

ISBBB 2016 Program – Draft

Monday, May 30th 2016 – Advanced registration desk will be opened in the evening from 6:30 pm – 8:30 pm
 Tuesday, May 31st 2016

Tuesday, May 31 st 2016				
6:30 am – 8:30 am	Registration and Networking Breakfast			
8:30 am – 9:45 am	Opening Ceremony and Conference Inauguration - Delta Guelph Ballroom			
9:45 am – 12:15 pm	Parallel Session			
	S1 <i>Royal City Ballroom A</i> Natural Fiber Composites Session Co-Chairs: Ramaswamy Nagarajan Aman Ullah	S2 <i>Flanders Room</i> Biopolymers Session Co-Chairs: Bandaru Ramarao Joseph F. Stanzione	S3 <i>John McCrae Room</i> Polylactic Acid (PLA) Composites Session Co-Chairs: Basil D. Favis Anup K. Ghosh	S4 <i>Royal City Ballroom B</i> Biobased Materials and Micro/nanocomposites Session Co-Chairs: Monique Lacroix John Dutcher
9:45 am – 10:10 am	Keynote Talk S1.1 - Canceled	Keynote Talk S2.1 - <i>Natural/Synthetic Polymer Composites Prepared by Graft Modification of Natural Polymers</i> Michael F. Cunningham Queen's University Canada	Keynote Talk S3.1 - <i>Efficiency of coupling in PLA/lignocellulosic fiber composites; effect of particle characteristics and coupling strategy</i> Béla Pukánszky Budapest University of Technology and Economics Hungary	Keynote Talk S4.1 - <i>Cellulose Nanocomposites: Challenges, Opportunities and Commercialization Prospects</i> Douglas Gardner University of Maine USA
10:10 am – 10:35 am	Keynote Talk S1.2 - <i>A challenge of spray up method for hybrid composite with glass fiber and natural fiber</i> Hamada Hiroyuki Kyoto Institute of Technology Japan	Keynote Talk S2.2 - <i>Bio Based Plasticizers</i> Hari Sunkara DuPont USA	Keynote Talk S3.2 - <i>Polylactic Acid-Based Improved Barrier Films</i> Rakesh Gupta West Virginia University USA	Keynote Talk S4.2 - <i>Broadening the Property and Application Windows of Biobased Polymers</i> Jinwen Zhang Washington State University USA

<p>10:35 am – 10:55 am</p>	<p>Invited Talk <i>S1.3 - PLA/Jute composite laminates: mechanical tests and infrared thermography</i> Pietro Russo Institute for Polymers, Composites and Biomaterials Italy</p>	<p>Invited Talk <i>S2.3 - Sugarcane based plastic - an update on the use of Bio-based Polyethylene from Braskem</i> Joseph Jankowski Braskem America, Inc. USA</p>	<p>Invited Talk <i>S3.3 - Improvement of the Properties of PLA with Filler Incorporation</i> Hani Naguib University of Toronto Canada</p>	<p>Invited Talk <i>S4.3 – Biopolymers and Biomaterials: challenges for translating into products</i> Azam Ali University of Otago New Zealand</p>
<p>10:55 am – 11:15 am Networking Break</p>				
<p>11:15 am – 11:35 am</p>	<p><i>S1.4 - Overcoming interfacial affinities issues in bamboo-poly lactide bio-composites via surface coupling</i> Erwan Castanet Deakin University Australia</p>	<p>Invited Talk <i>S2.4 - Strategies to Manufacture Extrusion-Blown PLA films without Melt Strength Enhancers</i> Laurant Matuana Michigan State University USA</p>	<p><i>S3.4 - Reinforcing polylactide with lactic acid modified Cellulose Nanocrystals via melt blending</i> Jean-Marie Raquez University of Mons Belgium</p>	<p>Invited Talk <i>S4.4 - Tailored for simplicity: Foam-templated high performance and high porosity bio-based macroporous polymers</i> Koon-Yang Lee Imperial College London UK</p>
<p>11:35 am – 11:55am</p>	<p><i>S1.5 - Tensile and thermal properties of borassus/ramie fibre reinforced hybrid composites for orthoses</i> Fabrizio Sarasini Sapienza-Università di Roma Italy</p>	<p><i>S2.5 - Mycology Biomaterials</i> Sonia Travaglini University of California, Berkeley USA</p>	<p><i>S3.5- Investigation of Bimodal Cellular Distributions via Supercritical Fluid Assisted Foam Injection Molding of PLA/PBSA Blends</i> Sai Aditya Pradeep Clemson University USA</p>	<p>Invited Talk <i>S4.5 - Polyurethane Materials from Biodiesel Residues and Biobased Resources</i> Özgür Seydibeyoğlu Izmir Katip Çelebi University Turkey</p>
<p>11:55 am – 12:15 am</p>	<p><i>S1.6 - Two CNC Process Improvements to Dramatically Reduce Acid Usage and CNC Purification Costs</i> Joel Kelly NORAM Engineering and Constructors Canada</p>	<p><i>S2.6 - Properties of Amphiphilic Triazole-Linked Polymers Derived from Renewable Sources</i> Michael C. Floros Trent University Canada</p>	<p><i>S3.6 - Poly (trimethylene terephthalate)/Poly (lactic acid) Blends and Biocarbon Composites</i> Vidhya Nagarajan University of Guelph Canada</p>	<p><i>S4.6 - From thermoset polymer to functional porous materials: a bio-recombination design based on polyfurfuryl alcohol and epoxidized linseed oil</i> Jean-Mathieu Pin University of Guelph Canada</p>
<p>12:15 pm - 1:30 pm Networking Buffet Lunch</p>				

