

# DEMOday History

## DEMOday 2024

On May 22, 2024, ten firms and technologies were invited to pitch their innovative solutions at the 6th annual DEMOday.

This year's invitees focus on corrosion mitigation/prevention, electrification, emissions, geology, production efficiency, safety solutions, and tailings management. The ten firms and technologies are:

- Polycontrols Technologies Inc. – Cold Spray Hybrid Additive Manufacturing
- We-Stop (USask Hackathon Team) – Wireless Electronic Stop
- HimSai – HiResMSI Imaging (High Resolution MicroSeismic Imaging)
- Spero Analytics – LoRA Mesh Networks for Remote Asset Monitoring in Mining with Limited Telecom Infrastructure
- Ambitonner AI Solutions – AmbDrift
- Spartan Controls Limited – Solvent Extraction Real-Time Optimization for SX-DeBottlenecking and Efficient Recovery of Uranium
- Continental Mine & Industrial Supply Ltd. – Surface Fine Tailings System Optimization
- Continental Mine & Industrial Supply Ltd. – Underground Conveyor Installation Optimization System
- Metaspectral – ORES: Ore Resource Evaluation System
- Xtended Hydraulic & Machine Inc. – Conveyance Installation System

## DEMOday 2023

On April 18, 2023, five innovative solutions providers were invited to pitch their technologies to the 5th DEMOday held in association with the 15th Annual Saskatchewan Mining Supply Chain Forum.

This year's invitees focus on advanced chemicals, emissions reductions, energy efficiency and water solutions and include:

- BioDiffusion Technologies Inc. – with a bio-based renewable resin that could help the industry address caking or clumping concerns in dry fertilizer production. [biodiffusion.ca](https://www.biodiffusion.ca)
- Extract Energy Inc. – with a novel application of shape memory alloy heat engine in the waste heat to power space. [Extract Energy – Converting waste heat into clean energy.](#)
- H2nanO Inc. – with a passive, naturally powered technology for process and wastewater treatment. [H2nanO](https://www.h2nano.com)
- Solex Thermal Science Inc. – with a moving bed heat exchanger with the potential to reduce emissions. [solexthermal.com](https://www.solexthermal.com)



- Solex Thermal Science Inc. – with indirect heat exchange technology that has the potential to reduce energy consumption. [solexthermal.com](http://solexthermal.com)
- 247 Solar Inc. – with a novel technology to store excess electricity from solar or wind as heat and convert this heat to electricity when needed. [247Solar – Solar Power That Gets You Through the Night – 247Solar, Inc.](#)

## DEMOday 2022

On May 18, 2022, ten finalists presented their innovative solutions and technologies to Saskatchewan's leading minerals producers.

Innovators that pitched to IMII's minerals company members include:

- Teal Electrification Systems – [Home – TEAL \(tealev.com\)](#)
- Solar Steam – [Lowest Cost Renewable Heat – SolarSteam](#)
- 2S Water – [Home – 2S Water](#)
- MMKL – [MMKLGroup](#)
- InnoTech – [InnoTech Alberta | Solving Real Industry Challenges](#)
- GFL Environmental – [GFL Environmental Inc. – Waste Management & Infrastructure Services](#)
- Dyna Industrial – [Dynaindustrial- An Engineering and custom design Manufacturing](#)
- CMI – [Continental Mine & Industrial Supply Ltd.Saskatoon \(cmisk.ca\)](#)
- iRing Inc. – [iRing – Creators of Aegis, an underground drill & blast planning software that helps a mine improve its effectiveness and efficiency](#)
- Muon Vision – [Home Page – Muon Vision](#)

## DEMOday 2020

On December 2, 2020, five finalists pitched their innovative solutions to Saskatchewan's leading minerals producers in the categories of safety, technical, and green innovation.

The selected finalists for 2020 are:

- EECOL Electric & SafeBox – SafeBox Systems (safety innovation)
- Noble Construction Corp. – NobleVR Safety Experience (safety innovation)
- OXO Valve Inc. / Westlund (safety innovation)
- RESPEC & Automodality, Inc. – Autonomous UAV (technical innovation)
- EECOL Electric & Phoenix Contact – PLCnext Open Controller (technical innovation)

DEMOday 2020 was hosted in a virtual event by IMII on the eve of the 12<sup>th</sup> Annual Saskatchewan Mining Supply Chain Forum.

## DEMOday 2019

On Wednesday, April 3<sup>rd</sup>, five supply chain innovations that matter to mining will be presented to a panel of representatives from Saskatchewan's leading minerals companies in the International Mineral Innovation Institute's (IMI's) second DEMOday. They are:

- A new cybersecurity solution for industrial SCADA systems from EECOL Electric and Nozomi Networks;
- A new corrosion resistant epoxy powder coating technology from Saskatoon Custom Powder Coating Corporation and Akzo Nobel Coatings;
- A new to Saskatchewan mining technology for potential use in the potash industry from Continental Mine & Industrial Supply Ltd.;
- A new dust collection system suitable for underground potash mining from Continental Mine & Industrial Supply Ltd.; and
- A new battery electric truck for roof bolting from Prairie Machine & Parts Mfg. Partnership.

## DEMOday 2018

DEMOday 2018 was a first-time event in which supply chain companies presented their innovations directly to Saskatchewan's major mining companies and had them considered for further review and potentially financial and in-kind support, to help move them down the path to commercialization. Innovations aren't innovations if they are not used, and supply chain companies were invited to pitch their innovation in equipment, technologies, products or processes to industry members that may be used to improve one or more of the pillars of industry sustainability – economic, environmental or social performance.

On Tuesday, April 10<sup>th</sup>, and on the eve of the 10<sup>th</sup> Annual Saskatchewan Mining Supply Chain Forum, five innovations that matter to mining were presented to a panel of representatives from Saskatchewan's leading minerals companies in the International Minerals Innovation Institute's inaugural DEMOday. They were:

- A radically new style of conveyor belt roller with the potential to improve maintenance, safety, and productivity on existing belts from a local inventor, Danny Lewis, P.Eng.;
- A new to mining in Canada type of conveyor drive motor with the potential to increase energy efficiency and lower maintenance and inventory costs from GMR Electric Motors Ltd.;
- A new tool for wear analysis of mineral processing equipment using portable scanners combined with advanced analytics with the potential to improve maintenance planning and reduce downtime in operations from Croatia Industries Ltd.;
- A new and improved replacement arm for underground bore miners in potash applications with the potential to reduce maintenance downtime and costs, and improve the capacity of the bore miner from Industrial Machine & Mfg. Inc.; and
- A new fall protective system that is portable and easy to move with the potential to improve safety in many maintenance applications from Northern Strands.