheng Li Nadras Othman</p>	<p style="text-align: center;">S4 <i>Royal City Ballroom B</i> Food Packaging and Biomedical Applications <u>Session Co-Chairs:</u> Khurshid Saharan Susanne Braun</p>
10:10 am – 10:35 am	<p style="text-align: center;">Keynote Talk S1.1 - <i>A Natural Alternative to Glass Fibers in Composite Laminates: Challenges and Opportunities of Silk Fibers</i> M Cengiz Altan University of Oklahoma USA</p>	<p style="text-align: center;">Keynote Talk S2.1 - <i>Natural and waste fillers in biodegradable polymeric films and foams</i> Sarah Billington Stanford University USA</p>	<p style="text-align: center;">Keynote Talk S3.1 – <i>From bioeconomy research towards sustainable innovations</i> Pia Qvintus VTT Technical Research Centre of Finland Finland</p>	<p style="text-align: center;">Keynote Talk S4.1 - <i>Effect of Graphene Nanoplatelets on Moisture Permeability in Poly(lactic Acid-Matrix) Nanocomposite Films</i> Rakesh Gupta West Virginia University USA</p>

<p>10:35 am – 11:00 am</p>	<p>Keynote Talk <i>S1.2 - Mechanical Characterisation and Modelling of Sustainable Biomaterials Randomly Reinforced Toughened Polypropylene</i> Anh Dung Ngo Ecole de Technologie Superieure de l'Université du Québec Canada</p>	<p>Keynote Talk <i>S2.2 - Use of biorefining processes for the production of fully bio-based polymers</i> Sudip Rakshit Lakehead University Canada</p>	<p>Keynote Talk <i>S3.2 - The BIOX Journey - Contributing to the global effort of providing cleaner and greener energy</i> Nak Paik BIOX Canada</p>	<p>Keynote Talk <i>S4.2 - Improvement of Gas Barrier Properties of Polyactic Acid (PLA) by Layer Multiplying Co-Extrusion</i> Alain Guinault Conservatoire National des Arts et Métiers France</p>
<p>11:00 am – 11:20 am</p>	<p>Invited Speaker <i>S1.3 - Cellulose Nanofibers Graphene Oxide based Biohybrids for Water Purification</i> Aji Mathew Stockholm University Sweden</p>	<p>Invited Speaker <i>S2.3 - Recent Research at Fraunhofer UMSICHT: from bio-based Foams and compatibilized Natural Fiber reinforced Composites</i> Mona Duhme Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT Germany</p>	<p>Invited Speaker <i>S3.3 - Circular Economy Approach for Waste Management and Creation of Value Added Products</i> Bishnu Acharya University of Prince Edward Island Canada</p>	<p>Invited Speaker <i>S4.3 - DNA plastics from bio-wastes</i> Takashi Aoki Kyoto Institute of Technology Japan</p>
<p>11:20 am – 11:40 am Networking Break</p>				
<p>11:40 am – 12:05 pm</p>	<p>Keynote Talk <i>S1.4 - Effect of surface treatment and fiber flexibility on the micromechanical behavior of natural fiber reinforced thermoplastic composites</i> Pedro J. Herrera-Franco The Yucatan's Center for Scientific Research (CICY) Mexico</p>	<p>Keynote Talk <i>S2.4 - Thermoplastic and Thermoset Foams for Structural Applications</i> Nandika D'Souza University of North Texas USA</p>	<p>Keynote Talk <i>S3.4 - Processing Kraft Lignins with Hot, Aqueous, Acetic Acid Solvents: Enhanced Properties for Materials Applications</i> Mark Thies Clemson University USA</p>	<p>Keynote Talk <i>S4.4 - Nanomaterials design and their polymer composite and biomedical applications</i> Vijaya Kumar Rangari Tuskegee University USA</p>

