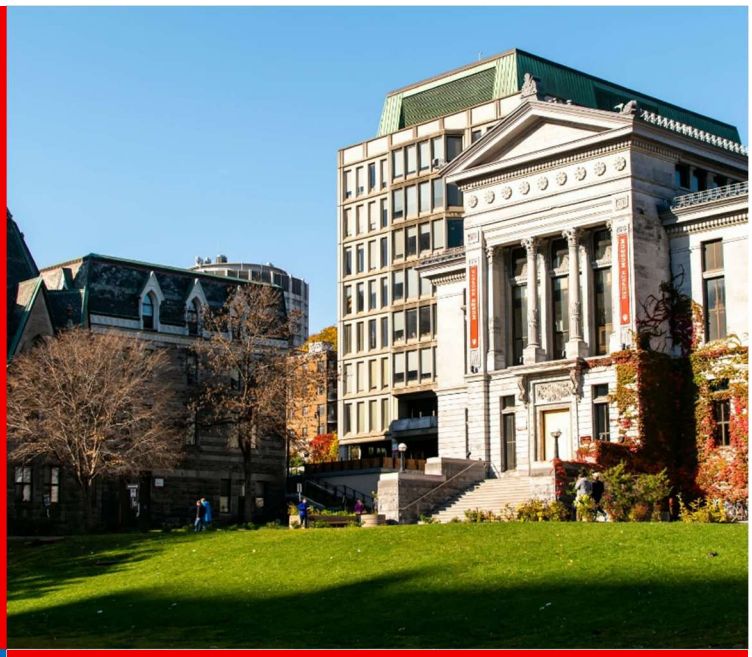
INORGANIC DISCUSSION WEEKEND





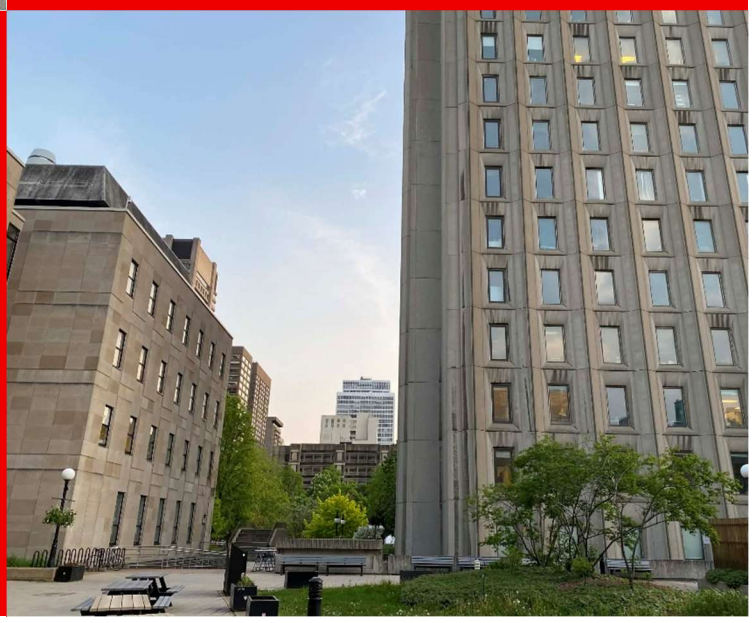
IDW

56th edition

November 6th – 8th, 2026

McGill University

Montréal



McGill UNIVERSITY

Welcome to IDW 2026

We are looking forward to having you with us at McGill University for a weekend of sharing ideas, connecting with each other and celebrating the wonderful research conducted by our community in the field of inorganic chemistry. We have a busy program filled with exciting presentations and events that we hope you will enjoy.