1:30 pm - 3:45 pm	Plenary Session I Climate Change, Bioeconomy and Sustainability			
1:30 pm – 1:35 pm	Introduction and sponsor talk			
1:35 pm – 1:45 pm	Moderator: Tyler Whale Ontario Agri-Food Technologies Canada			
1:45 pm – 3:25 pm	Helena Chum National Renewable Energy Laboratory USA			
	Mike Hartmann BioAmber Canada			
	André Faaij University of Groningen Netherlands			
	Jim Grey IGPC Ethanol Inc. Canada			
3:25 pm – 3:45 pm	Question & Answer/ Discussion			
3:45 pm - 4:05 pm	Networking Break			
4:05 pm – 6:20 pm	Parallel Session			
	S5 <i>John McCrae Room</i> Structural Composites: Processing and Testing <u>Session Co-Chairs:</u> Debes Bhattacharyya Chad Ulven	S6 <i>Royal City Ballroom A</i> Biopolymers and Biopolymer Blends <u>Session Co-Chairs:</u> Jian Xu Michael A. Saltzberg	S7 <i>Flanders Room</i> Cellulosic Materials <u>Session Co-Chairs:</u> Hani Naguib Srikanth Pilla	S8 <i>Royal City Ballroom B</i> Natural and Protein-based Biopolymers <u>Session Co-Chairs:</u> Jonathan Curtis David Bressler
4:05 pm – 4:30 pm	Keynote Talk <i>S5.1 - Structural, Thermal, Acoustic, Carbon Footprint and Energy Impact of Sandwich Composites for Green Buildings</i> Nandika D'Souza Discovery Park USA	Keynote Talk <i>S6.1 - Morphology Control in Multiphase Bioplastics : A Route to Next-Generation Materials</i> Basil D. Favis Ecole Polytechnique Canada	Keynote Talk <i>S7.1 - Natural polymers reinforced with cellulose nanocrystal to protect the functionality of active beads, edible coating and biodegradable packaging</i> Monique Lacroix Centre INRS–Institut Armand-Frappier Canada	Keynote Talk <i>S8.1 - Protein plastics, possibilities and challenges</i> Mikael Hedenqvist KTH Royal Institute of Technology Sweden
4:30 pm – 4:55 pm	Keynote Talk <i>S5.2 - Natural Fibre Composites for Strengthening of Civil Engineering Structures</i> Raul Fanguero University of Minho Portugal	Keynote Talk <i>S6.2 - New Developments in Compounding Biomaterials - Process Needs - Machine Developments - Project Results</i> Daniel Schwendemann Hochschule für Technik Rapperswil Switzerland	Keynote Talk <i>S7.2 - Bast Fibres in Composites - Opportunities and Limitations</i> Rajesh Anandjiwala CSIR Materials Science & Manufacturing South Africa	Keynote Talk <i>S8.2 - Structure and Hydration of Highly-Branched, Monodisperse Phytyglycogen Nanoparticles</i> John Dutcher University of Guelph Canada

