



CANCOM 2022

12th Canadian-International Conference on Composites

Fredericton-Moncton NB

July 12–15 2022

“Research & Innovation in Composites”

www.cancom2022.ca

Welcome

Dear Colleagues,

We are honoured to welcome you to the 12th Canadian-International Conference on Composites (CANCOM 2022), taking place in Fredericton and Moncton, NB, between July 12 and 15, 2022.

Since its inception, CANCOM has been Canada's largest technical forum facilitating the exchange of technological know-how, research state-of-art, and innovation challenge related to composite materials, by bringing together Canadian and international delegates from industry, academia, government, non-governmental organizations, and vendor suppliers.

Keeping industry focus at the centre, CANCOM 2022 has adopted Research & Innovation in Composites as its theme. CANCOM 2022 will feature three prominent keynote speakers and a special EDI Workshop which will aim at advancing knowledge and technologies in a respectful, diverse, and inclusive workspace.

A day dedicated to the industry will be hosted by the Université de Moncton (Moncton campus) on July 15, 2022. It will feature presentations from local and national speakers from leading technological sectors, a panel discussion on additive manufacturing, as well as 3D printing demos.

Looking forward to a great event and welcome again to Fredericton and Moncton!

On behalf of the organizing committee,

Dr. Gobinda Saha (University of New Brunswick)

Dr. Gabriel LaPlante (Université de Moncton)

Dr. Benoit Landry (Université de Moncton)

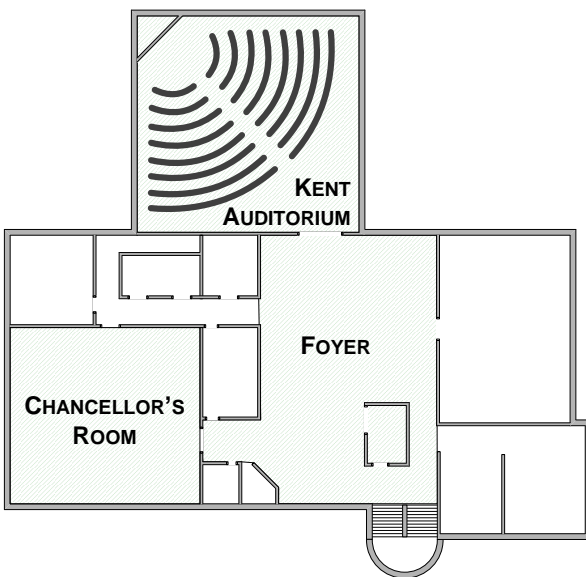
Dr. Sam Nakhla (Memorial University of Newfoundland)

Venue Overview

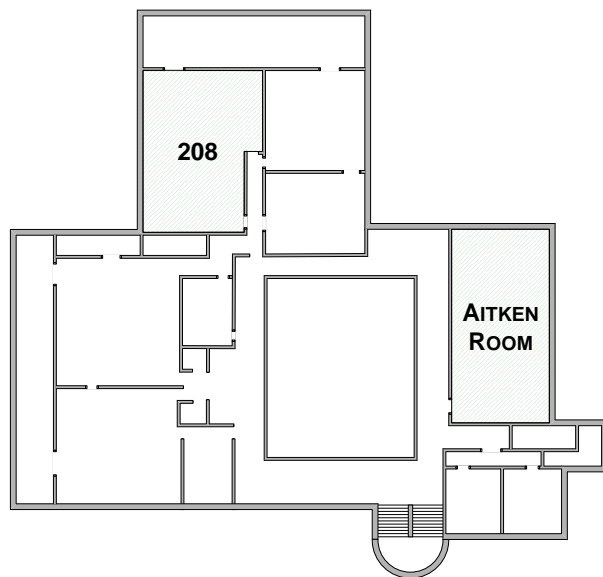
The Wu Conference Centre is a full-service meeting facility with 12,500 square feet of professional meeting space designed for training and development, arbitrations, video conferences, staff meetings, special events, and much more.



First Floor



Second Floor



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General Information

Registration and Information

The conference registration will take place in the foyer of the Wu Conference Centre located at 6 Duffie Dr, Fredericton, NB. Please bring a Photo ID with you (driver's licence or passport).

Registration & Information hours:

Tuesday, July 12: 7:00 – 13:00

Wednesday, July 13: 7:00 – 13:00

Thursday, July 14: 7:00 – 13:00

Exhibition hours:

Monday, July 11: 12:00 – 17:00

Tuesday, July 12: 7:00 – 17:00

Wednesday, July 13: 7:00 – 17:00

Thursday, July 14: 7:00 – 17:00

Internet Access

Free Wi-Fi is provided during the conference at the Wu Conference Centre and the Université de Moncton.

Lunches and Coffee Breaks

Coffee, tea, water, light refreshments during the morning and afternoon breaks. Lunches are also provided.



Welcome Reception

The Welcome Reception will take place at the Wu Centre Foyer on the evening of July 12, 2022.

Banquet

The CANCOM 2022 banquet will take place on the evening of July 13, 2022, at the Student Union Building Ballroom. This event will be marked by a tribute to the life and contribution of late Prof. Pearl Sullivan, who was an advocate for Composite Materials research in Canada and worldwide.

Equity, Diversity, and Inclusion Workshop

The Canadian Equity, Diversity, and Inclusion (EDI) in Composites community aims at advancing knowledge and technologies, fostering collaboration through research and innovation, and supporting Canada's economic growth through creating a respectful, diverse and inclusive workspace, closing equity gaps for students, researchers and community members in education, and supporting throughout career advancement.