The organizing committee

Dr. Marc-André Légaré

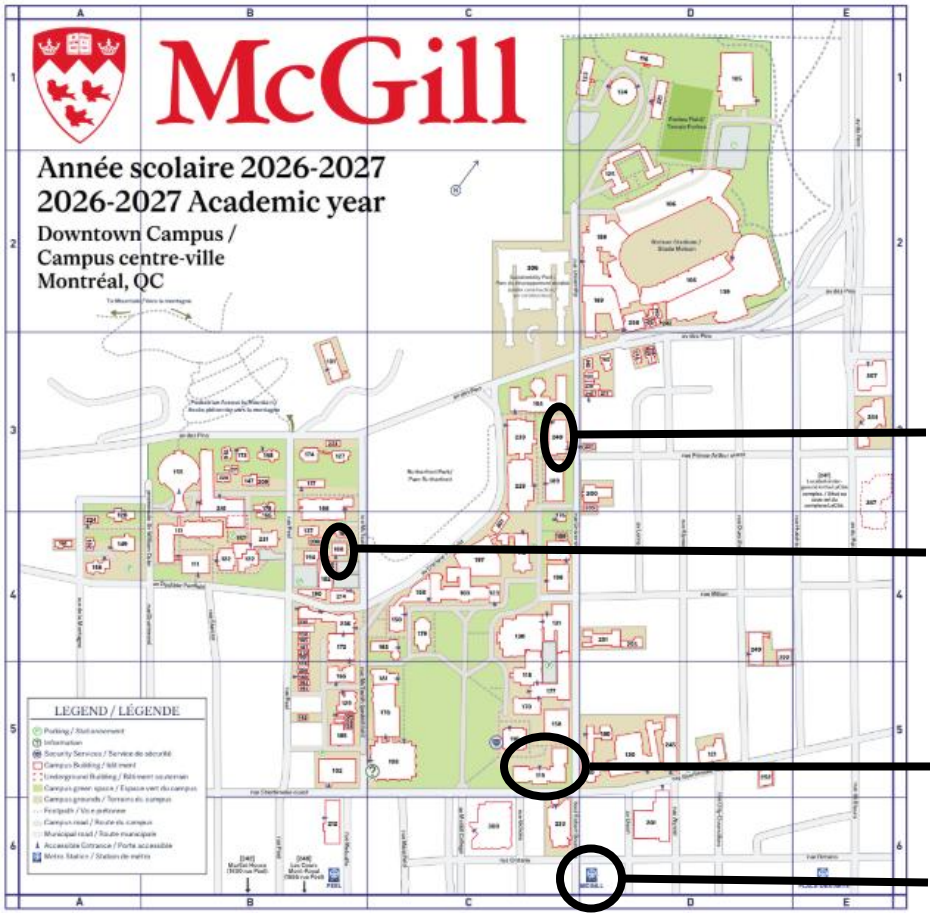
Christina McCabe
YuXiang Wei
Gabriella Morin
Jackie Wu

organizers@idw2026.com
www.idw2026.com

Venues

McGill University

For an interactive version of McGill downtown campus, consult maps.mcgill.ca.



Trottier Building, Friday crystallography workshop

Thomson House, Saturday banquet

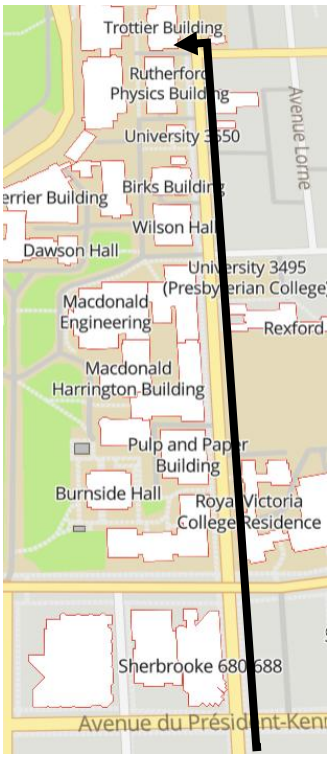
Maass Chemistry Building, Main session

McGill metro station, STM green line

Parking around campus is extremely limited. We recommend that you use active transport or public transport to get to the conference. There are several BIXI stations (bike-sharing system) located on campus. The McGill metro station is located 200 m from the Maass Chemistry building where the main session will take place. The Chrono app lets you find real-time public transit information and buy virtual STM fares (on Android).

Bruker Crystallography Workshop

Friday November 6th, 20226 at 1:30 PM in Trottier 1100 (3630 University St, Montréal, QC)



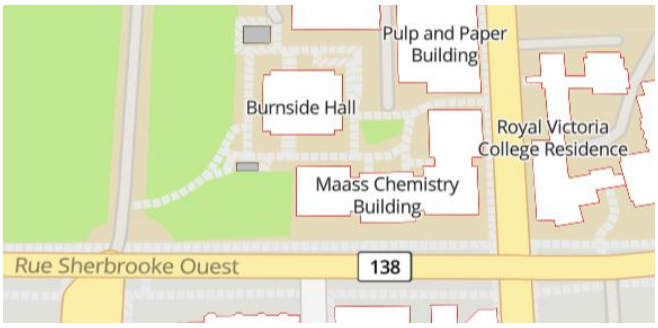
We are pleased to announce that IDW 2026 will kick off with a crystallography workshop in collaboration with our sponsor, Bruker. The workshop will cover a variety of practical topics:

- **Best practices for crystal quality evaluation and data collection** - led by Dr. Michael Ruf (Bruker).
- **From raw data to accurate reflection intensities** - Dr. Michael Ruf (Bruker).
- **Introduction to SHELX syntax** - Dr. Hein Frank Schaper (Université de Montréal).
- **Introduction to structure refinement with ShelXle** - Dr. Ashley Schmidt (Bruker).