4:55 pm – 5:15 pm	<p>Invited Talk <i>S5.3- Hybrid Composites And Biocomposites-Concepts, Opportunities And Challenges</i> Hom Nath Dhakal University of Portsmouth UK</p>	<p>Invited Talk <i>S6.3 - Improvements in the melt strength and crystallization kinetics of biopolyesters through reactive modification in the melt state</i> Marianna Kontopoulou Queen's University Canada</p>	<p>Invited Talk <i>S7.3 - Novel Multifunctional Nanocellulose based Fire Retardants for Polymer Composites</i> Dilpreet S Bajwa North Dakota State University USA</p>	<p><i>S8.3 - A Canadian biobased polyol that can replace castor oil in polymer formulations</i> Jonathan Curtis University of Alberta Canada</p>
5:15 pm – 5:35 pm	<p><i>S5.4 - Automotive Biocomposites based on Cellulose Filament Technology</i> Gurminder Minhas Performance Biofilaments Canada</p>	<p>Invited Talk <i>S6.4 - Mechanical properties of 3D printed PLA tensile bars</i> Frank Ehrig Institute for Materials Technology and Plastics Processing Switzerland</p>	<p><i>S7.4 - Performance of hydrophobic cellulosic fibres for biopackaging</i> Javad Sameni Natures Affinity Inc. Canada</p>	<p><i>S8.4 - High performance flax/gluten composite materials: difficulties and challenges</i> Nhan Vo Hong University of Leuven Belgium</p>
5:35 pm – 5:55 pm	<p><i>S5.5 - Thermal insulation materials based on residual natural fibers</i> Juan Pablo Cardenas Universidad de La Frontera Chile</p>	<p><i>S6.5 - Production of polyhydroxyalkanoates with different monomer composition for diverse applications</i> Parveen K. Sharma University of Manitoba Canada</p>	<p><i>S7.5 - Formation of metal nanostructured clusters on TEMPO-oxidized cellulose nanofibers (TOCNF) during metal adsorption in the aqueous medium</i> Peng Liu Luleå University of Technology Sweden</p>	<p><i>S8.5 - Nano-reinforced thermoplastic films from poultry feather keratin</i> Manpreet Kaur University of Alberta Canada</p>
5:55 pm – 6:15 pm	<p><i>S5.6 - Properties of particleboard made from bamboo veneer waste as function of particle geometry</i> Juliana Abdul Halip Universiti Putra Malaysia Malaysia</p>	<p><i>S6.6 - Biodegradable plastics - part or solution of the marine litter problem?</i> Marco Neudecker Institute for Bioplastics and Biocomposites Germany</p>	<p><i>S7.6 - Interfacial characterization of a functionalized cellulosic fiber reinforced PLA composite</i> Foruzanmehr Mreza Universite de Sherbrooke Canada</p>	<p><i>S8.6- Structural and mechanical properties of wheat gluten and potato protein composites as affected by processing temperature and plasticizer</i> William Roy Newson Swedish University of Agricultural Sciences Sweden</p>
6:30 pm – 6:45 pm	Welcome Reception - Delta Guelph Ballroom			
6:45 pm – 7:00 pm	Welcome Address - Delta Guelph Ballroom			
7:00 pm – 9:00 pm	Networking Buffet Dinner - Delta Guelph Ballroom			

Wednesday, June 1st, 2016

7:00 am – 8:30 am	Registration and Networking Breakfast			
8:30 am – 10:30 am	Parallel Session			
	<p align="center">S9 <i>John McCrae Room</i> Thermosets and Nanobiocomposites <u>Session Co-Chairs:</u> Dilpreet Bajwa Isaul Lopez</p>	<p align="center">S10 <i>Royal City Ballroom A</i> Lignin, Gasification and Carbon-based Materials <u>Session Co-Chairs:</u> Sudip Rakshit Animesh Dutta</p>	<p align="center">S11 <i>Flanders Room</i> Nanomaterials <u>Session Co-Chairs:</u> Helena Chum Rajesh Anandjiwala</p>	<p align="center">S12 <i>Royal City Ballroom B</i> Sustainable Biomaterials <u>Session Co-Chairs:</u> Andrew Myers Jinwen Zhang</p>
8:30 am – 8:55 am	<p align="center">Keynote Talk S9.1 - <i>A New Approach to Preparing Oriented Nanocellulose Reinforced Thermosets</i> Craig Clemons USDA Forest Products Laboratory USA</p>	<p align="center">Keynote Talk S10.1 - <i>Low-Ash and Ultrapure Lignins of Controlled Molecular Weight from Kraft Black Liquor</i> Mark C. Thies Clemson University USA</p>	<p align="center">Keynote Talk S11.1 - <i>Development and Application of High Residual Lignin Content Nanocellulose Fibers from Bark</i> Ning Yan University of Toronto Canada</p>	<p align="center">Keynote Talk S12.1 - <i>Sustainable Plastics and the Center for Bioplastics and Biocomposites</i> David Grewell Iowa State University USA</p>
8:55 am – 9:20 am	<p align="center">Keynote Talk S9.2 - <i>Designing Advanced Biocomposites For Structural Applications</i> Chad Ulven North Dakota State University USA</p>	<p align="center">Keynote Talk S10.2 - <i>Hydrogen Generation via Supercritical Water Gasification of Lignin and Waste Biomass using Ni-Co Biometallic Catalyst</i> Ajay K. Dalai University of Saskatchewan Canada</p>	<p align="center">Keynote Talk S11.2 - <i>Lightweight Aerogel Materials: From Fundamentals to Innovative Applications</i> Sadhan Jana University of Akron USA</p>	<p align="center">Keynote Talk S12.2 - <i>Wheat Gluten-based Green Composites</i> Xiaoqing Zhang CSIRO Manufacturing Australia</p>
9:20 am – 9:40 am	<p align="center"><i>S9.3 - Research Progress on Bio-based Thermosetting Resin</i> Xiaoqing Liu Ningbo Institute of Materials Technology and Engineering China</p>	<p align="center"><i>S10.3 - Synthesizing Epoxy Resins and Corrosion Protection Coatings from Lignin</i> Haibin Yu Ningbo Institute of Materials Technology and Engineering China</p>	<p align="center">Invited Talk S11.3 - <i>Influence of Bionano-Fillers in Improvement of Poly(lactic acid) Performance</i> Vimal Katiyar Indian Institute of Technology Guwahati India</p>	<p align="center"><i>S12.3 - Development of new techniques for the production of Levulinic acid and Succinic acid from wood hemicelluloses</i> Sai Swaroop Dalli Lakehead University Canada</p>