12:05 pm – 12:25 pm	<p>Invited Speaker <i>S1.5 - Measurement of Corn Stalk Fibre Compositional Traits by Fourier-transform Infrared Spectroscopy and the Thermal Stability of Processed Corn Cob Fibres in Polypropylene Composites</i> Peter Pauls University of Guelph Canada</p>	<p>Invited Speaker <i>S2.5 - Formation of Nanoplastics from Biodegradable Plastic Mulch Films and Characterization of their Behavior in Soil</i> Douglas G. Hayes University of Tennessee USA</p>	<p>Invited Speaker <i>S3.5 - Ontario's Agricultural Bioeconomy: Research and Innovation, and Biomass Crops</i> Rajib Hazarika & Mahendra Thimmanagari Ontario Ministry of Agriculture, Food and Rural Affairs Canada</p>	<p><i>S4.5 - Fluorescent Carbon Dots</i> Zhihui Yi University of Toronto Canada (15 minutes)</p>
12:25 pm – 12:40 pm	<p><i>S1.6 - The effect of different heat-treatments on interfacial and thermomechanical properties of PLA/TiO₂-coated flax fibers composites</i> Marie Bayart Université de Sherbrooke Canada</p>	<p><i>S2.6 - Bio-carbon Enhanced High-performance Foams using Physical Blowing Agents with Continuous Extrusion Process</i> Yabo Chen University of Toronto Canada</p>	<p><i>S3.6 - Lipid based nano-reinforced polymers from a poultry by-product: The spent hens</i> Muhammad Safder University of Alberta Canada</p>	<p><i>S4.6 - Synthesis of Canola Oil Derived Amphiphilic Block Copolymers and their Evaluation as a Potential Drug Carrier</i> Muhammad Arshad University of Alberta Canada</p>
12:40 pm – 1:45 pm	Networking Lunch (Buffet)			
1:45 pm – 4:05 pm	Plenary Session I Biobased Materials – Recent Developments			
1:45 pm – 1:50 pm	Introduction and Sponsor Talk			
1:50 pm – 2:00 pm	Moderator: Gregory Glenn USDA - Agricultural Research Service			
2:00 pm – 2:25 pm	Ramani Narayan Michigan State University			
2:25 pm – 2:50 pm	Sridevi Narayan-Sarathy PepsiCo			
2:50 pm – 3:15 pm	Fabien Resweber PTTMCC			
3:15 pm – 3:40 pm	Jesper van Berkel SYNINA			
3:40 pm – 4:05 pm	Question & Answer/ Discussion			
4:05 pm - 4:25 pm	Networking Break			

4:25 pm – 6:05 pm	Parallel Session			
	S5 Royal City Ballroom A Bioeconomy and Sustainability <u>Session Co-Chairs:</u> Paul Stuart Srikanth Pilla Lakshmi Raghupathy	S6 Flanders Room Sustainable Thermosets and Coatings <u>Session Co-Chairs:</u> Nathanael Guigo Jaya Shankar Tumuluru	S7 John McCrae Room Cellulose & Chitin for Advanced Materials <u>Session Co-Chairs:</u> Abdellah Ajji Habiba Bougherara	S8 Royal City Ballroom B 3D Printing and Electrospinning <u>Session Co-Chairs:</u> Margaret Sobkowicz Pia Qvintus
4:25 pm – 4:50 pm	Keynote Talk S5.1 - <i>Biomass valorization for a sustainable bio-economy - biobased products innovation at NRC</i> Anthony Anyia National Research Council Canada Canada	Keynote Talk S6.1 - <i>Bioplastics potential for sustainable packaging and coatings</i> Azam Ali University of Otago New Zealand	Keynote Talk S7.1 - <i>Cellulose Nanocrystals in Melt-Processed Composites: Lessons Learned, the Current State, and Progress towards Commercialization</i> Craig Clemons USDA Forest Products Laboratory USA	Keynote Talk S8.1 - <i>Electrospun-based biopolymers: Trends and applications</i> Rodrigo Navia University of La Frontera Chile
4:50 pm – 5:15 pm	Keynote Talk S5.2 - <i>Greener Production of Renewables for Innovative Bioproducts</i> Scott Rennekar University of British Columbia Canada	Keynote Talk S6.2 - <i>Biobased Intumescent Flame Retardant Coating Based on Synergistic Combination of Phytic Acid and Tannic Acid</i> Ramaswamy Nagarajan University of Massachusetts Lowell USA	Keynote Talk S7.2 - <i>Properties of polylactide (PLA)/cellulose nanofiber (CNF) and crystalline nanocellulose (CNC) biocomposites</i> Pierre Carreau Polytechnique Montréal Canada	Keynote Talk S8.2 – <i>Compounding of Water Soluble Support Material for Additive Manufacturing</i> Daniel Schwendemann University of Applied Science Rapperswil (HSR) Switzerland
5:15 pm – 5:35 pm	Invited Speaker S5.3 - <i>Understanding Conformity in Sustainability: Implications for the Circular Economy</i> Ashish Pujari McMaster University Canada	Invited Speaker S6.3 - <i>High-linoleic acid soybean oil: A promising New Feedstock for coatings, paints and other applications</i> Istvan Rajcan University of Guelph Canada	Invited Speaker S7.3 - <i>On the durability of Natural Fibre Composites (NFCs)</i> Habiba Bougherara Ryerson University Canada	Invited Speaker S8.3 - <i>3D printing - soft and solid biobased constructs for biomedical applications</i> Gary Chinga Carrasco RISE PFI Norway