Industry Day Workshop @ Université de Moncton

The industry day will be hosted by the Université de Moncton (Moncton campus) on July 15, 2022. It will feature presentations, a panel discussion on additive manufacturing, as well as 3D printing demos. Registration will take place in the foyer of the Jacqueline-Bouchard Building located at 51 Antonine-Maillet Ave, Moncton, NB. Bus transportation is provided between the Fredericton and Moncton.

- **Two pick up locations: in front of the Lady Dunn Hall (see the campus map on p.8), departure at 6:30 and in front of the Hilton Garden Inn, departure at 6:45. Please arrive 10 minutes earlier. Light continental breakfast will be provided on the bus.**
- **The estimated return time in Fredericton is 19:30.**



Committees

Organizing Committee

Gobinda Saha, University of New Brunswick

Gabriel LaPlante, Université de Moncton

Benoit Landry, Université de Moncton

Sam Nakhla, Memorial University of Newfoundland

Scientific Committee

Anoush Poursartip, University of British Columbia

Andrew Johnston, National Research Council

Mehdi Hojjati, Concordia University

Suong Hoa, Concordia University

Pascal Hubert, McGill University

Kazem Fayazbakhsh, Ryerson University

François Robitaille, University of Ottawa

Reza Vaziri, University of British Columbia

Rajamohan Ganesan, Concordia University

Yasmine Abdin, University of British Columbia

Marie-Laure Dano, Université Laval

John Montesano, University of Waterloo

Ali Yousefpour, National Research Council

Pierre Mertiny, University of Alberta

Ahmed Elruby, Memorial University of Newfoundland

Mathilde Jean-St-Laurent, Université du Québec à Trois-Rivières

Joanna Wong, University of Calgary

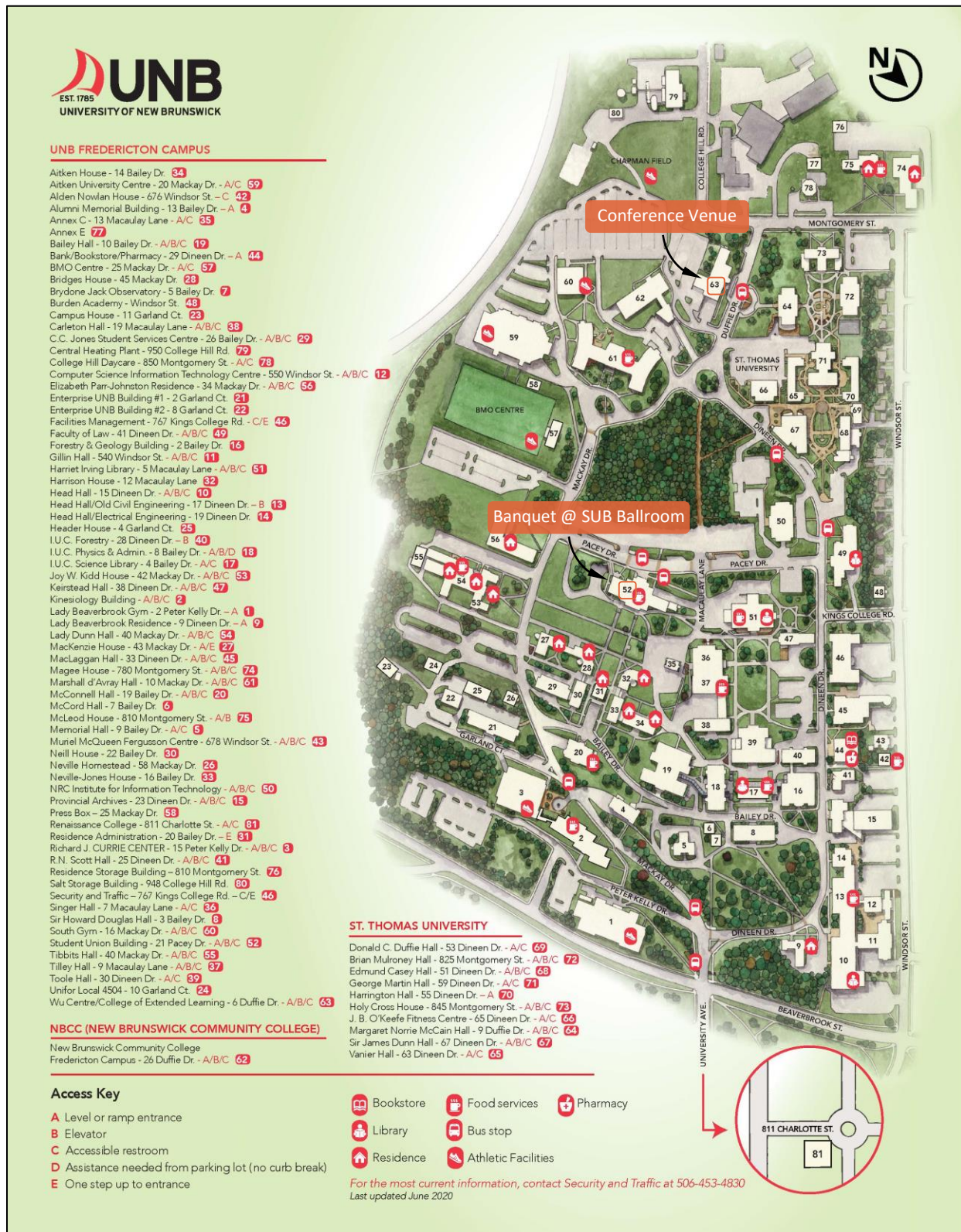
Martine Dubé, École de Technologie Supérieure

