# **SECOND INTERNATIONAL INNOVATION 5.0** FORUM AND EXHIBITION

November 9, 2022 Palais des Congrès de Montréal



# **BEYOND INDUSTRY 4.0/5.0**



## Organized by



















## In partnership with











## **WELCOME**

The fourth industrial revolution "Industry 4.0", with its automation, digitization and exponential technologies is changing the landscape of the industry and the society and evolving rapidly into Industry 5.0, a correction to industry 4.0, to be more human-centric, sustainable, agile, and resilient. It is characterized by optimization and management of assets, sharing and security of big data, data analytics, Internet of Things (IoT), Digital Twin, Internet of Behavior (IoB), and Augmented Artificial Intelligence (A2I). Industry 4.0 and 5.0 is going beyond affecting mainly the manufacturing sector by addressing the total enterprise and the society in order to achieve a "Smart-Digital-Green (SDG) Society". Industry 4.0/5.0 will drive a major change in tomorrow's workforce in order to have them ready for a rapidly evolving business environment. Companies have to support their workforce by continuous reskilling, upskilling and multiskilling. Educational institutions need to respond to Industry 4.0/5.0 needs, provide broader skill sets and close the gap in Information and Communication Technology (ICT) skills.

The "Réseau Innovation 5.0 *Network*" (RI5.0; created in 2019) is a collaboration consortium between eight universities for research and training of highly skilled workforce for Industry 5.0. The Palais des congrès de Montréal (PCM) "Strategic Multisector Committee" (CSM; created in 2017) groups representatives from industrial sectors, academia and governments with the objectives to support the PCM in attracting and hosting international conferences and creating our own recurrent international conferences like this Forum 5.0. The "Network of the Four Industry 4.0 Experts Centers" (RCEI4.0; created in 2019) objective is to support, train and propel innovative manufacturers in their digital transformation journey by taking advantage of the expertise of academia.

The Second International Innovation 5.0 Forum, a partnership between the RI5.0, the PCM-CSM and the RCEI4.0 will address the theme of Smart-Digital-Green (SDG) technologies and training in our society and in various sectors of the economy such as manufacturing, transport, aerospace, energy, health, etc. The Forum will have 30 speakers: 14 from industry, 10 from academia and 6 from research centers including senior executives from Alstom, Pratt & Whitney Canada, CAE, Siemens Energy, CHUM and IVADO. A special presentation on Society X.0 and data-driven paradigm in France will be held at our event. The Forum will showcase various projects and success stories carried out in collaboration between academia and small and large companies. In addition, there will be various exhibits of the latest SDG-5.0 technologies and student's poster session.

On behalf of "Réseau Innovation 5.0 Network" and our partners, we look forward to having you at our Second International Innovation 5.0 Forum.

Sincerely yours,

Hany Moustapha

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Professor and Director of Innovation 5.0 Network (RI5.0) Siemens Chair on Industry 5.0 Technology Integration École de technologie supérieure (ÉTS) President, Club des ambassadeurs & CSM

Palais des congrès de Montréal

<u>Hany.moustapha@etsmtl.ca</u> <u>www.sdginnovnetwk.com</u>

#### Members of Organizing Committee

Ali Aidibe; R&D Innovation Manager (RI5.0)
Maggie Contant-Hébert; Executive Secretary of RI5.0 (ÉTS)
Ygal Bendavid; Professor and Leader RI5.0 (UQAM)
Tasseda Boukherroub; Professor and Leader RI5.0 (ÉTS)
Réda Chaouqi; Strategic Advisor (MEI)
Gerry Gagnon, Director (CNIMI)
Sousso Kelouwani; Professor and Leader RI5.0 (UQTR)
Irène Marcheterre; Director of communications (CHUM)
Badr Terjani; President of 5.0 Student Exec Ctte (ÉTS)





# Second International Innovation 5.0 Forum and Exhibition

"Beyond Industry 4.0/5.0: Towards a Smart-Digital-Green Society"

Nov. 9, 2022 - Palais des congrès de Montréal



8:00

9:00

11:00







Time Topic

Speaker

Registration – Breakfast Networking (7:00 – 8:00)

WELCOME AND GLOBAL PERSPECTIVE Rémi Quirion, Chief Scientific of Québec

Québec SDG Innovation Network: Towards a Smart-Digital-Green Society

Hany Moustapha, Professor and Director, Innovation 5.0 Network (**RI5.0**); ÉTS Président, Club des Ambassadeurs et CSM, Palais de congrès de Montréal

Society X.0 - A Data-driven Paradigm: National and Region Experiences in France

Farouk Yalaoui, Senior Vice President for Research, Université de technologie de Troyes (UTT), France

Session Chair: Rolf Wuthrich, Professor and Leader RI5.0, Codirector of the Center for Advanced Manufacturing, Concordia University

Data Driven Personalized Cabinets Production

**Alstom Smart and Green Hydrogen Mobility** 

Danny Di Perna, Chief Operating Officer and Executive Vice-President, ALSTOM, France David Van Der Wee, VP, Head of Rolling Stocks, ALSTOM Americas

Radical Turns needed for a Smart, Digital & Green Society

Charles Litalien, Executive Director, P&WC Research and Technology, Pratt & Whitney Canada (P&WC)

**Green and Smart Urban Mobility** 

Fethi Chebil, CEO, **VPorts** Sylvain Ducas, Chief Urban Integration, **VPorts** 

**CAE Digital Twin and Sustainability** 

Nuwan Fernando, Director of Hardware Engineering – Development, Product & Technology Solutions, CAE

Networking Coffee Break: Exhibit Hall (10:30 - 11:00)