<p>5:35 pm – 5:50 pm</p>	<p><i>S5.4 - Performance, and evaluation of bio-carbon based composites: Effects of carbon particle size</i> Arturo Rodriguez Uribe University of Guelph Canada</p>	<p><i>S6.4 - Epoxidized Plant Oil Based Natural Fiber Composites</i> Vinay R. Patel University of Alberta Canada</p>	<p><i>S7.4 – Strong, flexible and multifunctional nanocomposites of cellulose nanofibril dispersed by industrial lignin</i> Yingxin Liu Stockholm University Sweden</p>	<p>Invited Speaker <i>S8.4 - The development of 3D printing materials of poly(lactic acid)</i> Kazunari Masutani Kyoto Institute of Technology Japan (20 minutes)</p>
<p>5:50 pm – 6:05 pm</p>	<p><i>S5.5 - Investigating The Effect Of Hybridization On The Mechanical Performance Of Flax Fibers And Aramids In A Sandwich Structure</i> Ahmed Sarwar Ryerson University Canada</p>	<p><i>S6.5 - Influence of natural fibers on network formation and thermomechanical properties of an epoxy</i> Mathieu Boutin Laboratoire de Chimie agro-industrielle France</p>	<p><i>S7.5 - Nanocrystalline Cellulose from Invasive Tunicates - Isolation, Characterization and Applications</i> Matthew J. Dunlop University of Prince Edward Island Canada</p>	<p><i>S8.5 - Toughening biobased poly(lactic acid)/Poly(buthylene terephthalate) blend by judicious compatibilizers</i> Boon Peng Chang University of Guelph Canada</p>
<p>6:15 pm - 7:30 pm</p>	<p>Welcoming Reception <i>Royal City Ballroom</i></p>			
<p>6:30 pm – 8:00 pm</p>	<p>Poster Review <i>Gryphon / Ken Danby Room</i></p>			
<p>8:00 pm - 10:00 pm</p>	<p>Networking Dinner (Buffet) <i>Royal City Ballroom</i></p>			

Wednesday, July 25th, 2018

6:30 am – 8:30 am	Registration and Networking Breakfast			
8:30 am – 10:10 am	Parallel Session			
	<p style="text-align: center;">S9 <i>Royal City Ballroom A</i> Chemical and Bacterial Bio-Refinery <u>Session Co-Chairs:</u> Ajay Dalai Franco Berruti</p>	<p style="text-align: center;">S10 <i>Flanders Room</i> Lignin and Polysaccharides-based Materials <u>Session Co-Chairs:</u> Aicheng Chen Yaseen Elkasabi</p>	<p style="text-align: center;">S11 <i>John McCrae Room</i> Lignocellulosic Based Polymers and Composites <u>Session Co-Chairs:</u> Hazizan Md Akil Anh Dung Ngo</p>	<p style="text-align: center;">S12 <i>Royal City Ballroom B</i> Starch and Protein Biomaterials <u>Session Co-Chairs:</u> Sudip Rakshit Vijaya Kumar Rangari</p>
8:30 am – 8:55 am	<p style="text-align: center;">Keynote Talk <i>S9.1 - Biorefinery of Himalayan Cedar Wood (Cedrus deodara)</i> Satya Narayan Naik Indian Institute of Technology India</p>	<p style="text-align: center;">Keynote Talk <i>S10.1 - Lignin Thermoplastic Products: En Route to Commercialization</i> Hongbo Li National Research Council Canada Canada</p>	<p style="text-align: center;">Keynote Talk <i>S11.1 - Using DDGS-Soy Flour Mixtures as Adhesives for Wood Composites</i> Veera Boddu US Department of Agriculture (USDA) USA</p>	<p style="text-align: center;">Keynote Talk <i>S12.1 - A New Approach to Produce Starch Graft Copolymers and Grafted Starch Nanoparticles via Nitroxide Mediated Polymerization</i> Michael Cunningham Queen's University Canada</p>
8:55 am – 9:20 am	<p style="text-align: center;">Keynote Talk <i>S9.2 - Advances in biomass preprocessing, pretreatments and control systems</i> Jaya Shankar Tumuluru Idaho National Laboratory USA</p>	<p style="text-align: center;">Keynote Talk <i>S10.2 - Low temperature and high efficiency biomass fuel cell and bio-hydrogen production</i> Yulin Deng Georgia Tech USA</p>	<p style="text-align: center;">Keynote Talk <i>S11.2 - Performance of Oriented Polyethylene Furanoate (O-PEF)</i> Andrea Arias Corbion Purac BV The Netherlands</p>	<p style="text-align: center;">Keynote Talk <i>S12.2 - Development of Keratin and Fibroin Resins for Fabricating Sustainable Materials Using Protein Fibers</i> Shinji Hirai Muroran Institute of Technology Japan</p>

