Time	Speaker	Presentation	Abstract	Room
8:30 - 9:00	Registration and Breakfast			Galerie 1, First Floor
9:00 - 9:10	**Welcome and Introduction** *National Research Council Canada (NRC) and ICI* **GOLD SPONSOR**			Espace 4, Fourth Floor
THEME : APPLICATIONS CHAIR : ERIKA REBROSOVA, PH.D., SUN CHEMICAL				
9:10 - 9:30	**James Lee** Director, Innovation Solutions Group **Jones Healthcare Group**	Improving Medication Adherence with Intelligent Packaging	Addressing a global healthcare challenge – Jones Healthcare Group innovates with connected packaging design, integrating sustainability, automation compatibility, and user-friendliness to improve medication adherence and patient therapy.	Espace 4, Fourth Floor
9:30 - 9:50	**Chad Smithson, Ph.D.** Chemical Engineering **Trusscore**	Digital Paint – Changing your wall colour on demand.	Trusscore's journey using electrochromic technology to make walls that change colour from a mobile app. The walls do not emit light, but instead change their base colour via an electrical stimulus. The product is integrated with Trusscore's core PVC panel which is a drywall replacement product.	Espace 4, Fourth Floor
9:50 - 10:10	Networking and coffee Break			Galerie 1, First Floor
THEME : MATERIALS CHAIR : CHAD SMITHSON, PH.D., TRUSSCORE				
10:10 - 10:30	**Erika Rebrosova, Ph.D.** Global R&D Manager – Electronic Materials **SunChemical**	Innovation Opportunities in Functional Inks for Electronics Applications	Functional ink technologies are highly adaptive, and they continue to rejuvenate themselves to stay relevant and enable new applications or new ways of electronics manufacturing or integration into devices around us. This talk will provide an insight into recent advancements and innovations in functional inks for electronics.	Espace 4, Fourth Floor
10:30 - 10:50	**Jean-François Morin, Ph.D.** Professor and holder of the Canada Research Chair on Organic Electronic Materials **Université Laval**	Green Chemistry and Green Electronics	The development of modern optoelectronic devices increases the need for lightweight and flexible transparent conductors. It is thus essential to develop new eco-friendly materials that can be easily processed for the fabrication of such devices. For this purpose, the synthesis of self-doped, highly conducting, transmissive and water-processable polymers was performed. Best coated films exhibited optical transmittance greater than 79% at 550 nm with sheet resistances of 116 Ω ▫-1. These values are comparable to indium-tin oxide on plastics.	Espace 4, Fourth Floor
10:50 - 11:10	**Natasha Shoghi, Ph.D.** Quality Assurance & Quality Control Director **NanoIntegris Raymor**	SC-CNTs : Thin Film Transistors for High-Performance, Low-Power, Flexible Electronics	NanoIntegris' high-purity semiconducting CNTs will be shown to create NO detectors with ppb sensitivities for industrial and medical usage, wearable and flexible e-skin temperature sensors with healing capabilities, flexible flat panel displays, and the next generation of 3-dimensional microprocessors with increased processing speeds and enhanced power reduction.	Espace 4, Fourth Floor
11:10 - 11:30	**Dr. Ta-Ya Chu** Research Officer and Scientist **National Research Council Canada**	High resolution fine line printing and Aerosol-jet printed MXene for flexible electronics	MXenes have shown promising potential for use in printable electronics owing to their excellent conductivity and solution processability. Aerosol jet printing (AJP) is a high-resolution additive manufacturing technique which can deposit different inks with a wide range of viscosity. Printed MXene opens a wide window for the flexible electronics.	Espace 4, Fourth Floor
11:30 - 13:00	Poster / Prototype Sessions and Networking lunch			Galerie 1, First Floor
THEME : KEYNOTE AND EQUIPMENTS CHAIR : ARNOLD KELL, NRC CANADA				
13:00 - 13:30	**Brian Gallant K.C.** CEO, **Space Canada**	The economic opportunities of the emerging space sector		Espace 4, Fourth Floor
13:30 - 13:50	**Eisuke Tsuyuzaki** Founder and CEO **Bayflex Technologies**	Overcome the Chasm faster – latest market opportunities from a reliability perspective	A concise non-technical overview of emerging market pportunities in consumer electronics, medical, mobility (including aviation and aeronautics) and sustainable markets; and the latest advances in new material selection, workforce education, reliability qualification, scalable manufacturing for faster market adoption. More at **www.bayflextechnologies.com** and **www.linkedin.com/company/bayflex-solutions-llc/**	Espace 4, Fourth Floor
13:50 - 14:10	**Alex Lauke** Global Inks Application Specialist **Netzsch**	Grinding and dispersing of materials for printed electronics	A wet grinding process can be divided into pre mixing and fine grinding. During the premixing and the fine grinding step there is a number of parameters that need to be considered in order to achieve stable production conditions and requested material qualities. The presentation provides an overview of the different modes of operation and the most important equipment and process parameters for grinding and dispersing materials for printed electronics.	Espace 4, Fourth Floor
14:10 - 14:25	**Éric Landry** Director of Sales **Anton Paar** **SILVER SPONSOR**	Anton Paar's Toolbox for Advancing Ink Formulations and Printed Electronics Development	Anton Paar is a leader in the development, production, and distribution of highly accurate analytical instrumentation and process measuring systems and provides custom-tailored automation and robotics solutions worldwide. An overview of the company's application work in the characterization of ink formulations and printed electronics will be presented. Insights will be shared into techniques used to investigate material composition, structure, optimal flow, printability, and durability in the development of high-performance and flexible electronics.	Espace 4, Fourth Floor
14:25 - 14:45	Networking and coffee Break			Galerie 1, First Floor
THEME : SENSORS CHAIR : MARIIA ZHULDYBINA, PH.D., TRAQC				
14:45 - 15:05	**Ricardo Izquierdo ing., Ph.D.** Electrical Engineering Department LaCIME Director **ÉTS**	Printable electronics for microsystem manufacturing: From materials to devices	The development of the field of PE is based on advances in materials and printing processes. Thus, process conditions and the interaction of materials across the various layers of the device can have a major influence on its operation. PE will enable the production of a wide range of components that can be directly integrated by low-cost processes. Intelligent packaging, RFID components, electronic circuits, flexible displays, energy-efficient lighting, disposable diagnostic devices, memories, components for optical communications and printed batteries are just a few examples of possible applications in the field of PE.	Espace 4, Fourth Floor
15:05 - 15:25	**Alireza Saidi, Ph.D.** Researcher - Prevention of mechanical and physical risks **IRSST** **Patricia Forcier** Prototyping Project Manager **Groupe CTT**	Physiological contactless sensor system based on conductive textiles to detect driver drowsiness	Road accidents cause about 1/3 of work-related deaths, with driver fatigue being a key factor. Over the past three years, Quebec research groups have launched a large-scale, highly multidisciplinary project to develop a drowsiness detection system using non-contact textile-based sensors in car seats, and machine learning approach to assess drowsiness.	Espace 4, Fourth Floor
15:25 - 15:30	Closing Remarks			Espace 4, Fourth Floor
18:00	***Ad+Banquet* at ITHQ,** **presented by our Gold Sponsor National Research Council (NRC)** *(reserved seats only)*			Espace 4, Fourth Floor