Louis Laberge Lebel, Polytechnique Montreal

Simon Baril-Gosselin, National Research Council

Hamidreza Yazdani Sarvestani, National Research Council

UNB Campus Map



https://www.unb.ca/advancement/_assets/documents/communications/frederictonmap.pdf

Program Overview

Start	End		
7:00	8:00	Registration & Breakfast @ Wu Centre Foyer	
8:00	9:00	Kent Auditorium	
		Plenary I Dr. Duncan Cree: "Indigenous inventions improved by modern composite materials."	
9:00	10:20	Kent Auditorium	Room 208
		Characterization of Composites 1	Multifunctional Composites 1
10:20	10:40	Coffee Break @ Wu Centre Foyer	
10:40	12:00	Characterization of Composites 2	Multifunctional Composites 2
12:00	13:30	Lunch @ Chancellor's Room	
13:30	15:10	Computational/Analytical 1	Green/Eco-responsible 1
15:10	15:40	Coffee Break with Agencies @ Wu Centre Foyer	
15:40	17:20	Composite Additive Manufacturing 1	Green/Eco-responsible 2
17:30	20:00	Wu Centre Foyer	
		Welcome Reception	

Tuesday – July 12

Start	End		
7:00	8:00	Breakfast @ Wu Centre Foyer	
8:00	9:00	Kent Auditorium	
		Plenary II Ken Segal: "Composites: Innovation at NASA, from ideas to orbit."	
9:00	10:40	The Dr. Suong Van Hoa Student Paper Award Competition	
10:40	11:00	Coffee Break @ Wu Centre Foyer	
11:00	12:00	Kent Auditorium	Room 208
		Life Cycle Analysis	Machine Learning/AI
12:00	13:30	Lunch @ Chancellor's Room	
13:30	14:50	Composite Additive Manufacturing 2	Computational/Analytical 2
14:50	15:10	Coffee Break with Agencies @ Wu Centre Foyer	
15:10	17:40	EDI Workshop – Chancellor's Room	
18:00	21:00	UNB Student Union Building Ballroom	
		Banquet	

Wednesday – July 13

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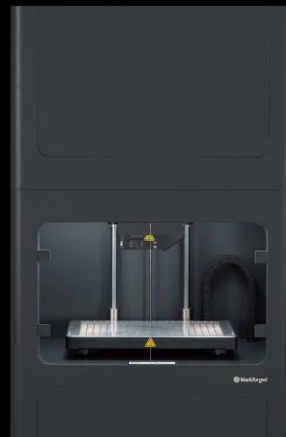
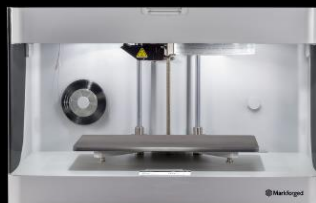


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Program Overview

Start	End		
7:00	8:00	Breakfast @ Wu Centre Foyer	
8:00	9:00	Kent Auditorium	
		Plenary III Dr. Suong V. Hoa: "4D printing of composites."	
9:00	10:20	Kent Auditorium	Room 208
		Textile/3D Composites	Fatigue/Fracture/Impact/Dynamic Loading Response 1
10:20	10:40	Coffee Break @ Wu Centre Foyer	
10:40	12:00	Characterization of Composites 3	Fatigue/Fracture/Impact/Dynamic Loading Response 2
12:00	13:30	Lunch @ Chancellor's Room	
13:30	15:10	Characterization of Composites 4	Processing of Composites
15:10	15:30	Coffee Break @ Wu Centre Foyer	

Thursday – July 14

Start	End		
8:00	9:00	Registration & Breakfast @ Jacqueline-Bouchard Building Foyer	
9:00	9:45	"Additive Manufacturing of Polymers : Transition from Ancillary to Functional Parts" Barry Barnett, Senior Technology Manager, Pratt & Whitney Canada	
9:45	11:15	Panel Discussion on Additive Manufacturing	
11:15	11:30	Coffee Break @ Jacqueline-Bouchard Building Foyer	
11:30	12:15	"Machining of Advanced Composites" Scott Saunders, VP Engineering & Controls, Stelia North America	
12:15	13:30	Lunch Break @ Salle Richelieu	
13:30	15:00	Additive Manufacturing Demo	
15:00	15:45	"New Generation of Aerospace Composite Materials and Processes to Meet Emerging Market" Kevin Dupuis, Senior Customer Engineer Aerospace & Defense, Solvay Materials	
15:45	16:00	Coffee Break @ Jacqueline-Bouchard Building Foyer	
16:00	16:45	"Present Day Challenges and Opportunities to Solve Coastline Erosion Protection Problem Using Advanced Pultruded Composite Materials Technologies" Bernard Morin, CEO, Thermopak	

Friday – July 15

Technical Program (Tuesday)