Wednesday, June 1st 2016

9:40 am – 10:00 am	S9.4 - <i>Characterization of chitin nanowhisiker reinforced polypropylene biocomposites</i> Sharon Li University of Toronto Canada	S10.4 - <i>Understanding moisture induced degradation in flax fiber composites by innovative and targeted treatments</i> Kevin Hendrickx University of Leuven Belgium	S11.4 - <i>Preparation and properties of high residual lignin containing nanocellulose-epoxy composite</i> Sandeep Sudhakaran Nair University of Toronto Canada	S12.4 - <i>Lignocellulosic biomass for development of novel bio-based materials</i> TriDung Ngo Alberta Innovates – Technology Futures Canada
10:00 am – 10:20 am	Networking Break			
10:20 am - 12:40 pm	Plenary Session II Innovation in Bioplastic and Biobased Products and Standards			
10:20 am – 10:30 am	Moderator: Ramani Narayan Michigan State University USA			
10:30 am – 12:20 pm	Thomas Pitzi BASF Corporation USA			
	Derek Atkinson Corbion Purac USA			
	Amar K. Mohanty University of Guelph Canada			
	Peter Hobbes Club Coffee Canada			
	Oliver Ehlert DIN CERTCO Germany			
12:20 pm – 12:40 pm	Question & Answer/ Discussion			
12:40 pm- 2:05 pm	Networking Buffet Lunch			
2:05 pm - 4:20 pm	Plenary Session III Sustainable Manufacturing, Natural Fibre Composites and Biobased Materials			
2:05 pm – 2:10 pm	Introduction and sponsor talk			
2:10 pm – 2:20 pm	Moderator: Atul Bali CGTech Canada			
2:20 pm – 4:00 pm	Lawrence T. Drzal Michigan State University USA			
	Deborah Mielewski Ford Motor Company USA			
	Michael A. Saltzberg DuPont USA			
	Sanjay Mazumdar Lucintel USA			
4:00 pm – 4:20 pm	Question & Answer/ Discussion			

4:20 pm – 4:35 pm	Networking Break			
4:35 pm – 6:20 pm	Parallel Session			
	<p>S13 <i>Royal City Ballroom A</i> Bioeconomy I <u>Session Co-Chairs:</u> John Wolodko Murray McLaughlin</p>	<p>S14 <i>John McCrae Room</i> Biomedical Materials and Electronics <u>Session Co-Chairs:</u> Nandika D'Souza Paridah Tahir</p>	<p>S15 <i>Flanders Room</i> Bioinspired Materials, Biocomposites and Policy <u>Session Co-Chairs:</u> Ajay K. Dalai Ning Yan</p>	<p>S16 <i>Royal City Ballroom B</i> Bioproducts and Sustainability <u>Session Co-Chairs:</u> Hans-Josef Endres David Grewell</p>
4:35 pm – 5:00 pm	<p>Keynote Talk <i>S24.2 - Biomass for Bioproducts: A Farmer's Perspective</i> Don McCabe Ontario Federation of Agriculture Canada</p>	<p>Keynote Talk <i>S14.1 - Cellulose Nanofibril (CNF)-Based Aerogels for Various Applications</i> Shaoqin "Sarah" Gong University of Wisconsin - Madison USA</p>	<p>Keynote Talk <i>S15.1 - Bio-inspired Thermosets and Char Forming Additives</i> Ramaswamy Nagarajan University of Massachusetts Lowell USA</p>	<p>Keynote Talk <i>S16.1 - When is enough, enough? The Politics, Business and Science of Sustainability Management Systems</i> Dilip Tambyrajah International Fiber Organization Netherlands</p>
5:00 pm – 5:20 pm	<p><i>S13.2 - Transportation Model Assessment for Corn Stock Supply in Southwestern Ontario</i> Aung Oo Sarnia Lambton Research Park Canada</p>	<p>Invited Talk <i>S14.2 - Electrospun Nonwovens In Controlled Release Applications</i> Loong-Tak Lim University of Guelph Canada</p>	<p>Invited Talk <i>S15.2 - Vanillin: A Renewable and Versatile Platform Chemical for Sustainable Polymers</i> Joseph F. Stanzione Rowan University USA</p>	<p>Invited Talk <i>S16.2 - A Special Way of Developing Biobased Composites for the Markets</i> Qiangxian Wu Central China Normal University China</p>
5:20 pm - 5:40 pm	<p><i>S13.3 - Producing cost effective lignin-based biomaterials for the automotive industry in an integrated forest biorefinery: Techno-economic and environmental analysis</i> Olumoye Ajao Natural Resources Canada</p>	<p>Invited Talk <i>S14.3 - Optimization of a Composite Intramedullary Nail for Treating Femoral Shaft Fractures using Selective Stress Shielding Approach</i> Habiba Bougherara Ryerson University Canada</p>	<p><i>S15.3 - Superior Flexible and Rigid Polyurethane Foams from Metathesized Palm Oil</i> Prasanth S. Pillai Trent University Canada</p>	<p><i>S16.3 - Synthesis of Good Quality Bioplastics using Chicken Feather Waste</i> Muhammad Asgher University of Agriculture Pakistan</p>

