

Press Release
For Immediate Release

**Hydro-Québec Science Fair, Montreal Regional Science & Technology Fair
Regional Final 2025
Secondary & Collegial Level**

Several innovative projects rewarded!

Presenting partner



Montreal, March 25, 2025 - The Hydro-Québec Science Fair, regional final of the Educational Alliance for Science & Technology (EAST) ended successfully today. During the award ceremony, the work of several exhibitors was rewarded with a value in scholarships and participation prizes of over \$15,000.

For three (3) days, we welcomed over 3,500 visitors who discovered the scientific projects of young people from different schools in the region. The public was able to talk to the 162 exhibitors, who were particularly proud of their projects.

An event by



During the awards ceremony, EAST, a member of the Technoscience Network and organizer of the event, highlighted and congratulated the talent of the next generation of regional scientists.

A project from Herzliah High School, with the theme of electricity wins first prize.

The Hydro-Québec First Prize, awarded to the best project in the competition, was presented to David Salasidis for their outreach project entitled "Blackout Blocker". Blackout Blocker is a current modulating device used to effectively reduce electricity consumption in households and businesses. The design uses a computer connected to current sensors and relays. The sensors measure the amount of electricity that is consumed by various electrical devices (outputs). The outputs are switched on and off based on the measured total current consumption with thresholds set by the user for each individual output. This device can prevent reaching or exceeding maximum building power and demand power, and can allow energy service providers to manage instances where the demand for electricity exceeds its ability to supply it.

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**Winners of the secondary and college level
CURIUM OF BLD PUBLICATIONS AWARD**

Project: Blackout Blocker

David Salasidis, Herzliah High School

Project: Sustainably Designed E-Bike

Marc-Anthony Mourad, Laval Senior Academy

ADRIQ Young Innovators Award

Project: Blackout Blocker

David Salasidis, Herzliah High School

RÉSEAU ACTION TI-YOUTH AWARD IN INFORMATION TECHNOLOGY,
COLLEGIAL LEVEL

Project: HASTE: Histology Automation for Swift Tissue Evaluation

Arielle Benarroch & Nathan Aruna, Dawson College

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RÉSEAU ACTION TI-YOUTH AWARD IN INFORMATION TECHNOLOGY,
SECONDARY LEVEL

Project: Sustainably Designed E-Bike

Marc-Anthony Mourad, Laval Senior Academy

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MINISTÈRE DES TRANSPORTS ET DE LA MOBILITÉ DURABLE AWARD

Project: Sustainably Designed E-Bike

Marc-Anthony Mourad, Laval Senior Academy

CANADIAN METEOROLOGICAL AND OCEANIC SOCIETY AWARD

Project: AI WaterBot

Varun Aadharsh Karthikeyan & Siddharth Mondal, Kuper Academy

ORDER OF CHEMISTS OF QUEBEC AWARD

Project: Gut Instinct – Probiotic Growth

Qianyu Wang & Anna Maria Romanishyna, Royal West Academy

ALCOA FOUNDATION AWARD

Project: Eco-Sip

Eleanor Chau & Marina de Carvalho, Miss Edgar's & Miss Cramp's School

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YOUNG TALENT AWARD

Project: The AI Showdown

Adam Hamdaq, Pierrefonds Community High School

UNIVERSITÉ DE MONTRÉAL BURSARY

Project: Dementi Detect

Jesse Ifrah, Herzliah High School

Project: Sustainably Designed E-Bike

Marc-Anthony Mourad, Laval Senior Academy

HYDRO-QUEBEC ENERGY AWARD

Project: Blackout Blocker

David Salasidis, Herzliah High School

MARIANOPOLIS COLLEGE SCIENCE AWARD

Project: Visual Attention and Performance

Elena Frappier-Temcheff, Sacred Heart School of Montreal

Project: Dirty Durability

Carver Secko & Filippo Navarra, Loyola High School

Project: Ferulic Acid and Vitamin C

Seokhyun Kwon & Sumin Woo, Royal West Academy

JOHN ABBOTT COLLEGE SCIENCE AWARD

Project: MEDImate: Don't Hesitate, Navigate First Aid!