Start		
7:00	Registration and Breakfast @ Wu Centre Foyer	
8:00	Kent Auditorium	
	<p>Conference Opening Remarks by Dr. David MaGee (UNB VP-Research)</p> <p>Opening Plenary Talk 1</p> <p>Dr. Duncan Cree: "Indigenous inventions improved by modern composite materials."</p>	
	Oral Sessions	
	Kent Auditorium	Room 208
	Characterization of Composites 1	Multifunctional and Smart Composites 1
9:00	<p>METHODOLOGY FOR CHARACTERIZATION OF MODE I TRACTION-SEPARATION DELAMINATION BEHAVIOUR IN LAMINATED COMPOSITES</p> <p>Devon Hartlen, John Montesano and Duane Cronin University of Waterloo</p>	<p>BIOINSPIRED HIERARCHICAL CERAMIC SUTURES FOR MULTI-MODAL PERFORMANCE</p> <p>Zachary Katz, Behnam Ashrafi, Hamidreza Yazdani Sarvestani and Javad Gholipour National Research Council Canada</p>
9:20	<p>CHARACTERIZATION OF 3D FIBRE DISTRIBUTION WITHIN DISCONTINUOUS-FIBRE REINFORCED POLYMER MATRIX COMPOSITES USING FIBRE CELLS</p> <p>Yuheng Zhou and Pascal Hubert McGill University</p>	<p>ARCHITECTURED LAMINATED CERAMICS: BIOINSPIRED TOUGHENING STRATEGIES</p> <p>Hamidreza Yazdani Sarvestani, David Backman, Marc Genest and Behnam Ashrafi National Research Council Canada</p>
9:40	<p>CHARACTERIZATION OF NON-CRIMP FABRICS FOR PREFORMING SIMULATION</p> <p>Jung Seok Bae, Pascal Hubert, Loleï Khoun and Paul Trudeau McGill University</p>	<p>ADDITIVELY MANUFACTURED THERMALLY BISTABLE STRUCTURES</p> <p>Hamed Niknam, Abdolhamid Akbarzadeh, Daniel Therriault and Sampada Bodkhe McGill University, Polytechnique Montréal</p>
10:00	<p>ASSESSMENT-BASED ECO-EFFICIENCY ESTIMATION OF COMPOSITE AND HYBRID STRUCTURES IN COMMERCIAL AIRCRAFT</p> <p>Ali Al-Lami and Markus Kleineberg Institute of Composite Structures and Adaptive Systems, Germany</p>	<p>PROCESSING OF A MULTISCALE MULTIPHASE COMPOSITE</p> <p>Nathan Hostettler and Pascal Hubert McGill University</p>
10:20	Coffee Break @ Wu Centre Foyer	
	Characterization of Composites 2	Multifunctional and Smart Composites 2
10:40	<p>A COMPARATIVE STUDY ON MATERIAL SELECTION OF AEROSPACE COMPONENTS FOR FUSED FILAMENT FABRICATION</p> <p>Farimah Tikhani and Pascal Hubert McGill University</p>	<p>MICROWAVE ABSORPTION STUDY OF MULTIFUNCTIONAL GRAPHENE BASED POLYLACTIDE NANOCOMPOSITES</p> <p>Mahima Dua and Pierre Mertiny University of Alberta</p>
11:00	<p>MODULATING COATABILITY OF SUPERFICIALLY METAL MESH INCORPORATED POLYMER COMPOSITES VIA OPTIMIZED GRIT BLASTING AND MACHINE VISION INSPECTION</p> <p>Pooria Sedigh Rahimabadi, Shiva Shokri, Tsz Ho Kwok and Mehdi Hojjati Concordia University</p>	<p>EFFECT OF MATERIAL AND MANUFACTURING PARAMETERS ON COMPRESSION RESIN TRANSFER MOULDING OF GRAPHENE-BASED MULTI-SCALE COMPOSITES</p> <p>David-Michael Phillips, Pascal Hubert and Farnaz Mazaheri Karvandian McGill University</p>
11:20	<p>EFFECT OF GRAPHENE ON THE MULTISCALE COMPOSITE PRODUCTION THROUGH ANALYTICAL PROCESS MODELLING</p> <p>Farnaz Mazaheri Karvandian and Pascal Hubert McGill University</p>	<p>ROLE OF LOW-COST GRAPHENE ON THE PROPERTIES OF POLYDIMETHYLSILOXANE (PDMS) FOR SENSING APPLICATIONS</p> <p>Shikha Singh, Emi Myzeqari and Prof. Pascal Hubert McGill University</p>
11:40	<p>MECHANICAL CHARACTERIZATION OF MULTIFOLD® CARDBOARD ANGLES: EFFECTS OF PAPER AND ADHESIVE TYPES AT TWO DIFFERENT MOISTURE CONTENTS</p> <p>Samuel Hénault, Laurent Cormier and Mathilde Jean-St-Laurent Université du Québec à Trois-Rivières</p>	<p>BISTABLE COMPOSITES: STABILITY CHARACTERISTICS AND ACTUATION REQUIREMENTS</p> <p>Ahmed Elruby and Sam Nakhla Memorial University of Newfoundland</p>
12:00	Lunch @ Chancellor's Room	

Tuesday – July 12

Technical Program (Tuesday)