<p>9:20 am – 9:40 am</p>	<p>Invited Speaker <i>S9.3 - Functional metagenomics and bacterial genome engineering for PHA production</i> Trevor Charles University of Waterloo Canada</p>	<p>Invited Speaker <i>S10.3 - Synthesis and application of adhesives from glycerin-based thermoplastics</i> Eric Cochran Iowa State University USA</p>	<p><i>S11.3 - Characterization of Viscoelastic Properties of Wood Polymer Composites As Function of Temperature</i> Mostafa Tazi Universite De Quebec En Abitibi-Temiscamingue Canada (15 minutes)</p>	<p>Invited Speaker <i>S12.3 - Novel Glycoprotein Conjugates via a Combined Electrospinning - Annealing process</i> Jochen Weiss University of Hohenheim Germany</p>
<p>9:40 am – 9:55 am</p>	<p><i>S9.4 - Real-time analysis of syngas quality for predictive control of fluidized bed gasification of biomass</i> Kurt Woytiuk University of Saskatchewan Canada</p>	<p><i>S10.4 - The effect of amylose and amylopectin content for the improvement of adhesion in starch-based, formaldehyde free resins</i> Nicole Tratnik University of Toronto Canada</p>	<p><i>S11.4 - Milkweed floss surface modification to enhance fiber adhesion in polylactic acid biocomposites</i> Pierre Ovlaque University of Sherbrooke Canada</p>	<p><i>S12.4 - Effect of Starch Nanocrystals Grafted by Lactic acid (SNCs-g-LA) on the Crystallization behaviour and Phase transitions of PLA</i> Farnaz Sharafi Zamir University of Sherbrooke Canada</p>
<p>9:55 am – 10:10 am</p>	<p><i>S9.5 - Fruitful transformation of rotten tomatoes into a substrate for bioplastic production</i> Aarti Sharma Amity University India</p>	<p><i>S10.5 - UV-curable bionanocomposite: Incorporating crystalline nanocellulose through a urethane styrene prepolymer</i> (Anna) Magdalena Hubmann University of Alberta Canada</p>	<p><i>S11.5 - Characterization and application of a natural polymer obtained from Hydrangea macrophylla as a thermal insulation bio-aggregate</i> Juan Pablo Cardenas Universidad de La Frontera Chile</p>	<p><i>S12.5 – Improvement in Mechanical Properties of Silk Resin with Raw Silk Dispersion</i> Shota Akioka Muroran Institute of Technology Japan</p>
<p>10:10 am – 10:30 am</p>	<p>Networking Break</p>			

10:30 am – 12:50 pm	Plenary Session II Sustainable Manufacturing
10:30 am – 10:35 am	Introduction and Sponsor Talk
10:35 am – 10:45 am	Moderator: Atul Bali Competitive Green Technologies
10:45 am – 11:10 am	Sanjay Mehta Indorama Ventures
11:10 am – 11:35 am	Jennifer Meier Varroc Lighting Systems
11:35 am – 12:00 pm	Hamdy Khalil The Woodbridge Group
12:00 pm – 12:25 pm	Karen Stoeffler National Research Council Canada
12:25 pm – 12:50 pm	Question & Answer/ Discussion
12:50 pm- 2:00 pm	Networking Lunch (Buffet)
2:00 pm – 4:20 pm	Plenary Session III Circular Economy Towards Mitigating Climate Change
2:00 pm – 2:05 pm	Introduction and Sponsor Talk
2:05 pm – 2:15 pm	Moderator: Amar Mohanty University of Guelph
2:15 pm – 2:40 pm	Emma Chow Ellen MacArthur Foundation
2:40 pm – 3:05 pm	Libby Peake Green Alliance
3:05 pm – 3:30 pm	Yuezhong Meng Sun Yat-sen University
3:30 pm – 3:55 pm	John Pigott Club Coffee
3:55 pm – 4:20 pm	Question & Answer/ Discussion
4:30 pm – 4:50 pm	Networking Snack Break
4:50 pm	Free Time (Dinner on Your Own)
5:00 pm – 6:00 pm	Optional Tour – Bioproducts Centre Facility Tour (BDDC), University of Guelph <i>Meet at Registration Desk</i>