Sophie Iny & Sae Ah Park, Royal West Academy

DAWSON COLLEGE SCIENCE & TECHNOLOGY AWARD

Project: Declaring War on Deforestation

Marie-Pierre Tardif, Laval Junior Academy

CHAMPLAIN COLLEGE, ST. LAMBERT CAMPUS SCIENCE AWARD

Project: Bio Battery

Yelena Naeimi & Emily Xu, Miss Edgar's & Miss Cramp's School

VANIER COLLEGE SCIENCE AND TECHNOLOGY AWARD

Project: L'avenir de l'agriculture

Damian Lysowych & Aris Galanogeorgos, Loyola High School

SHAD CANADA PROGRAM SCHOLARSHIP

Project: Blackout Blocker

David Salasidis, Herzliah High School

Project: Visual Attention and Performance

Elena Frappier-Temcheff, Sacred Heart School of Montreal

Project: Sustainably Designed E-Bike

Marc-Anthony Mourad, Laval Senior Academy

Project: PILLpilot: An automatic pill dispenser

Heli Patel & Alysha Vania Azzahra, Pierrefonds Community High School

Presenting partner



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MCGILL UNIVERSITY – DEPARTMENT OF CHEMICAL ENGINEERING AWARD

Project: Alarme bioluminescente marine

Nathan Bailey & Thomas Wong, Loyola High School

MCGILL UNIVERSITY – DEPARTMENT OF CIVIL ENGINEERING AWARD

Project: 200 Dollars Turbojet

Hanming Chen & Ziyi Fan, Kells Academy

Project: Plant-Thing

Mia Colette Passineau, Macdonald High School

MCGILL UNIVERSITY – DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING AWARD

Project: Patient-Specific Artificial Intestine: Biomechanics of Auxetic Structures

Mingruifu Lin & Daniel Wei, Marianopolis College

Project: Catch the Motion

Mariya Kazmi, Miss Edgar's & Miss Cramp's School

Project: ElectroLaunch

Alexa Cipriani & Jake Gurevitch, Royal West Academy

Project: LifeBand Monitor

Oliver Rusu, Sainte-Agathe Academy

MCGILL UNIVERSITY – DEPARTMENT OF MECHANICAL ENGINEERING AWARD

Project: Pill Popper

Maryam Kazmi, Miss Edgar's & Miss Cramp's School

Project: Puck Launcher

Aidan Kerkhoven, Pierrefonds Community High School

MCGILL UNIVERSITY – DEPARTMENT OF MINING & MATERIALS ENGINEERING AWARD

Project: Mapping Soil Organic Carbon Concentrations across Canada with Machine Learning

Bill Xu, Marianopolis College

Project: Dirty Durability

Carver Secko & Filippo Navarra, Loyola High School

MCGILL UNIVERSITY – DEPARTMENT OF BIOENGINEERING AWARD

Project: HASTE: Histology Automation for Swift Tissue Evaluation

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Arielle Benarroch & Nathan Aruna, Dawson College

MCGILL UNIVERSITY – FACULTY OF ENGINEERING AWARD

Project: Dementi Detect

Jesse Ifrah, Herzliah High School

Project: Sustainably Designed E-Bike

Marc-Anthony Mourad, Laval Senior Academy

Project: PILLpilot: An automatic pill dispenser

Heli Patel & Alysha Vania Azzahra, Pierrefonds Community High School

Project: The AI Showdown

Adam Hamdaqa, Pierrefonds Community High School

MCGILL UNIVERSITY – PROMOTING OPPORTUNITIES FOR WOMEN IN
ENGINEERING (POWE) AWARD

Project: PILLpilot: An automatic pill dispenser

Heli Patel & Alysha Vania Azzahra, Pierrefonds Community High School

MCGILL UNIVERSITY – FACULTY OF SCIENCE – ATMOSPHERIC AND
OCEANIC SCIENCES AWARD

**Project: Mapping Soil Organic Carbon Concentrations across Canada with
Machine Learning**

Bill Xu, Marianopolis College

Project: Solar Stream: A Solar-Powered Water Heat

Sophie Fecteau & Simone Sabourin, Pierrefonds Community High School

MCGILL UNIVERSITY – FACULTY OF SCIENCE – BIOLOGY AWARD

Project: Breathe-Easy: A Detection System for Vape Aerosols

Liam Abitbol, Herzliah High School

Project: Gut Instinct – Probiotic Growth

Qianyu Wang & Anna Maria Romanishyna, Royal West Academy

MCGILL UNIVERSITY – FACULTY OF SCIENCE – CHEMISTRY AWARD

Project: Ferulic Acid and Vitamin C

Seokhyun Kwon & Sumin Woo, Royal West Academy

Project: Don't be salty

Matej Blasch, Selwyn House School

Presenting partner



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MCGILL UNIVERSITY – FACULTY OF SCIENCE – EARTH AND PLANETARY SCIENCES AWARD