If arriving to the workshop via metro, you should follow the exit signs for boulevard Robert-Bourassa. Walk uphill toward Sherbrooke St. Boulevard Robert-Bourassa changes name to University St. once it crosses Sherbrooke St, but it is a straight line to Trottier building.

Main Session

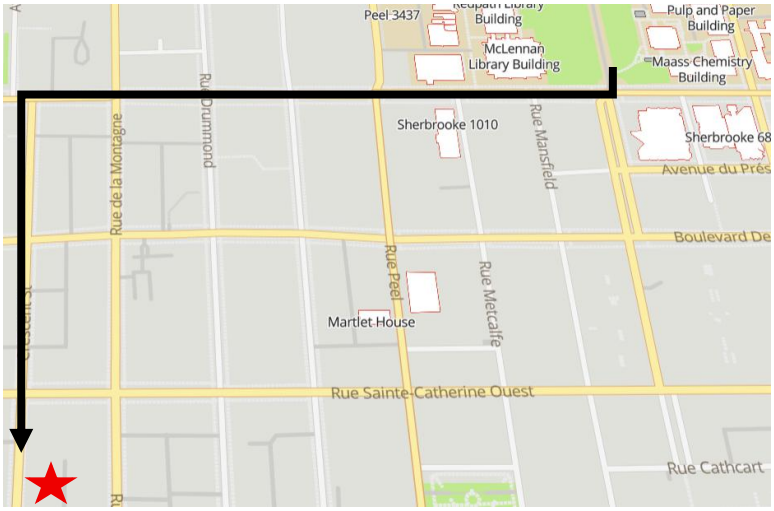
Saturday November 7th and Sunday 8th, 2026 in Maass Chemistry Building (801 Sherbrooke St, Montréal, QC)



There are no entrances to the Maass Chemistry Building on Sherbrooke St W. You must either walk up the stairs between Pulp and Paper Building and Otto Maass Building or enter through the campus main gate and walk in front of Burnside Hall (dotted grey lines).

Welcome Mixer

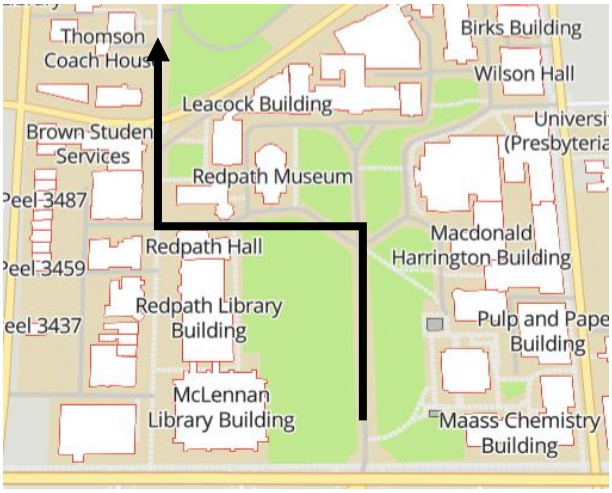
Friday November 6th, 2026 at 6:30 PM at Brutopia (1219 Cresecent St, Montréal, QC H3G 2B1)



Located within a 15 to 20 min of McGill downtown campus, Brutopia can also be accessed from Guy-Concordia metro (green line, 600 m walk) or from Lucien-L'Allier (orange line, 550 m walk). From campus, take a right turn after exiting on Sherbrooke St W, then a left turn on Crescent St. A few buses also run along boul. René-Lévesque (200 m walk).

Banquet

Saturday November 7th, 2026 at 6:30 PM in Thomson House (3650 McTavish St, Montréal, QC)



Take the scenic route through campus, walking in front of the Redpath Museum before turning right on McTavish to access Thomson house. Alternatively, exit campus on Sherbrooke St W and turn right on McTavish. The hill is steep. There are a series of step on McTavish before Doctor-Penfield Avenue with a ramp to the right side.