Thursday, July 26th, 2018

6:30 am – 8:30 am	Registration and Networking Breakfast			
8:30 am – 10:10 am	Parallel Workshops			
8:30 am – 10:10 am	3D Printing of Biobased Materials for Applications in Manufacturing and Biomedical Devices <i>Royal City Ballroom A</i>		Biocomposites for Technical Applications - Life Cycle and Sustainability <i>Royal City Ballroom B</i>	
	Moderator: Gary Chinga Carrasco		Moderator: Ashish Pujari	
	Frank Ehrig Institute for Material Science and Plastics Processing		Hans-Josef Endres IfBB - Institute for Bioplastics and Biocomposites	
	Jun Yang University of Western Ontario		Madina Shamsuyeva Fraunhofer Institute for Woods Research	
10:10 am – 10:35 am	Networking Break			
10:35 am – 12:15 pm	Parallel Session			
	S13 <i>Flanders Room</i> Lignin Extraction and Applications <u>Session Co-Chairs:</u> Mark Thies Hongbo Li	S14 <i>Royal City Ballroom A</i> Smart Packaging and Pollution Awareness <u>Session Co-Chairs:</u> Pierre Carreau Scott Renneckar	S15 <i>John McCrae Room</i> Biofiller Based Composites <u>Session Co-Chairs:</u> M Cengiz Altan Craig Clemons	S16 <i>Royal City Ballroom B</i> Biomass Pyrolysis and By-product Applications <u>Session Co-Chairs:</u> Rakesh Gupta Ramaswamy Nagarajan Yulin Deng
10:35 am – 11:00 am	Keynote Talk <i>S13.1 - Green and Energy-saving Technologies for Lignocellulose Biomass Processing</i> Kecheng Li Western Michigan University USA	Keynote Talk <i>S14.1 - Radiation grafting on natural films</i> Monique Lacroix INRS-Institut Armand-Frappier Quebec	Keynote Talk <i>S15.1 - Starch composite packaging made by compression molding</i> Gregory Glenn USDA-ARS USA	Keynote Talk <i>S16.1 - Sustainable chemicals and products from fast pyrolysis bio-oils</i> Yaseen Elkasabi USDA-ARS USA

<p>11:00 am – 11:25 am</p>	<p>Keynote Talk <i>S13.2 - Electrochemical Extraction and Oxidation of Lignin</i> Aicheng Chen University of Guelph Canada</p>	<p>Invited Speaker <i>S14.2 - Influence of Natural And Artificial Weathering on Bioplastics And Biocomposites For Food Packaging</i> Tomas J. Madera-Santana Centro de Investigación en Alimentación Y Desarrollo (CIAD) Mexico (20 minutes)</p>	<p>Keynote Talk <i>S15.2 - Progress in Kenaf fibre Reinforced Composites (KFRC) research at Universiti Sains Malaysia (USM)</i> Hazizan Md Akil Universiti Sains Malaysia (USM) Malaysia</p>	<p>Keynote Talk <i>S16.2 - Production Of Bio-Char For Value-Added Building Materials</i> Franco Berruti Western University Canada</p>
<p>11:25 am – 11:45 am</p>	<p>Invited Speaker <i>S13.3 - Production and flocculation performance of kraft lignin (KL), acrylamide (AM) and 2-[(methacryloyloxy) ethyl] trimethylammonium chloride (DMC) copolymers</i> Pedram Fatehi Lakehead University Canada</p>	<p>Invited Speaker <i>S14.3 - Hydrophobic Starch-Laurate Graft Polymers: Synthesis, and Structure – Property Correlations</i> Tizazu Mekonnen University of Waterloo Canada</p>	<p>Invited Speaker <i>S15.3 - Understanding the Photo Cure Kinetics and Mechanical Performance of Natural Fiber Reinforced Epoxidized Vegetable Oil</i> Srikanth Pilla Clemson University USA</p>	<p>Invited Speaker <i>S16.3 - Characterization of coconut shell activated carbon to serve as a potential green filler for rubber industry; comparative study with carbon black</i> Nadras Othman Universiti Sains Malaysia Malaysia</p>
<p>11:45 am – 12:00 pm</p>	<p><i>S13.4 - High Mechanical and Transport Enhancement in Composites of Chitin Nano-whiskers</i> Muhammad Anwer University of Toronto Canada</p>	<p><i>S14.4 Production of Bio-carbon Using Oxidative Procedure and Hydrothermal Carbonization of Spent Liquor from Paper Recycling Industry</i> Zainab AL-Kaabi University of Guelph Canada</p>	<p><i>S15.4 - Influence of the pyrolysing temperature of biomass on the morphology of the bio-composites</i> Amandine Codou University of Guelph Canada</p>	<p><i>S16.4 - Structural Development of Biochar Derived from Cattle Manure Under Exposure to Subcritical and Supercritical Water</i> Sonil Nanda Western University Canada</p>
<p>12:00 pm – 12:15 pm</p>	<p><i>S13.5 - Application of lignin containing nanocellulose fibrils to enhance adhesion properties of pMDI wood adhesives</i> Heyu Chen University of Toronto Canada</p>	<p><i>S14.5 - Production and characterization of coconut-coir biochars for optimization of Cr (VI) adsorption in aqueous solution</i> Chinmayee Acharya CSIR- Institute of Minerals and Materials Technology India</p>	<p><i>S15.5 - Bacterial Cellulose-assisted Delignified Wheat Straw-PVA based Biocomposites with novel Characteristics</i> Muhammad Asgher University of Agriculture Pakistan</p>	<p><i>S16.5 - Rapid removal of phosphates, nitrates, lead, and cadmium from wastewater using fast pyrolysis biochar</i> Akila G Karunanayake Biochar Supreme Inc. USA</p>