Wednesday, June 1st 2016

5:40 pm - 6:00 pm	<p>S13.4 - <i>Investigation of pyrolysis char made of natural fiber reinforced plastics as a filler for innovative and sustainable thermoplastic compounds in the automotive industry</i> Constanze Uthoff Volkswagen Germany</p>	<p>S14.4 - <i>Experimental Investigation and Finite Element Studies of Laser Parameter Effects on the Bioactivity of Treated Implants</i> Mohsen Mohammadi University New Brunswick Canada</p>	<p>S15.4 - <i>Surface modification of dried distillers grains with solubles (DDGS) for application in PLA-based composites</i> Tao Wang University of Guelph Canada</p>	<p>Invited Talk S13.5 - <i>IGPC Ethanol: Applying the biorefinery concept to a first generation corn to ethanol plant</i> Rachel Murdy IGPC Ethanol Inc. Canada</p>
6:00 pm – 6:20 pm	<p>S16.4 - <i>Mechanical recycling of fiber-reinforced thermoset composites</i> Christina Haxter University of Rostock Germany</p>	<p>S14.5 – <i>Printing Patterns of Conductive Graphene Coated Cellulose for Flexible Electronics</i> Yin Li University of Guelph Canada</p>	<p>S15.5 - <i>Policy Review of Bioproduct Industry for</i> Canada Nafis Muntasir University of Guelph Canada</p>	<p>S16.5 - <i>Biodegradable composite materials from bioplastics and distillers grains</i> Nima Zarrinbakhsh University of Guelph Canada</p>
6:20 pm – 9:00 pm	<p>Poster Competition and Networking Reception with hors d'oeuvres – Dinner of your own Delta Guelph Ballroom</p>			

Thursday, June 2nd 2016

7:00 am – 8:30 am	Registration and Networking Breakfast				
8:30 am – 10:45 am	Plenary Session IV Green Chemistry and Biobased Materials				
8:30 am – 8:35 am	Introduction and sponsor talk				
8:35 am – 8:45 am	Moderator: Mohini Sain University of Toronto Canada				
8:45 am – 10:25 am	Canceled - TBA				
	Hans-Josef Endres IfBB Germany				
	Wayne (Weining) Song CCLINK Materials Co. Ltd. China				
	Yulin Deng Georgia Tech USA				
10:25 am – 10:45 am	Question & Answer/ Discussion				
10:45 am – 11:05 am	Networking Break				
11:05 am – 12:55 pm	Parallel Session				
	S17 <i>Flanders Room</i> Biobased Materials for Automotive Applications <u>Session Co-Chairs:</u> Béla Pukánszky Douglas Gardner	S18 <i>John McCrae Room</i> Biobased Materials for Energy Storage and Production Applications <u>Session Co-Chairs:</u> Rakesh Gupta Özgür Seydibeyoğlu	S19 <i>Royal City Ballroom A</i> Natural Fibers, Polymers and Vegetable Oils <u>Session Co-Chairs:</u> Hom Nath Dhakal Murali Reddy	S20 <i>Gryphon Room</i> Biocarbon <u>Session Co-Chairs:</u> Rodrigo Navia S. Vivekanandhan	S21 <i>Royal City Ballroom B</i> Bioresources <u>Session Co-Chairs:</u> Mark C. Thies Rachel Murdy
11:05 am – 11:30 am	Keynote Talk S17.1 - <i>Cost-effective Bioplastics and Biocomposites Made with Lignocelluloses</i> Minh Tan Ton-That National Research Council Canada	Keynote Talk S18.1 - <i>Conversion of Cellulose Biomass into Activated Carbon Fiber for Energy Storage</i> Jonathan Y. Chen University of Texas at Austin USA	Keynote Talk S19.1 - <i>Polymers, Lubricants, Phase Change Materials, Waxes and High Value Chemicals from Vegetable Oils: Chemistry and Material Properties</i> Suresh S. Narine Trent University Canada	Keynote Talk S20.1 - <i>Biochar Based Biocomposites: Mechanical and Flammability Characterizations</i> Debes Bhattacharyya University of Auckland New Zealand	Keynote Talk S21.1 - <i>Current R&D Activities in Alberta's Bio-Materials Sector</i> John Wolodko Alberta Innovates – Technology Futures Canada