Start	Kent Auditorium	Room 208
	Computational/Analytical Modelling 1	Green/Eco-responsible Composites 1
13:30	GENERATING FINITE ELEMENT MODELS OF TUBULAR BRAIDED COMPOSITE USING MICRO-COMPUTED TOMOGRAPHY METHOD Ali Gholami and Garrett. W. Melenka York University	IMPACT OF CORNCOB FILLER ON PHB-PLA COMPOSITE FILAMENTS FOR 3D PRINTING Okezie Ohaeri and Duncan Cree University of Saskatchewan
13:50	MODELING LOW-VELOCITY IMPACT DAMAGE BEHAVIOR OF FIBER-REINFORCED COMPOSITES USING COMBINED CONTINUUM AND DISCRETE DAMAGE MODELING TECHNIQUES Peyman Shabani, Gang Qi, Lucy Li and Jeremy Laliberte Carleton University, National Research Council Canada	CONTINUOUS INDUCTION WELDING OF THERMOPLASTIC ADHERENTS USING MAGNETIC SUSCEPTORS Romain G. Martin, Christer Johansson, Jason R. Tavares and Martine Dubé École de Technologie Supérieure, Research Institutes of Sweden, Polytechnique Montréal
14:10	RESIDUAL STRESSES INDUCED BY HIGHLY REACTIVE THERMOSETS DURING HEATED RTM Leonardo Barcenás and Pascal Hubert McGill University	EFFECT OF TEMPERATURE ON MECHANICAL PROPERTIES OF THE EGGSHELL Anahita Homavand and Duncan Cree University of Saskatchewan
14:30	A FINITE ELEMENT MODEL FOR 3D PRINTED RECYCLED PARTS FROM END-OF-LIFE WIND TURBINE BLADES Zhengshu Yan, Amirmohammad Rahimizadeh, Yixue Zhang and Larry Lessard McGill University, Ryerson University	FABRICATION OF ENVIRONMENTALLY BENIGN CHITOSAN/3-HYDROXYFLAVONE DUAL EMITTER COMPOSITE THIN FILMS FOR OLED APPLICATIONS Balladka Sarojini, Pushparekha Pushparekha and Gowda Dayananda Mangalore University
14:50	UNCERTAINTY-BASED MICROMECHANICAL MODELLING OF BAMBOO FIBER-REINFORCED COMPOSITES Hossein Bisheh, Eduardo Trujillo, Lina Osorio and Yasmine Abdin University of British Columbia, Autonomous University of Manizales	A STUDY OF THE MECHANICAL PROPERTIES OF CNT/UHMWPE NANOCOMPOSITES Yunfa Zhang, Jingwen Guan, Qi Yang, Christopher Kingston and Ali Yousefpour National Research Council Canada
15:10	Coffee Break with Agencies @ Wu Centre Foyer	
	Composite Additive Manufacturing 1	Green/Eco-responsible Composites 2
15:40	RELATIVE CONTRIBUTION OF DIFFERENT BONDING MECHANISMS DURING THE FFF PROCESS Maryam Shokrollahi, Martine Dubé and Ilyass Tabiai École De Technologie Supérieure	DEVELOPMENT OF SUSTAINABLE COMPOSITES USING GREEN EPOXY AND LOW-COST CARBON FIBERS DERIVED FROM ALBERTA OIL SANDS ASPHALTENE Atif Hussain, Addie Bahi, Frank Ko and Yasmine Abdin University of British Columbia
16:00	A QUANTITATIVE SMALL-SCALE CHARACTERIZATION SUITE TO ASSESS HYBRID-MANUFACTURED TOOLING DURABILITY FOR COMPOSITE PROCESSES Joshua Ilse and Pascal Hubert McGill University	NATURAL FIBER COMPOSITE FOR UAV LANDING GEAR Ahmad Alzaid and Sam Nakhla Memorial University of Newfoundland
16:20	EFFECT OF THERMAL GRADIENT ON WELD STRENGTH IN FUSED FILAMENT FABRICATION Noah Ferrarotto and Pascal Hubert McGill University	EFFECT OF THE SHORT FLAX FIBER MAT BINDER ON IMPACT PROPERTIES OF UNIDIRECTIONAL FLAX COMPOSITES MADE OF UD-MAT REINFORCEMENTS Camille Marmonnier, Gilbert Lebrun and Thuy Quynh Truong-Hoang Université du Québec à Trois-Rivières
16:40	ADVANCING CONTINUOUS FIBER FUSED FILAMENT FABRICATION FOR HIGH PERFORMANCE APPLICATIONS Nicholas Elderfield and Joanna Wong University of Calgary	INFLUENCE OF CELLULOSE NANOCRYSTALS ON THE MECHANICAL PROPERTIES AND CRYSTALLIZATION OF NYLON 6 COMPOSITES Nicole Jankovic, Eyup Demir, Cagri Ayranci and Mark McDermott University of Alberta
17:30	Wu Centre Foyer	
	Welcome Reception	

Tuesday – July 12

Technical Program (Wednesday)