Session Chair: Mohamed Cheriet, Professor, General Director CIRODD & Administrative Director CEOS<sup>Net</sup>, ÉTS Digital Manufacturing Testbed

INNOVATION 5.0 NETWORK &

Transformation Offensive

**SMART & GREEN** 

**MOBILITY** 

**CEOSNet** 

Digital

**Green Smart Coffee Waste Management System** 

Christophe Danjou, Professor, Leader RI5.0, Director Lab Poly Industries 4.0, **Polytechnique Montréal** Said Samih, CEO, **Afmerica Technology** 

**Predictive Maintenance Platform for UAVs** 

Yaoyao Fiona Zhao, Professor and Leader RI5.0, Head of ADML, McGill University

CFI5.0-CEOS<sup>Net</sup>
Digital Testbed

Sean Smith, President, VOZWIN

Traceability Systems in the Seafood Supply Chain

R&D Projects:

Luis Antonio de Santa-Eulalia, Professor and Leader RI5.0,

Luis Antonio de Santa-Eulalia, Professor and Leader RI5.0, **Université de Sherbrooke** Jeffrey Dungen, CEO, **reelyActive** 

Vincent Grenier, CEO, EOS Nation

Training Programs

Digital Enterprise Program - Manufacturing Simulation - Intelligent Manufacturing

Training Programs

Tasseda Boukherroub, Professor and Leader RI5.0, École de technologie supérieure (ÉTS)

Tasseda Boukherroub, Professor and Leader RI5.0, **École de technologie supérieure (ÉTS)** Vincent Thomasset-Laperrière, Director, Research & Partnerships, **Productique Québec** (CCTT)

Networking Lunch Break: Exhibit Hall (12:30 - 13:30)

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Session Chair: Ygal Bendavid, Professor and Leader 5.0, Director of IoT lab, UQAM - Digitalization for Space Management			
		Siemens Energy Solutions for Digital and Green Energy Transition	

**DIGITAL-GREEN-AI ENERGY & HEALTH** 

Time Tonic

13:30

15:30

Angus Halliday, Head of Product Support Operations, Siemens Energy

**Digital Medicine to Improve Health** Fabrice Brunet, MD, CEO, Centre hospitalier de l'Université de Montréal, CHUM

A paradigm shift in AI and its adoption: R<sup>3</sup>AI

Pierre Dumouchel, Director of Technology Transfer, Institut de valorisation des données, IVADO

Networking Coffee Break: Exhibit Hall (15:00 – 15:30)

Speaker

Session Chair: Jonathan Gaudreault, Professor and Leader RI5.0, Director Consortium de recherche en ingénierie des systèmes industriel 4.0, Université Laval - Digital Manufacturing Training - Digitization for Cleanroom Walls Assembling

**INDUSTRIAL EXPERTISE 4.0 CENTERS** 

Réseau des centres d'expertise industrielle 4.0 au Québec (RCEI 4.0)

**Digital Transformation** Catalyst

**Projects and** Collaboration with SME and Academia

**Autonomous and Intelligents Vehicles** 

Sousso Kelouwani, Professor, Centre national intégré du manufacturier intelligent (CNIMI), Université du Québec à Trois-Rivières (UQTR) Stephan Elliott, VP Business Development, Noovelia

#### **Digital Engine for Green Innovation**

Franck Boulbes, Innovation commissioner, Excellence industrielle Saint-Laurent Vincent Paradis, Business Development Director, HRVST Limited

#### **Human at the Heart of Digital Transformation**

Denis Beauchemin, Director, Innovation and Digital Transformation, Québec International Tomy Rodrigue, VP Production, Festo Didactique Ltée

#### Digital Manufacturing of Sterile Sampling Bags and Kits

Francois Blackburn-Grenon, Expert, Digital Transformation 4.0, Développement économique Longueuil (DEL)

Benoit Brouilette, General Director, Labplas

17:00 Jonathan Gaudreault **CLOSING REMARKS** 

Networking Cocktail: Exhibit Hall (17:00)

### REGISTRATION

Regular: \$200 (including taxes)

Student: \$60 (including taxes)

To qualify for the student reduced registration fee, proof of current student status (e.g., current Student ID or other proof of current enrollment) must be emailed to maggie.contant-hebert@etsmtl.ca

#### Includes:

- Conference and exhibits\* attendance, and access for presentations
- Breakfast, lunch, cocktail, and coffee breaks

To Access Online Registration: https://sdginnovnetwkforum2022.eventbrite.ca Or visit the Innovation 5.0 Network website at: sdginnovnetwk.com

<sup>\*</sup>For details on exhibit space and fee please contact <a href="maggie.contant-hebert@etsmtl.ca">maggie.contant-hebert@etsmtl.ca</a>

#### Location and access to the Palais

The Palais des congrès de Montréal is located in the heart of the city, directly connected to the metro (Place d'Armes station), to 1600 parking spaces and to the underground pedestrian network.

**Access from outside:** the main entrance is located at 1001 Place Jean-Paul-Riopelle, Montreal, but you can also access it through the entrances located on Viger West, St-Urbain or St-Antoine West. <u>Directions by car.</u>

Access from inside: the Palais des congrès de Montréal is part of the largest underground pedestrian network in the world, consult the map of buildings connected to the network (RÉSO).

Cars: There are several parking lots on site and near the Palais des congrès, including:

- Indoor parking (Viger) of 400 spaces on Chenneville, accessible from Viger Avenue West.
- Indoor parking (QIM) of 1200 spaces accessible from St-Antoine Street West.

Accommodation: The Palais is directly connected to 4000 hotel rooms. For more information: Accommodation in Montreal

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## **PLATINUM**









## **GOLD**



## **SILVER**