<p>11:30 am – 11:55 am</p>	<p>Keynote Talk S17.2 - Bio-based Headlamp Housing for Automotive Ayse Ademuwagun Varroc Lighting USA</p>	<p>Keynote Talk S18.2 - <i>BIOX - A biodiesel story of climate change mandates, technological innovation and entrepreneurship</i> Nak Paik BIOX Corporation Canada</p>	<p>Keynote Talk S19.2 - Oil Palm Biomass – Endless Opportunities Paridah Tahir University Putra Malaysia Malaysia</p>	<p>Keynote Talk S20.2 - Opportunities In The Use Of Biocarbon-Based Materials Rodrigo Navia Universidad de La Frontera Chile</p>	<p>Keynote Talk S21.2 - Renewable applications for Specified Risk Material David Bressler University of Alberta Canada</p>
<p>11:55 am – 12:15 pm</p>	<p>Invited Talk S17.3 - <i>Lightweight and Sustainable Materials for Automotive</i> Omar Faruk Ford Motor Company Canada</p>	<p>S18.3 - <i>In-situ modification of cellulose nanofibrils by organosilanes during spray drying</i> J. Elliott Sanders University of Maine USA</p>	<p>Invited Talk S19.3 - <i>High-linoleic acid soybean: New Opportunities for Material Applications such as paints, coatings, polyols and epoxies</i> Istvan Rajcan University of Guelph Canada</p>	<p>S20.3 - <i>Carbon fiber made from pyrolytic lignin</i> Wangda Qu Iowa State University USA</p>	<p>Invited Talk S21.3 - <i>Hydrothermal Gasification of Low Grade Biomass at Supercritical Condition</i> Animesh Dutta University of Guelph Canada</p>
<p>12:15 pm – 12:35 pm</p>	<p>S17.4 - <i>Effect of annealing process, stereocomplexation and nucleation on performances of highly tough polylactide-based materials for automotive applications</i> Amani Bouzouita University of Mons Belgium</p>	<p>S18.4 - <i>Nanocrystalline Cellulose - Jatropha Oil-based Polyurethane Nanocomposites: Effects of Fiber Loading</i> Syed Saiful Azry Institute of Tropical Forestry and Forest Products Malaysia</p>	<p>Invited Talk S19.4 - <i>Chain Extension Studies of Carbon-dioxide based Polypropylene Carbonate</i> Murali Mohan Reddy University of Guelph Canada</p>	<p>S20.4 - <i>Utilizing Reclaimed Carbon fibers in Production of Thermoplastic Composites</i> Amir Hossein Behravesh University of Toronto Canada</p>	<p>S21.4 - <i>Agricultural waste to high value product</i> Bishnu Acharya University of Prince Edward Island Canada</p>
<p>12:35 pm – 12:55 pm</p>	<p>S17.5 - <i>FibreCITY Initiative at the Composites Innovation Centre: An Update and links to the Biomass Quality Network Canada</i> Lin-Ping Choo-Smith Composites Innovation Centre Canada</p>	<p>S18.5 - <i>Investigation into the use of a biobased carbon prepared from a lignin-rich precursor as a pseudo-carbon black</i> Michael R. Snowdon University of Guelph Canada</p>	<p>S19.5 - <i>Effect of Wood Fiber on Foaming Behavior of Pine Oil based Bioepoxy</i> Lady Joana Rodriguez Universidad Nacional de Colombia Sede Manizales Colombia</p>	<p>Invited Talk S20.5 - <i>Carbon Nanotubes from Renewable Resources</i> S. Vivekanandhan MK University India</p>	<p>S21.5 - <i>Substitution of Phenol with Bio-Oil in the Production of Phenol Formaldehyde Resin</i> Zhouhong Wang Auburn University USA</p>
<p>12:55 pm – 2:00 pm</p>	<p>Networking Buffet Lunch</p>				