Start		
7:00	Breakfast @ We Centre Foyer	
	Kent Auditorium	
8:00	Opening Plenary Talk II Ken Segal: "Composites: Innovation at NASA, from ideas to orbit."	
	Oral Sessions	
	The Dr. Suong Van Hoa Student Paper Award Competition – Ranking voted by conference audience	
9:00	SIMULATION AND VALIDATION OF 3D COMPRESSION RESIN TRANSFER MOULDING Sidharth Sarojini Narayana, Leonardo Barcenas, Lolei Khoun and Pascal Hubert McGill University, National Research Council Canada	
9:20	A NUMERICAL CHARGE OPTIMIZATION FRAMEWORK FOR METHODOICAL CHARGE DESIGN OF ADVANCED SHEET MOULDING COMPOUND STRUCTURES Henri Schwalm, Derek Harvey and Pascal Hubert McGill University	
9:40	DEVELOPING A NEW ADDITIVE MANUFACTURING TOOLPATH STRATEGY FOR CONTINUOUS FIBER COMPOSITES Hussam Tawfik, Nicholas Elderfield and Joanna Wong University of Calgary	
10:00	MECHANICAL AND THERMAL CHARACTERIZATION OF A FLAX FIBRE REINFORCED BIOBASED HIGH-DENSITY POLYETHYLENE COMPOSITE Olivia Margoto and Abbas Milani University of British Columbia	
10:20	PROGRESSIVE DAMAGE AND ORTHOTROPIC ANALYSIS OF ADDITIVE MANUFACTURED COMPOSITE PARTS Myesha Hoque, Barry Barnett, Anthony Sinclair, Kerello Farah, Matilda Khoshaba, Joanna Kolodko and Xiaochen Yu Pratt & Whitney Canada Corporation, University of Toronto	
10:40	Coffee Break @ Wu Centre Foyer	
	Kent Auditorium	Room 208
	Life Cycle Analysis/Composite Recycling	Machine Learning/AI in Composites
11:00	GEOMETRIC CHARACTERIZATION AND SIEVING OF UNIDIRECTIONAL CARBON-FIBRE/PEEK PREPREG TRIM WASTE Adam Smith, Antoine Legait, Ilyass Tabiai and Martine Dubé École de Technologie Supérieure	A MULTISCALE MODELLING APPROACH TO GENERATE VIRTUAL TEST DATA FOR MACHINE LEARNING Yu Zeng and John Montesano University of Waterloo
11:20	SENSITIVITY FACTOR ANALYSIS AND OPTIMIZATION OF RECYCLED GLASS FIBRE COMPOSITE WASTE REINFORCED FE-RICH INORGANIC POLYMER Yixue Zhang, Aart Willem van Vuure, Larry Lessard and Yiannis Pontikes McGill University, KUL	PREDICTIVE SOFTWARE TOOL FOR THE DESIGN OF MANUFACTURING PROCESSES FOR TEXTILE PREFORMS Fabian Basaldua-Robledo, Lionel Dylan Sildawende Tapsoba, Philippe Kanz, Jacob Hoffer, Zhengyang Zhang and Francois Robitaille University of Ottawa
11:40	CURE PATH DEPENDENCY OF MODE I FRACTURE TOUGHNESS OF RECYCLED AEROSPACE-GRADE PREPREGS Lucas Marrone and Pascal Hubert McGill University	THERMAL MAPPING AND FILLER SETTling DETECTION IN POLYMER COMPOSITES WITH MTPS Arya Hakimian and John Clifford C-Therm Technologies
12:00	Lunch @ Chancellor's Room	

Wednesday – July 13

Technical Program (Wednesday)

Start	Kent Auditorium	Room 208
	Composite Additive Manufacturing 2	Computational/Analytical Modelling 2
13:30	PROCESSING OF COMMINGLED YARNS IN 3D SKELETON WINDING (3DSW) Bjoern Beck, Yoon-Bo Shim, Jonathan Haas, Young-Bin Park, Frank Henning and Peter Eyerer Fraunhofer ICT, Ulsan National Institute of Science and Technology	THERMODYNAMIC PROFILE CHARACTERIZATION OF MOLD GEOMETRIES IN COMPOSITE PULTRUSION MANUFACTURING Teck Ry Looi, Wesley Stewart, Bernard Morin, Gobinda Saha and Farhan Chowdhury Asif Thermopak Ltd., Innov Composites, University of New Brunswick
13:50	BIOINSPIRED TRANSPARENT IMPACT-ABSORBING COMPOSITE MADE WITH A FLUID MECHANICAL INSTABILITY Frederick Gosselin, Shibo Zou And Daniel Therriault Polytechnique Montreal, Amolf	ENHANCED MICROMECHANICS OF COMPACTING FIBRE BEDS Nasser Arbabi, Alireza Forghani, Reza Vaziri and Anoush Poursartip The University of British Columbia, Convergent Manufacturing Technologies Inc.
14:10	MECHANICAL EVALUATION OF ADDITIVELY MANUFACTURED COMPOSITE MATERIALS FABRICATED USING MARKFORGED X7 Julieta Barroeta Robles, Priti Wanjara, Richard G. Cole, Fabian Sanchez, Andrew Spineanu, Anas Chkafi and Javad Gholipour National Research Council Canada, Siemens Canada Ltd.	A DUAL-SCALE APPROACH FOR REPRESENTING SOLIDIFICATION IN THE INTEGRATED FLOW-STRESS MODEL FOR PREPREG PROCESSING Shayan Fahimi, Alireza Forghani, Reza Vaziri and Anoush Poursartip University of British Columbia, Convergent Manufacturing Technologies Inc.
14:30	ROBOTIC 3D PRINTING OF CONTINUOUS CARBON FIBER PEEK Seyed Miri, Jean-Philippe Canart, Joe Spangler and Kazem Fayazbakhsh Ryerson University, Teijin Carbon America	
14:50	Coffee Break with Agencies @ Wu Centre Foyer	
15:10	EDI Workshop – Chancellor’s Room	
	UNB Student Union Building Ballroom	
18:00	Banquet	

Wednesday – July 13

Technical Program (Thursday)