12:15 pm – 1:30 pm	Networking Lunch (Buffet)			
1:30 pm – 3:25 pm	Parallel Session			
	<p style="text-align: center;">S17 <i>Flanders Room</i> Biopolymer Processing and Modeling <u>Session Co-Chairs:</u> Nandika D'Souza Pedro J. Herrera-Franco</p>	<p style="text-align: center;">S18 <i>Royal City Ballroom A</i> Biobased Polymers and Biocomposites <u>Session Co-Chairs:</u> Monique Lacroix Anil Netravali</p>	<p style="text-align: center;">S19 <i>John McCrae Room</i> Sustainable Packaging Solutions <u>Session Co-Chairs:</u> Alain Guinault Azam Ali</p>	<p style="text-align: center;">S20 <i>Royal City Ballroom B</i> Bioeconomy and Innovation <u>Session Co-Chairs:</u> Anthony Anyia Qiang Liu</p>
1:30 pm – 1:55 pm	<p style="text-align: center;">Keynote Talk S17.1 - <i>Ultra-High Speed Reactive Twin Screw Extrusion for Compatibilizing Biobased Polymer Blends</i> Margaret Sobkowicz UMass Lowell USA</p>	<p style="text-align: center;">Keynote Talk S18.1 - <i>Biobased furanic polymers, composites and nanohybrids</i> Nathanael Guigo University Nice Sophia Antipolis France</p>	<p style="text-align: center;">Keynote Talk S19.1 - <i>Sustainable Polymer Packaging Through Material Reduction and the Use of Renewable Materials</i> Abdellah Aji Polytechnique Montréal Canada</p>	<p style="text-align: center;">Keynote Talk S20.1 - <i>Building Canada's BioEconomy Cluster: Value Chain Gaps and their Solutions</i> Paul Stuart Polytechnique Montréal Canada</p>
1:55 pm – 2:20 pm	<p style="text-align: center;">Invited Speaker S17.2 - <i>Performance enhancement of sustainable composites through hybrid technique for light weight applications</i> Hom Dhakal University of Portsmouth United Kingdom (20 minutes)</p>	<p style="text-align: center;">Keynote Talk S18.2 - <i>Technical Applications of Natural Fibres in Biocomposites</i> Rajesh Anandjiwala Nelson Mandela University South Africa</p>	<p style="text-align: center;">Keynote Talk S19.2 - <i>Identifying best markets for the exploitation of innovative sustainable food packaging solutions</i> Susanne Braun University of Hohenheim Germany</p>	<p style="text-align: center;">Keynote Talk S20.2 - <i>Novel Activated Carbon Materials Development from biomass for Various Industrial Applications</i> Ajay Dalai University of Saskatchewan Canada</p>