	Parallel Session			
	S22 <i>Royal City Ballroom A</i> Biorefinery <u>Session Co-Chairs:</u> Laurant Matuana Khurshid Saharan	S23 <i>Flanders Room</i> Green Chemistry and Biomaterials <u>Session Co-Chairs:</u> Mikael Hedenqvist Andrea Lazzeri	S24 <i>John McCrae Room</i> Biomass Characterization and Separation <u>Session Co-Chairs:</u> Mahesh V. Hosur Xiaoqing Zhang	S25 <i>Royal City Ballroom B</i> Biodegradability, Renewable Materials and Recycling <u>Session Co-Chairs:</u> Sadhan Jana Habiba Bougherara
2:00 pm – 3:50 pm				
2:00 pm – 2:25 pm	Keynote Talk <i>S22.1 - Biorefinery of Spices and Aromatic Plants</i> Satya Narayan Naik Indian Institute of Technology India	Keynote Talk <i>S23.1 - Non-Isocyanate Polyurethanes For "Green" Materials: Foams, Adhesives And The Potential For Additive Manufacturing</i> Andrew Myers Pittsburg State University USA	Keynote Talk <i>S24.1 – Xylose Separation from Hot-Water Hardwood Extract Hydrolysates</i> Shijie Liu State University of New York USA	Keynote Talk <i>S25.1 - Understanding biodegradability - a much used and misused concept</i> Ramani Narayan Michigan State University USA
2:25 pm – 2:50 pm	Keynote Talk <i>S22.2 - Constraints of the costs of fossil resources on the biorefining of lignocellulosics</i> Sudip Rakshit Lakehead University Canada	Keynote Talk <i>S23.2 - Bio-inspired Materials and Their Applications Based on Marine and Nature Organisms</i> Jian Xu Institute of Chemistry China	Keynote Talk <i>S13.1 - Biocarbon in Sustainable Bioeconomy: Current Status and Future Directions of Carbonaceous Biocomposites in Lightweight Auto-parts Uses</i> Manju Misra University of Guelph Canada	Keynote Talk <i>S25.2 - Foam Processibility and Biodegradability of Poly(lactide) based Biocomposites</i> Anup K. Ghosh Indian Institute of Technology Delhi India
2:50 pm – 3:10 pm	<i>S22.3 - Transitioning Pulp and Paper Mills into Integrated Forest Biorefineries</i> Lew Christopher Lakehead University Canada	Invited Talk <i>S23.3 - Conversion of lipids into monomers and conjugates</i> Aman Ullah University of Alberta Canada	Invited Talk <i>S24.3 - Long term biomass yield potentials of five energy crops grown in southern Ontario, Canada</i> Naresh Thevathasan University of Guelph Canada	Invited Talk <i>S25.3 - Understanding Foaming Mechanism in Cross-linkable Biopolymers, Blends and Composites</i> Srikanth Pilla Clemson University USA

3:10 pm – 3:30 pm	<p>S22.4 - <i>Organosolv Treatment of Lignocellulosic Biomass</i> Nasim Ramezani University of Toronto Canada</p>	<p>S23.4 - <i>A sustainable way for improving toughness of commercial bioplastics by reactive melt blending with glycerol based polyesters</i> Oscar Valerio University of Guelph Canada</p>	<p>S24.4 - <i>Thermochemical volatilization of lignin for fuels and chemicals: effect of biomass specie and lignin extraction method</i> Xianglan Bai Iowa State University USA</p>	<p>S25.4 - <i>Effect of recycling and weld-lines on the properties of injection molded high density polyethylene reinforced with flax fibers</i> Nathalie Benoit Université Laval Canada</p>
3:30 pm – 3:50 pm			<p>S24.5 - <i>Development of extrusion-assisted extraction process for glucosinolates based biochemicals using industrial oilseed meal as material</i> Jianbo Lu Alberta Agriculture and Forestry Canada</p>	<p>S25.5 - <i>Effect of chain extender on the rheological behaviour of poly(trimethylene terephthalate), PTT and PTT/biochar composites</i> Simonet Torres Galvez University of Guelph Canada</p>
3:50 pm – 4:10 pm	Networking Break			
4:10 pm – 5:40 pm	<p>Workshop I <i>Flanders Room</i> PIRE Workshop: Biocatalytic Routes to Biobased Monomers and Polymers</p>	<p>Workshop II <i>John McCrae Room</i> Recent Advancements in Bio-nanoscience and the Technology of cellulose: Translational Research and state of commercial avenues</p>	<p>Workshop III <i>Gryphon Room</i> Advanced Green Composites and Sustainability</p>	
	<p>Chair: Hari Sunkara/Minh Tan Ton-That Given by: Richard Gross and David Dodds</p>	<p>Chair: Alcides Lopes Leão/ Pietro Russo Given by: Mohini Sain and Kristiina Oksman</p>	<p>Chair: Manju Misra/ Istvan Rajcan Given by: Anil Netravali and Hamdy Khalil</p>	
6:00 pm – 7:00 pm	Conference Reception - Delta Guelph Ballroom			
7:00 pm – 10:30 pm	Conference Banquet and Poster Awards - Delta Guelph Ballroom			