Project: Mapping Soil Organic Carbon Concentrations across Canada with Machine Learning

Bill Xu, Marianopolis College

Project: When Earth Passes Gas

Raphael Ismailov, Lakeside Academy

MCGILL UNIVERSITY – FACULTY OF SCIENCE AWARD

Project: Type of mushrooms VS Growth in crankcase oil

Yara Abou Kheir, Kells Academy

Project: Fantastic Bombastic Elastic Bioplastic

Bella Flanz & Clara Attalah, Royal West Academy

MCGILL UNIVERSITY – FACULTY OF SCIENCE – GEOGRAPHY AWARD

Project: H2O Woes

Emma Bassermann, Lakeside Academy

Project: When Earth Passes Gas

Raphael Ismailov, Lakeside Academy

MCGILL UNIVERSITY – FACULTY OF SCIENCE – MATH AND STATISTICS AWARD

Project: HD-ICD: High-Definition Independent Cloaking Device

En Hui Ye & En Zhou Ye, Marianopolis College

Project: Can an AI Predict the Future?

Zachary Kiriazidis, Selwyn House School

MCGILL UNIVERSITY – FACULTY OF SCIENCE – PHYSICS AWARD

Project: HD-ICD: High-Definition Independent Cloaking Device

En Hui Ye & En Zhou Ye, Marianopolis College

Project: Oscillation Stimulation

Sarah Salis & Benjamin Bohbot, Herzliah High School

MCGILL UNIVERSITY – FACULTY OF SCIENCE – PSYCHOLOGY AWARD

Project: Beyond Words: Understanding the Role of Language in Healthcare Disparities

Lauren Engo & Cassidy Engo, Marianopolis College

Project: Visual Attention and Performance

Elena Frappier-Temcheff, Sacred Heart School of Montreal

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MCGILL UNIVERSITY – FACULTY OF SCIENCE – REDPATH MUSEUM AWARD
Project: Beyond Words: Understanding the Role of Language in Healthcare Disparities

Lauren Engo & Cassidy Engo, Marianopolis College

Project: Solar Stream: A Solar-Powered Water Heat

Sophie Fecteau & Simone Sabourin, Pierrefonds Community High School

Presenting partner



MCGILL UNIVERSITY – SCHOOL OF COMPUTER SCIENCE – ROBOTICS AWARD

Project: The Trash Terminator

Akshaya Rajarajan & Aditi Kumar, Kuper Academy

Project: AI WaterBot

Varun Aadharsh Karthikeyan & Siddharth Mondal, Kuper Academy

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MCGILL UNIVERSITY – SCHOOL OF COMPUTER SCIENCE – NON-ROBOTICS AWARD

Project: The AOA app: “The Art of Animation”

Hana Alilat, Kuper Academy

Project: Can an AI Predict the Future?

Zachary Kiriazidis, Selwyn House School

CONCORDIA UNIVERSITY – GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE – BUILDING, CIVIL AND ENVIRONMENTAL ENGINEERING AWARD

Project: Hydro Powered Sump Saver

Fangyi (Flora) Zhao & Ana Stephens-de Teresa, The Study

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CONCORDIA UNIVERSITY – GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE – COMPUTER SCIENCE & SOFTWARE ENGINEERING AWARD

Project: Router’s Killin’ It

Yuecheng Ma, Kells Academy

CONCORDIA UNIVERSITY – GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE – ELECTRICAL & COMPUTER ENGINEERING AWARD

Project: Watering Reimagined

Sparsh Nishit Shah & Charles-Henri Chaki, Royal West Academy

CONCORDIA UNIVERSITY – GINA CODY SCHOOL OF ENGINEERING AND COMPUTER SCIENCE – MECHANICAL & INDUSTRIAL ENGINEERING AWARD

Project: Mobility Lift

Maria Makri, Pierrefonds Community High School

CONCORDIA UNIVERSITY – GINA CODY SCHOOL OF ENGINEERING AND
COMPUTER SCIENCE AWARD

Project: Plasma Assisted Combustion

Siyu Zhang, Lower Canada College

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CONCORDIA UNIVERSITY – GINA CODY SCHOOL OF ENGINEERING AND
COMPUTER SCIENCE AWARD FOR A YOUNG WOMAN

Project: Thermo-science at the beach

Olivia Pereira & Ava Caruso, Laval Senior Academy

CONCORDIA UNIVERSITY ENTRANCE SCHOLARSHIP

Project: Blackout Blocker

David Salasidis, Herzliah High School

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The competition continues: 22 will represent EAST at the 47th edition of the Super Expo-sciences Hydro-Québec, Quebec final.