Start		
7:00	Breakfast @ Wu Centre Foyer	
8:00	Kent Auditorium	
	Opening Plenary Talk III Dr. Suong V. Hoa: "4D printing of composites."	
	Oral Sessions	
	Kent Auditorium	Room 208
	Textile/3D Composites	Fatigue/Fracture/Impact/Dynamic Loading Response 1
9:00	FULL FIELD STRAIN ASSESSMENT OF SINGLE LAYER UD-NCF DURING FORMING PROCESS Mehdi Ghazimoradi and John Montesano University of Waterloo	DIGITAL IMAGE CORRELATION ANALYSIS FOR COMPRESSION AFTER IMPACT CHARACTERIZATION OF COMPOSITE PANELS Alexander Dondish, Lucy Li and Garrett Melenka York University, National Research Council Canada
9:20	CHARACTERIZATION OF THE YARN TENSION EVOLUTION GENERATED BY BRAIDING CARRIERS Cristian Talos, Sofiane Achiche and Louis Laberge Lebel Polytechnique Montréal	SINGLE-CAMERA HIGH-SPEED DIGITAL IMAGE CORRELATION FOR COMPRESSIVE FAILURE ANALYSIS OF COMPOSITE PANELS Alexander Dondish, Lucy Li and Garrett Melenka York University, National Research Council Canada
9:40	3D OPEN-STRUCTURE CONTINUOUS-FIBRE COMPOSITE PARTS: YARN PATH OPTIMIZATION Chengqian Liao and Francois Robitaille University of Ottawa	DAMAGE MECHANISMS AND STATISTICAL METHOD FOR THE FATIGUE LIFE ESTIMATION OF COKE DRUMS Zihui Xia University of Alberta
10:00	RESEARCH STATUS OF ADVANCED 3D TEXTILE TECHNOLOGIES AND APPLICATIONS FOR TRANSPORTATION INDUSTRY Cynthia Dega, Mohamed Habibi, and Patricia Forcier Groupe CTT	A ROADMAP OF CERTIFICATION OF BONDED REPAIRS ON COMPOSITE AIRCRAFT STRUCTURES Lucy Li, John Wang and Alan Baker National Research Council Canada, Defence Science and Technology, Melbourne, Australia
10:20	Coffee Break @ Wu Centre Foyer	
	Characterization of Composites 3	Fatigue/Fracture/Impact/Dynamic Loading Response 2
10:40	FAILURE CHARACTERIZATION OF LAMINATION EPOXY UTILIZING 3D DIGITAL IMAGE CORRELATION UNDER DIFFERENT LOADING CONDITIONS Ahmed Elruby and Sam Nakhla Memorial University of Newfoundland	FATIGUE BEHAVIOR OF A UNIDIRECTIONAL NON-CRIMP FABRIC GLASS FIBER REINFORCED REACTIVE THERMOPLASTIC COMPOSITE Erli Shi and John Montesano University of Waterloo
11:00	DEVELOPMENT OF STRUCTURAL OVERMOULDING FOR THERMOPLASTIC COMPOSITES Simon Baril-Gosselin National Research Council Canada	AN EXPERIMENTAL STUDY ON ENTROPY GENERATION IN THE FATIGUE OF FIBER-REINFORCED THERMOPLASTIC COMPOSITES Sara Pessoa, Ricardo Marques, Hafiz Qasim Ali, Mehmet Yildiz and Afzal Suleman University of Lisbon, University of Victoria, Sabanci University
11:20	MODELLING DISCONTINUOUS LONG-FIBRE COMPOSITES UNDER TENSILE LOADING Réjean Belliveau, Benoit Landry and Gabriel LaPlante Université de Moncton	FATIGUE LIFE PREDICTION IN COMPOSITE LAMINATE WITH ARTIFICIAL FLAW USING ACOUSTIC EMISSION DETECTION Charly Batigne, Ahmed Maslouhi and Rajamohan Ganesan Université de Sherbrooke, Concordia University
11:40	A BLISTER TEST FOR CHARACTERIZATION OF PREPREG TACK USING 3D-DIC FULL-FIELD MEASUREMENTS Nima Bakhshi and Anoush Poursartip University of British Columbia	UTILIZING WASTE THERMOCOL SHEETS AND RUSTED IRON WIRES TO FABRICATE CARBON-Fe_3O_4 NANOCOMPOSITE-BASED SUPERCAPACITORS: TURNING WASTES INTO VALUE-ADDED MATERIALS Zhibin Ye Concordia University
12:00	Lunch @ Chancellor's Room	

Thursday – July 14

Technical Program (Thursday)