<p>2:20 pm – 2:40 pm</p>	<p>S17.3 - <i>Develop instrumental methods for mold evaluation and foreign crops detection of flax and hemp straws</i> Jianbo Lu Alberta Agriculture and Forestry Canada (15 minutes)</p>	<p>S18.3 - <i>Introduction of A Novel Resilience Capped WPC</i> Rugui Dong Jiaping WPC China (15 minutes)</p>	<p>Invited Speaker S19.3 - <i>Developing Biobased Polymeric Products for Slow Release of Water or Fertilizers in Agriculture</i> Qiangxian Wu Central China Normal University China</p>	<p>Invited Speaker S20.3 - <i>Innovative Technology for Quality Improvement Of Plastic Granules Produced From Recycled Plastics Waste</i> Deepali Jadia Enviro Remediation & Research Laboratory (ERRL) India</p>
<p>2:40 pm – 2:55 pm</p>	<p>S17.4 – <i>Process-property relationships in fused deposition modeling of poly (lactic acid)</i> Andrew Anstey University of Guelph Canada</p>	<p>S18.4 - <i>Preparation and thermal properties of polyethylene glycol/expanded graphite as novel form-stable phase change material for indoor energy saving</i> Yingni Yang Beijing Forestry University China</p>	<p>S19.4 - <i>Nanostructured Super-toughness Biodegradable Materials by Reactive Melt Blending</i> Feng Wu University of Guelph Canada</p>	<p>S20.4 - <i>Synthesis of Bio-based Unsaturated Polyamides from Canola oil Derived Monomer</i> Reza Ahmadi University of Alberta Canada</p>
<p>2:55 pm – 3:10 pm</p>	<p>S17.5 - <i>Biobased Rubber-toughened Poly(trimethylene terephthalate) (PTT): Morphological, Mechanical, and Miscibility Characteristics</i> Michael Snowdon University of Guelph Canada</p>	<p>S18.5 - <i>Nanocellulose in Plastic Composites for Automotive Applications</i> Geoffrey Fisher Performance BioFilaments Inc. Canada</p>	<p>S19.5 - <i>Comparative experimental and techno-economic analysis of production cost of renewable diesel from woody biomass and agricultural residue</i> Madhumita Patel University of Alberta Canada</p>	<p>S20.5 - <i>Wheat Straw Torrefaction and Pyrolysis in a Horizontal Moving Bed Pilot Plant</i> William Campbell University of Saskatchewan Canada</p>
<p>3:10 pm – 3:25 pm</p>	<p>S17.6 - TBD</p>	<p>S18.6 - <i>Reinforcement effect of poly(glycerol succinate-co-maleate)-grafted cellulose nanocrystals on toughened polylactic acid biocomposites</i> Mohamed A. Abdelwahab University of Guelph Canada</p>	<p>S19.6 – <i>Downstream corn oil based polymer: a green substitution of petroleum based polymer</i> Suman Thakur University of Guelph Canada</p>	<p>S20.6 - <i>Characterization of Chicken Feather Biocarbons and Chicken Feather Biocarbon Composites</i> Zonglin Li University of Guelph Canada</p>

3:25 pm – 4:00 pm	Networking Break	
4:00 pm – 6:00 pm	<i>Thematic Panels (Author names not in order of appearance)</i>	
	Wood plastic composites (WPC): North America, Europe and China in Perspective <i>Flanders Room</i>	Circular Economy Towards Innovation in Industries <i>John McCrae Room</i>
4:00 pm – 6:00 pm	Moderator: Mohini Sain University of Toronto Tom Jacques Hickory Dickory Decks Wayne Song CCLINK Materials Co. Ltd. QingWen Wang South China Agricultural University Andrew Clements Bright Claim Question & Answer/ Discussion	Moderator: Manjusri Misra University of Guelph Joe Hruska Canadian Plastics Industry Association (CPIA) Ranganath Shastri Expert Plastics Solutions de México Pierre Boisseau Enerkem Atul Bali Competitive Green Technologies Question & Answer/ Discussion
6:00 pm – 6:30 pm	Conference Banquet Networking Reception <i>Royal City Ballroom</i>	
6:30 pm – 10:00 pm	Conference Banquet* <i>Royal City Ballroom</i> <i>*Banquet Addresses to Start at 7:00 pm</i>	