Friday, June 3rd 2016

7:00 am - 8:30 am	Registration and Networking Breakfast			
8:30 am – 10:55 am	Plenary Session V Bioeconomy, Policy and Government Regulations			
8:30 am – 8:35 am	Introduction and sponsor talk			
8:35 am – 8:45 am	Moderator: Steve Price Alberta Innovates Canada			
8:45 am – 10:35 am	Mike Toombs OMAFRA Canada			
	Don Fusco Ministry of Research and Innovation Canada			
	Carla St. Croix Agriculture and Agri-Food Canada Canada			
	Murray McLaughlin BioIndustrial Innovation Canada Canada			
	David Lynch Enerkem Canada			
10:35 am – 10:55 am	Question & Answer/ Discussion			
10:55 am – 11:15 am	Networking Break			
11:15 am - 12:40 pm	Parallel Session			
	<p>S26 <i>Flanders Room</i> Biobased Polymers and Blends <u>Session Co-Chairs:</u> Craig Clemons Qiangxian Wu</p>	<p>S27 <i>Royal City Ballroom B</i> Biopolymers and Biocomposites <u>Session Co-Chairs:</u> Daniel Schwendemann Michael F. Cunningham</p>	<p>S28 <i>John McCrae Room</i> Advanced Biomaterials <u>Session Co-Chairs:</u> Raul Fanguero Loong-Tak Lim</p>	<p>S29 <i>Royal City Ballroom A</i> Bioeconomy II <u>Session Co-Chairs:</u> Dilip Tambyrajah David Lynch</p>
11:15 am – 11:40 am	<p>Keynote Talk S26.1 - <i>Modulation of bio-based polymers performances by the use of proper additives</i> Andrea Lazzeri University of Pisa Italy</p>	<p>Keynote Talk S27.1 - <i>Production of Polyhydroxyalkanoates from enzymatically hydrolyzed cellulosic fiber and fines rejects from paper mill wastes</i> Bandaru Ramarao Empire State Paper Research Institute USA</p>	<p>Keynote Talk S28.1 - <i>Studies on the Fabrication and Characterization of Polymer Nanocomposites Modified With Nanofibers Isolated from Lignocellulosic Biomass</i> Mahesh V. Hosur Tuskegee University USA</p>	<p>Keynote Talk S29.1 - <i>The Biomass Producing Chain in Brazil - The Technological and Economical Aspects of Biofuels and Chemical Feedstocks</i> Alcides Lopes Leão Sao Paulo State University Brazil</p>

<p>11:40 am – 12:00 pm</p>	<p>S26.2 - <i>Toughened bioepoxy from epoxidized soybean oil and poly(furfuryl alcohol)</i> Ghodsieh Mashouf Roudsari University of Guelph Canada</p>	<p>S27.2 - <i>Hybrid biocomposites from toughened polypropylene and biocarbon</i> Ehsan Behazin University of Guelph Canada</p>	<p>S28.2 - <i>Structure and Properties of Lignocellulose Aerogels Based on LiCl/DMSO Solution</i> Liu Zhulan Nanjing Forestry University China</p>	<p>Keynote Talk S29.2 - <i>Thermal and mechanical preprocessing of biomass to improve physical, chemical, energy and storage properties</i> Jaya Shankar Tumuluru Idaho National Laboratory USA</p>
<p>12:00 pm – 12:20 pm</p>	<p>S26.3 - <i>Re-thinking of Poly(lactic acid) Toughening: A High Temperature Reactive Blending</i> Yury Yuryev University of Guelph Canada</p>	<p>Invited Talk S27.3 - <i>Research progress on improving properties of polylactic acid and its applications</i> Jin Zhu Ningbo Institute of Materials Technology and Engineering China</p>	<p>S28.3 - <i>Biocarbon Reinforced Toughened Nylon Composites</i> Emmanuel Ogunsona University of Guelph Canada</p>	<p>S29.3- <i>Delignification of forestry and herbaceous feedstocks for enhanced cellulose accessibility and biorefining</i> Sonil Nanda York University Canada</p>
<p>12:20 pm – 12:40 pm</p>	<p>S26.4 - <i>Sustainable Biobased Blends from the Reactive Extrusion of Polylactide (PLA) and Acrylonitrile Butadiene Styrene</i> Ryan Vadori University of Guelph Canada</p>	<p>S27.4 - <i>Carbon Dioxide based Polymer Blends and Composites</i> Eugene Enriquez University of Guelph Canada</p>	<p>S28.4 - <i>Renewable Replacement for Carbon Black and composites applications</i> Arturo Rodriguez Uribe University of Guelph Canada</p>	<p>S29.4 - <i>Willingness to Pay for Green Products: An Experimental Study</i> Mohammad Tajvarpour McMaster University Canada</p>
<p>12:40 pm – 2:10 pm</p>	<p>Networking Buffet Lunch and Closing Ceremony - Delta Guelph Ballroom</p>			