Start	Kent Auditorium	Room 208
	Characterization of Composites 4	Processing of Composites
13:30	PROCESS INDUCED DEFORMATION: A PROPOSAL FOR STANDARDIZED REPORTING OF L-SHAPE EXPERIMENTS Gavin Tao, Sam Reid and Anoush Poursartip University of British Columbia, Convergent Manufacturing Technologies Inc.	IN-SITU INTIMATE CONTACT EVALUATION IN FUSED FILAMENT FABRICATION Andre R. P. Correa, Jacques Lengaigne, Adam Smith, Ilyass Tabiai and Martine Dubé École de Technologie Supérieure
13:50	PHYSICAL AGING IN THERMOSETS Sherry Kiafar and Anoush Poursartip Composites Research Network (CRN)	COMPOSITE PANEL DEMONSTRATOR MADE BY AUTOMATED DRY FIBER PLACEMENT PROCESS AND VACUUM ASSIST RESIN TRANSFER MOLDING Farid Ehsani, Daniel-Iosif Rosca, Hugo Dubreuil, Sebastien Gordon, Robin Dube, Suong Van Hoa and Farjad Shadmehri Concordia University, Le Centre technologique en aérospatiale (CTA)
14:10	A PHYSICS-INFORMED NEURAL NETWORK FRAMEWORK FOR CHARACTERIZATION OF DAMAGE IN COMPOSITES Sahar Abouali, Ehsan Haghghat and Reza Vaziri University of British Columbia	PROCESS INNOVATION: H2 COMPOSITE TANK DOME REINFORCEMENTS WITH FIBER PATCH PLACEMENT Florian Lenz and Peter Richter Cevotec, WPR Consulting - Composite Automation
14:30	SHORT CARBON-FIBER REINFORCED PEEK COMPOSITE CHARACTERIZATION FOR THE SIMULATION OF 3D PRINTED HONEYCOMB SANDWICH PANELS Aleksey Kalinin, Marie-Laure Dano and Marie-Josée Potvin Université Laval, Agence Spatiale Canadienne	TOWARDS ROBUST, NON-APPLICATION SPECIFIC CONTINUOUS RESISTANCE WELDING Erfan Forghani, Stephen Atkinson, Scott Nesbitt, Kamyar Gordnian, Reza Vaziri, Anoush Poursartip, Manuel Endrass, Lars Larsen, Michael Kupke, Marc Palardy-Sim, Julieta Barroeta Robles, Marc-Andre Oceau, Steven Roy, Aria Guthrie, Francois Ferland and Ali Yousefpour National Research Council Canada, University of British Columbia, German Aerospace Center (DLR)
14:50	VISCOELASTIC MEASUREMENT OF TRANSVERSE COMPLIANCE OF GLASS FIBER REINFORCED POLYMER COMPOSITES SPECIMENS Miles Skinner and Pierre Mertiny University of Alberta	THE KNOWLEDGE IN PRACTICE CENTRE: A RESOURCE FOR APPLYING SCIENTIFIC KNOWLEDGE TO COMPOSITES MANUFACTURING Casey Keulen and Anoush Poursartip University of British Columbia
15:10	Coffee Break @ Wu Centre Foyer	

Thursday – July 14

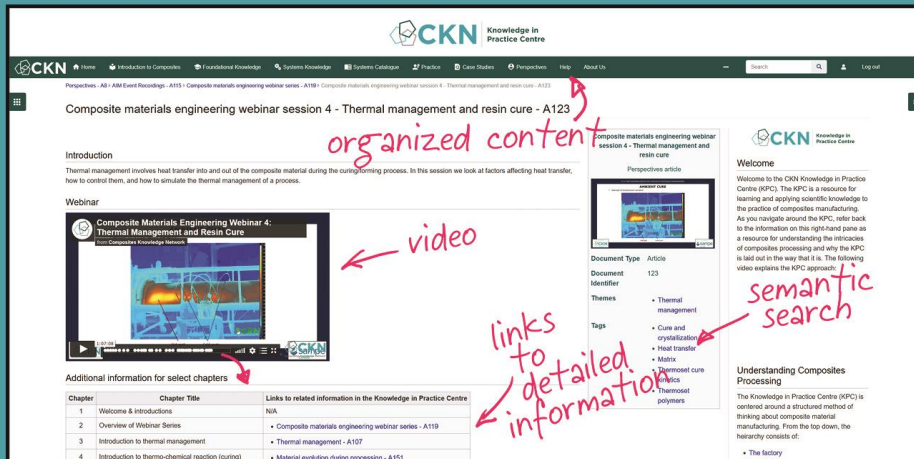
Poster Session (Welcome Reception)

THE CURE PATH DEPENDENCY OF RECYCLED PREPREG TOUGHNESS Lucas Marrone McGill University	3D PRINTING COMPOSITE SANDWICH PANELS Frédéric Gosselin Polytechnique Montréal
HOT-MELT THERMOSET-THERMOPLASTIC HYBRID PREPREGS: EFFECTS OF B-STAGE CONDITIONS ON THE QUALITY OF COMPOSITE PARTS Bendaoud Nohair, Daniel Poirier, Stéphane Dufresne, Mathieu Turgeon and Sanaa Elbouazzaoui The Composites Development Center of Quebec (CDCQ)-Cégep de Saint-Jérôme	HIGH-PERFORMING, COST-EFFECTIVE PULTRUSION DIE FOR OPTIMAL HEAT DISTRIBUTION Teck Ry Looi, Farhan Chowdhury Asif, Gobinda Saha, Wesley Stewart and Bernard Morin Thermopak Ltd and University of New Brunswick
MODELLING OF DELAMINATION IN LAMINATED COMPOSITES UNDER INTERLAMINAR MODE II FRACTURE LOADINGS Gang Qi and Lucy Li National Research Council Canada	MECHANICAL AND THERMAL CHARACTERIZATION OF A FLAX FIBRE REINFORCED BIOBASED HIGH-DENSITY POLYETHYLENE COMPOSITE Olivia Helena Margoto University of British Columbia
IMPACT TESTING (~8 M/S) OF LARGE SCALE PANELS USING 8-TONNE DOUBLE PENDULUM APPARATUS Bruce W. T. Quinton and Ahmed Elruby Memorial University of Newfoundland	

Tuesday – July 12

Notes

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