Plenary Speakers



Saturday November 7th, 2026 at 9:00 AM in OM 112

Tomislav Friščić

Lverhulme International Professor in Green and Sustainable Chemistry, University of Birmingham

Tomislav Friščić is currently the Leverhulme International Professor and Chair in Green and Sustainable Chemistry at the University of Birmingham (UoB), where he is also the founding Director of the Birmingham Centre for Mechanochemistry and Mechanical Processing (BCM2) and founding Co-Director of the RAM Facility for Sustainable Chemical Manufacturing. He and his team are enthusiasts in mechanochemistry, solid-state chemistry and crystal engineering, with their work recognized by awards including the 2024 ACS Award for Affordable Green Chemistry, the RSC Corday-Morgan Prize. He is currently a Co-Editor-in-Chief of RSC Mechanochemistry. He obtained his B.Sc with Prof. B. Kaitner (2001), Ph.D with Len MacGillivray (2006), followed by post-doctoral positions at the University of Cambridge with Prof. W. Jones, and independent positions at McGill University (2011-2022) and UoB (2022-).

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Mechanochemistry of the Elements

Over the past two decades mechanochemistry, *i.e.*, chemical and materials transformations under impact, shear or other types of mechanical energy input, has emerged as a versatile strategy to conduct a wide range of chemistries rapidly, and in the absence of bulk solvent - from organic and pharmaceutical synthesis, to the synthesis of metal-organic and covalent-organic framework materials, nanoparticle systems, and more. Whereas organic synthesis and catalysis under mechanochemical conditions are very recent, and rapidly advancing, areas, mechanochemistry for the synthesis and transformation of inorganic materials is a well-established field that is nevertheless developing in a wide range of new directions.

This presentation will outline some of fundamental aspects of such inorganic mechanochemistry, and highlight the potential, as well as the emergent synthetic opportunities that arise from using mechanochemistry for the direct activation of elements, and in particular metals. This will include an overview of the recent application of alkali metals in the synthesis of organometallic reagents, as well as the opportunities of mechanochemical activation for using alkaline earth, as well as base metals for destruction of perfluorinated chemicals, synthesis of new metal-organic materials, and activation of noble metals.



Saturday November 7th, 2026 at 1:00 PM in OM 112

Ashlee J. Howarth

Associate Professor, Concordia University Research Chair

She was born and raised in London, Ontario. She obtained her undergraduate degree from the University of Western Ontario in 2009, and then went on to do her PhD in inorganic materials chemistry at the University of British Columbia under the supervision of Michael O. Wolf. Before joining the faculty at Concordia, she completed an NSERC Postdoctoral Fellowship at Northwestern University with Joseph T. Hupp and Omar K. Farha. At Concordia, the Howarth group is focused on the design and synthesis of rare-earth cluster-based metal–organic frameworks targeting applications in pollution remediation, catalysis, drug delivery, X-ray detection, and chemical sensing.

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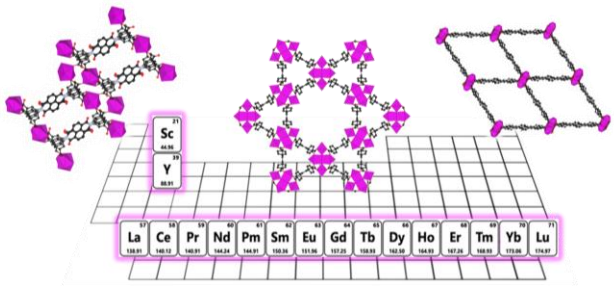
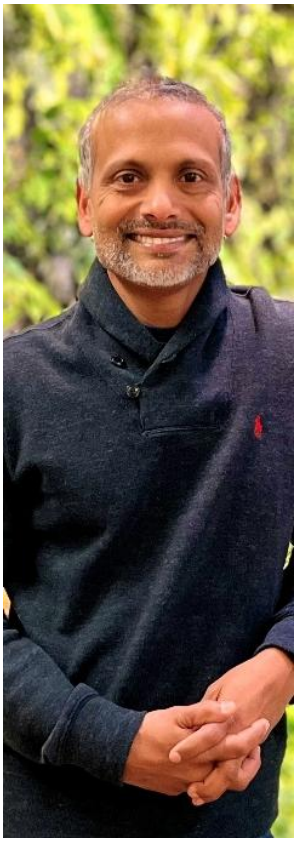
Exploring the Complex Structural Landscape and Potential Applications of Rare-Earth Metal–Organic Frameworks