This year, the regional finals of Hydro-Québec Science Fair allow young scientists to present the fruits of their labor to a wide audience. A regional delegation, made up of 15 projects, will proudly represent EAST at the Super Expo-sciences Hydro-Québec, Québec final 2025. 22 exhibitors will enjoy this wonderful experience from April 11 to 13, 2025, at the Cégep du Vieux Montréal.

Here are the winners who will represent the region next April:

Project: HASTE: Histology Automation for Swift Tissue Evaluation

Arielle Benarroch & Nathan Aruna, Dawson College

Project: Beyond Words: Understanding the Role of Language in Healthcare Disparities

Lauren Engo & Cassidy Engo, Marianopolis College

Project: Patient-Specific Artificial Intestine: Biomechanics of Auxetic Structures

Mingruifu Lin & Daniel Wei, Marianopolis College

Project: Blackout Blocker

David Salasidis, Herzliah High School

Project: Dementi Detect

Jesse Ifrah, Herzliah High School

Project: When Earth Passes Gas

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Raphael Ismailov, Lakeside Academy

Project: Declaring War on Deforestation

Marie-Pierre Tardif, Laval Junior Academy

Project: Sustainably Designed E-Bike

Marc-Anthony Mourad, Laval Senior Academy

Project: Dirty Durability

Carver Secko & Filippo Navarra, Loyola High School

Project: Eco-Sip

Eleanor Chau & Marina de Carvalho, Miss Edgar's & Miss Cramp's School

Project: Catch the Motion

Mariya Kazmi, Miss Edgar's & Miss Cramp's School

Project: PILLpilot: An automatic pill dispenser

Heli Patel & Alysha Vania Azzahra, Pierrefonds Community High School

Project: The AI Showdown

Adam Hamdaq, Pierrefonds Community High School

Project: MEDImate: Don't Hesitate, Navigate First Aid!

Sophie Iny & Sae Ah Park, Royal West Academy

Project: LifeBand Monitor

Oliver Rusu, Sainte-Agathe Academy

But the competition doesn't end there: the projects that stand out the most may be selected for the Canada-Wide Science Fair, which will take place from May 31 to June 7, 2025, in New Brunswick.

Thanks to our partners

The Hydro-Québec Science Fair is a program of Réseau Technoscience and its member organizations. It is made possible by the support of Hydro-Québec, the presenting partner. This annual science competition is financially supported by the Ministère de l'Économie, de l'Innovation et de l'Énergie, through the NovaScience program. Réseau Technoscience also benefits from the support of major national partners such as the Fédération du personnel professionnel des universités et de la recherche (FPPU), and the Fondation Alcoa. Publications BLD is the media partner of the Hydro-Québec Science Fair.

At the Montreal Regional Science & Technology Fair, several regional partners also contributed to making the regional finals a success: Pierrefonds Community High School, Lester B. Pearson School Board, English Montreal School Board, Sir Wilfrid

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Laurier School Board, QAIS, McGill University, Concordia University, Champlain College Saint-Lambert, Vanier College, Marianopolis College, Dawson College and Shad Canada.

All information related to the Hydro-Quebec Science Fair is available on the website technoscience.ca.

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About the Educational Alliance for Science & Technology and Réseau Technoscience

The Educational Alliance for Science & Technology is a non-profit organization whose mission is to promote science and technology, especially among young people.

With members across Quebec, Réseau Technoscience stimulates and transmits a passion for science, technology and innovation among young people, while encouraging the emergence of the next generation of scientists. Réseau Technoscience offers the following programs in particular: Expo-sciences, Défis technologiques, Les Débrouillards - Animations scientifiques and Les Innovateurs à l'école. It also distributes a number of science teaching kits and activities for primary and secondary schools. Visit the website technoscience.ca.

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About the NovaScience program

This program is designed to promote a greater understanding of science and technology among young people and the general public, and the development of the next generation of scientists and technologists.

For further information

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