Friday, July 27th, 2018

6:30 am - 8:30 am	Registration and Networking Breakfast			
8:30 am – 10:40 am	Plenary Session IV Green Technology and Government Policy & Commercialization Strategy			
8:30 am – 8:35 am	Introduction and Sponsor Talk			
8:35 am – 8:45 am	Moderator: Rodrigo Navia University of La Frontera			
8:45 am – 9:10 am	Anil Netravali Cornell University			
9:10 am – 9:35 am	Jim Grey IGPC Ethanol			
9:35 am – 10:00 am	Kate Lewis U.S. Department of Agriculture			
10:00 am – 10:25 am	Murray McLaughlin Bioindustrial Innovation Canada			
10:25 am – 10:40 am	Question & Answer/ Discussion			
10:40 am – 11:00 am	Networking Break			
11:00 am - 12:55 pm	Parallel Session			
	<p>S21 <i>Royal City Ballroom A</i> Agriculture, Bio-refinery and Circular Economy Session Co-Chairs: Daniel Schwendemann Satya Narayan Naik Qiangxian Wu</p>	<p>S22 <i>John McCrae Room</i> Green Chemistry and Smart Materials Session Co-Chairs: Michael Cunningham Aji Mathew</p>	<p>S23 <i>Flanders Room</i> Advanced Biocomposites for Structural Applications Session Co-Chairs: Hom Dhakal Mona Duhme</p>	<p>S24 <i>Royal City Ballroom B</i> Biodegradability and Plastic End-of-Life Management Session Co-Chairs: Veera Boddu Takashi Aoki</p>
11:00 am – 11:25 am	<p>Keynote Talk S21.1 - <i>Studies of the kinetics of enzymatic saccharification of waste biomass</i> Bandaru Ramarao State University of New York CESF USA</p>	<p>Keynote Talk S22.1 - <i>Monomers, Biopolymers, and Biomaterials from Renewable Resources</i> Aman Ullah University of Alberta Canada</p>	<p>Keynote Talk S23.1 - <i>Applications of Bio-Based FRP Composites in Civil Engineering Construction</i> Amir Fam Queen's University Canada</p>	<p>Keynote Talk S24.1 - <i>A bacterium that degrades and assimilates poly(ethylene terephthalate) and its enzymes involved in the degradation</i> Kohei Oda Kyoto Institute of Technology Japan</p>

11:25 am – 11:50 am	<p>Invited Speaker <i>S21.2 - Development of plant protein-based bioplastic for industrial applications</i> Qiang Liu Agriculture and Agri-Food Canada Canada (20 minutes)</p>	<p>Keynote Talk <i>S22.2 - Phytoglycogen nanoparticles: soft colloids from nature</i> John Dutcher University of Guelph Canada</p>	<p>Invited Speaker <i>S23.2 - Hierarchical structures assembled from cellulose nanofibril for advanced applications</i> Feng Jiang University of British Columbia Canada (20 minutes)</p>	<p>Keynote Talk <i>S24.2 - Technological Advances to process End-of-Life Plastics (ELPs): A contribution towards Circular Economy</i> Lakshmi Raghupathy TERI School of Advanced Studies India</p>
11:50 am – 12:05 pm	<p><i>S21.3 - Encapsulation and Triggered Release of Aldehydes from Their Imidazolidine Precursors for Shelf-life Extension of Fruits</i> Caihua Shi University of Guelph Canada</p>	<p><i>S22.3 - Light Emitting Bio-carbon</i> Maria Semeniuk University of Toronto Canada</p>	<p><i>S23.3 - Colza cane bio-aggregate as blown-in thermal insulator</i> Mariana Palumbo Universitat Rovira i Virgili Spain</p>	<p><i>S24.3 - Improving the moisture durability of natural fibre composites</i> Aart Willem van Vuure KU Leuven Belgium</p>
12:05 pm – 12:25 pm	<p>Invited Speaker <i>S21.4 - Light Weighting in Automotive Interior Trim Panels</i> Murali Reddy CpK Interior Products Inc. Canada</p>	<p>Invited Speaker <i>S22.4 - Light-Responsive Polymers as Reversible Soft-Bonding Materials</i> Christopher Barrett McGill University Canada</p>	<p>Invited Speaker <i>S23.4 - Sustainability and Circular Economy for Bio-plastics by R9 ideology</i> Harinder Tamber Polymer Resin & Film Extrusion (PRFE) Consultants Inc. Canada</p>	<p>Invited Speaker <i>S24.4 - Biodegradability Testing of Bioplastics In Aerobic Composting</i> Harsh Jadia Enviro Remediation & Research Laboratory (ERRL) India</p>
12:25 pm – 12:40 pm	<p><i>S21.5 - Thermal, Mechanical and Crystallization Behaviour of PCL-PLA type Random and Diblock Copolymers bearing Different Block Length</i> Neha Mulchandani Indian Institute of Technology Guwahati India</p>	<p><i>S22.5 - Synergistic evidence of Fe and Co nitrates catalysts on Miscanthus grass graphitization</i> Jean-Mathieu Pin University of Guelph Canada</p>	<p><i>S23.5 - Mechanical Properties of Poplar Fibers</i> Keller Joshell Hadassah George University of Western Ontario Canada</p>	<p><i>S24.5 - Flax as an alternative fiber source in composites: an LCA uncovering aspects of circularity including the fate of co-products and their counterfactuals</i> Alejandra Gomez-Campos University of Toulouse France</p>
12:40 pm – 2:00 pm	<p>Networking Lunch (Buffet) and Closing Ceremony <i>Royal City Ballroom</i></p>			
2:00 pm – 3:00 pm	<p>Optional Tour – Bioproducts Centre Facility Tour (BDDC), University of Guelph <i>Meet at Registration Desk</i></p>			