Metal–organic frameworks (MOFs) are structurally diverse, porous materials comprised of metal nodes bridged by organic linkers. Through careful choice of nodes and linkers, the chemical and physical properties of MOFs can be elegantly tuned and materials with very high surface area and porosity can be obtained. As a consequence, MOFs have been explored for many potential applications including, but not limited to, gas storage and release, chemical separations, catalysis, drug delivery, light harvesting and energy conversion, and the detoxification of hazardous analytes. In addition to these promising potential applications, MOFs offer an interesting platform for studying fundamental concepts in inorganic materials chemistry. In the Howarth lab, we are interested in the design and synthesis of novel MOFs comprised of rare-earth (RE) ions. RE ions, which include Y(III), Sc(III), and the series of fifteen lanthanoids (Ln(III)) have high and variable coordination numbers and allow for the construction of unique and intricate MOF topologies. Furthermore, RE-MOFs can be produced with diverse optical and electronic properties dictated by the 4*f* electron configurations of the RE ion. In this presentation, RE-MOFs are explored from design and synthesis to potential applications.





Sunday November 8th, 2026 at 11:00 AM in OM 112

Muralee Murugesu

Professor of Chemistry, University of Ottawa

He earned his Ph.D. with highest honours in 2002 at the Karlsruhe Institute of Technology under the supervision of Annie K. Powell. He subsequently conducted postdoctoral research with George Christou at the University of Florida, followed by a joint appointment at UC Berkeley and UC San Francisco with Jeffrey R. Long and Nobel Laureate Stanley B. Prusiner. He joined uOttawa as an Assistant Professor in 2006, was promoted to Associate Professor with tenure in 2011, and became Full Professor in 2015.

His research focuses on molecular magnetism and the design of advanced nanoscale materials, with particular emphasis on lanthanide complexes, single-molecule magnets, and multifunctional materials for quantum technologies and optical sensing. He has co-authored over 250 publications in inorganic chemistry and materials science. His honours include election as a JSPS Fellow, Fellow of the Royal Society of Canada, the Humboldt Research Award, and appointment as a University Research Chair in Nanotechnology.

Beyond research, he has held significant leadership and service roles, including Associate Vice-President, Innovation, Partnerships and Entrepreneurship at uOttawa and he currently chairs a European Research Council Consolidator Grant panel.

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Harnessing Critical Minerals: Lanthanide Molecular Magnets and Precision Thermometers

Lanthanides, a strategically important group of critical minerals, offer exceptional opportunities for modern inorganic chemistry through their diverse magnetic and optical properties. Our work highlights two complementary approaches to harnessing these elements for molecular information storage, quantum technologies, and temperature sensing. First, tetrazine- and pyrazine-radical bridges strengthen magnetic interactions between lanthanide centres, producing single-molecule magnets with large coercive fields and advancing the design of high-performance molecular magnetic materials. Second, tailored phosphinocyclopentadienyl ligands bearing sulfur, selenium, or tellurium donors provide access to multifunctional europium(II) metallocenes. These complexes combine paramagnetism and luminescence with exceptional magneto-optical responses, yielding the first organometallic thermometers based on magnetic circular dichroism. At cryogenic temperatures, they achieve relative thermal sensitivities up to 170% K^{-1} and temperature uncertainties as low as 0.003 K. Together, these studies demonstrate how ligand design and control of electronic interactions can unlock multiple functions from critical minerals, enabling advances in molecular magnetism and precision sensing.

Schedule

Friday November 6th, 2026	
1:30 – 4:00 PM	Bruker Crystallography Workshop *Trottier Building, 3630 University St, Montréal* Room: TR 1100
6:30 PM	Welcome mixer & registration *Brutopia Brewpub, 1219 Crescent St, Montréal*

Saturday November 7th, 2026			
8:00 – 8:45 AM	Light breakfast & registration *Otto Maass Chemistry Building, 801 Sherbrooke St W, Montréal* OM lobby		
8:45 – 9:00 AM	Opening statement Room: OM 112		
9:00 – 10:00 AM	Plenary speaker: Tomislav Friščić (University of Birmingham) Room: OM 112		
10:00 – 10:20 AM	Coffee break OM lobby		
	Session A – Room OM 10 (basement) *Chair: Shrabani Khan*	*Session B – Room OM 112 (1st floor)* *Chair: Robert Horne*	*Session C – Room OM 217 (2nd floor)* *Chair: Ilyes Oubaha*
10:20 – 10:40 AM	A1 – Rayni Paola Noriega (Western)	B1 – David Ateniola (McGill)	C1 – Marshall Atherton (Carleton)
10:40 – 11:00 AM	A2 – YuXiang Wei (McGill)	B2 – Carlos Diaz Fontenla (Ottawa)	C2 – Alexander Stöckli (Waterloo)
11:00 – 11:20 AM	A3 – Wilson Digby (Toronto Met.)	B3 – Sarah Englehart (New Brunswick)	C3 – Mira Gamache (Montréal)
11:20 – 11:40 AM	A4 – Griffin LaChapelle (McMaster)	B4 – Jordan Pagé (McGill)	C4 – Charles I. Ezekiel (Sherbrooke)
11:40 – 12:00 PM	**Flash #1 to 4**	B5 – Noah King (Waterloo)	C5 – Daniel Cutler (Windsor)
12:00 – 1:00 PM	Lunch OM lobby		

Saturday November 7th, 2026			
1:00 – 2:00 PM	Plenary speaker: Ashlee Howarth (Concordia University) Room: OM 112		
2:00 – 2:30 PM	Sponsor talks **Rigaku**: Micro Amounts, Mixed Powders, Great Structural Insights by Pierre Le Magueres **Proto**: Everything's a Sample: Unusual Applications of PXRD by Izabela Kolodziej Room: OM 112		
2:30 – 2:50 PM	Coffee break OM lobby		
	Session A – Room OM 10 (basement) *Chair: Logan Taylor*	*Session B – Room OM 112 (1st floor)* *Chair: Noah King*	*Session C – Room OM 217 (2nd floor)* *Chair: Sheng Yang*
2:50 – 3:10 PM	A6 – Cassandra DeFrancesco (Trent)	B6 – Quinn Valentine (Toronto)	C6 – Ilyes Oubaha (Montréal)
3:10 – 3:30 PM	A7 – Gabriel Jobin (Western)	B7 – Janine Richter (McGill)	C7 – Maya Cardillo (Sherbrooke)
3:30 – 3:50 PM	A8 – Yiyang Ma (McGill)	B8 – Zujhar Singh (Waterloo)	C8 – Cordelia Adams (Ontario Tech)
3:50 – 4:10 PM	A9 – Toma Kunikubo (Kyushu University)	B9 – Anna Kapusterynska (Birmingham)	C9 – Andrew Ocampochua (McMaster)
4:10 – 4:30 PM	A10 – Philip Karageorghis (McGill)	B10 – María Guadalupe Vasquez-Ríos (Sherbrooke)	C10 – Sanne Deijkers (Carleton)
4:30 – 6:00 PM	Poster session OM lobby and OM 110		
6:30 – 9:00 PM	Banquet *Thomson House, 3650 McTavish St, Montréal*		

Sunday, November 8th, 2026			
8:00 – 9:00 AM	Bagel hour *Otto Maass Chemistry Building, 801 Sherbrooke St W, Montréal* OM lobby		
	Session A – Room OM 10 (basement) *Chair: Clara Reiss*	*Session B – Room OM 112 (1st floor)* *Chair: David Ateniola*	*Session C – Room OM 217 (2nd floor)* *Chair: Charles Ezekiel*
9:00 – 9:20 AM	A11 – Aziza Adilkhanova (Brock)	B11 – Jixi Zhang (Waterloo)	C11 – Suhjung Chun (Western)
9:20 – 9:40 AM	A12 – Anbang Wang (Western)	B12 – Imogen Suh (McGill)	C12 – Jeffrey Feng (Carleton)
9:40 – 10:00 AM	A13 – Gabriella Morin (McGill)	B13 – Jean-Dannick Lavertu (McGill)	C13 – Rachel Mander (Toronto)
10:00 – 10:20 AM	A14 – Alyson MacKay (Concordia)	B14 – Jackie Wu (McGill)	C14 – Vishal Lohara (Sherbrooke)
10:20 – 10:40 AM	A15 – Matthew DaCosta (Toronto)		C15 – Lucas Paris (UQAM)
10:40 – 11:00 AM	Coffee Break OM lobby		
11:00 – 12:00 PM	Plenary speaker: Muralee Murugesu (University of Ottawa) Room: OM 112		
12:00 – 12:20 PM	Awards ceremony and closing remarks Room: OM 112		

The abstract booklet for all oral, flash and poster presentations can be found on our website at idw2026.com

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