

2023 DIGITAL INNOVATION FORUM

OCTOBER 18, 2023
CALGARY PETROLEUM CLUB



PTAC

PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA

CRIN
Clean Resource
Innovation Network



Alberta IoT

TABLE OF CONTENTS

03 Welcome

04 Schedule at a Glance

05 Sponsors & Partners

06 Floor Plan

08 Exhibitors

10 Agenda

13 Biographies



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

WELCOME

Welcome to the Digital Innovation Forum!

Thank you for joining us at the 2023 Digital Innovation Forum. Today's event will focus on the latest advancements and trends in digital innovation within the oil and gas industry. We have brought together a diverse group of industry leaders, entrepreneurs, researchers, and innovators to share insights, discuss challenges, and explore opportunities in the field of digital innovation.

This Forum will feature exciting keynote presentations, informative panel discussions, and valuable networking opportunities. Today's agenda will cover a wide range of topics, including Sensors and Analytics Systems for Emissions Detection and Quantification, Analytics and Artificial Intelligence for Emissions Reduction and Economics, and Digital Use Cases and Applications. This is your opportunity to engage in dynamic discussions, connect with peers, and gain insights from some of the brightest minds in the industry.

PTAC looks forward to seeing the momentum generated from this year's event and the collaborative opportunities it will create within our industry.

Sincerely,

***Soheil Asgarpour, Ph.D., FCAE, FCIM, FCSSE, P.Eng.
President & CEO
Petroleum Technology Alliance Canada***



SCHEDULE AT A GLANCE

Monday, October 18, 2023

REGISTRATION	7:15 AM
BREAKFAST AND NETWORKING	7:30 AM
OPENING COMMENTS	7:55 AM
CONFERENCE	8:05 AM to 12:00 PM & 1:00 PM to 3:55 PM
NETWORKING LUNCH	12:00 PM - 1:00 PM
CLOSING REMARKS	3:55 PM
NETWORKING RECEPTION	4:00 PM
ADJOURNMENT	5:30 PM



RTGHG
REALTIME GHG TRACKER



**PROCESS
ECOLOGY**

Revolutionize the way you track and manage greenhouse gas emissions.

Real-time data for immediate action

Showcasing

RT-GHG BENEFITS

The future of emissions management.

- 1. Track your progress**
on emissions reductions in real time
- 2. Reliable data**
every stakeholder can trust
- 3. Agile decision making**
for optimal process performance
- 4. Cloud-based**
Access anywhere and anytime
- 5. Reduce the costs**
for regulatory compliance.

Emissions Estimations and Management



Process Engineering and Simulation



Decision Support Software and Tools



Reach out to us!

OUR SERVICES

SPONSORS & PARTNERS

GOLD SPONSOR



BRONZE SPONSORS



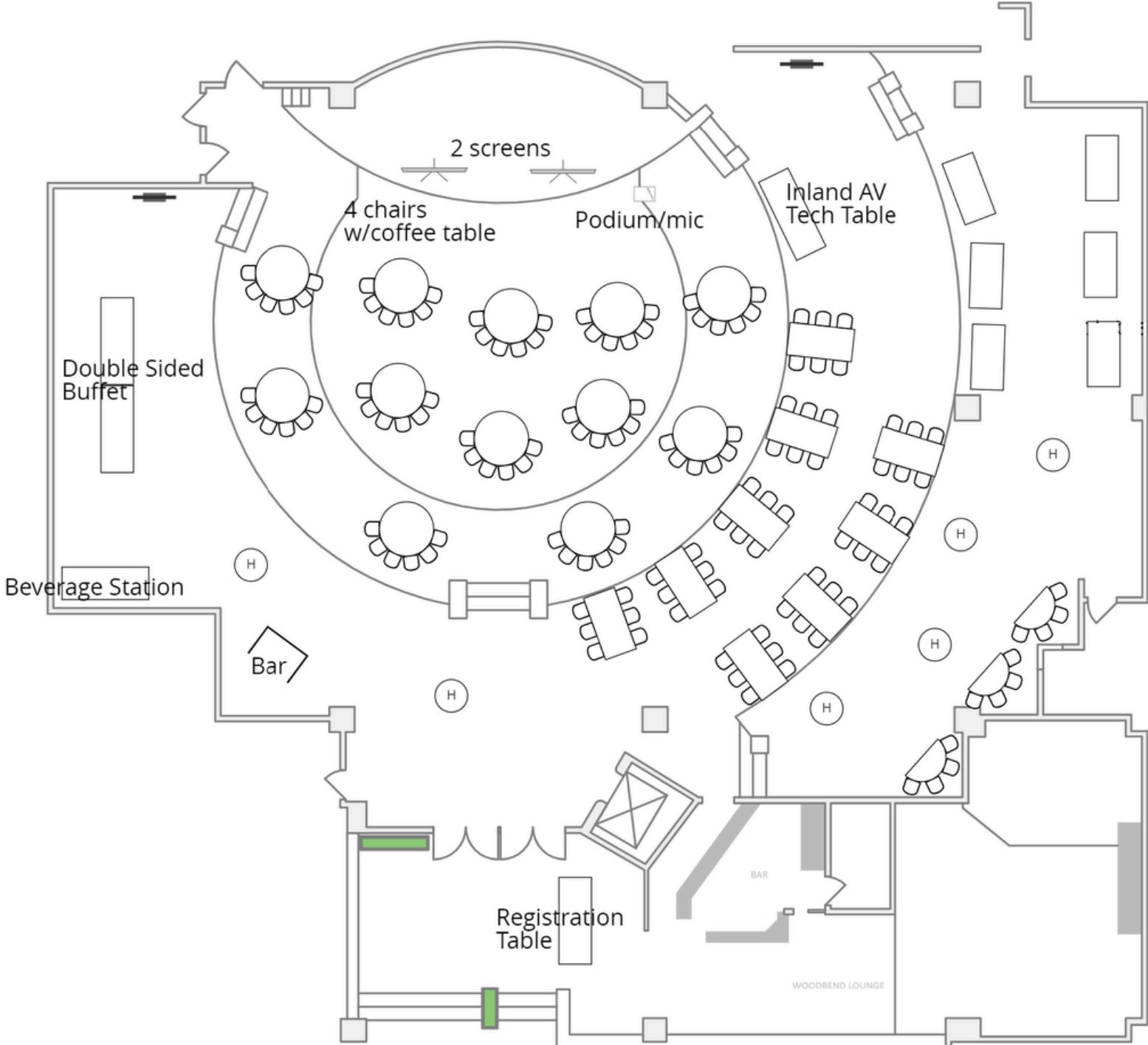
EVENT SPONSORS



COLLABORATORS



FLOOR PLAN



Move your operations into the digital era.

Get operational data & environmental
insights in one place.

EXHIBITORS

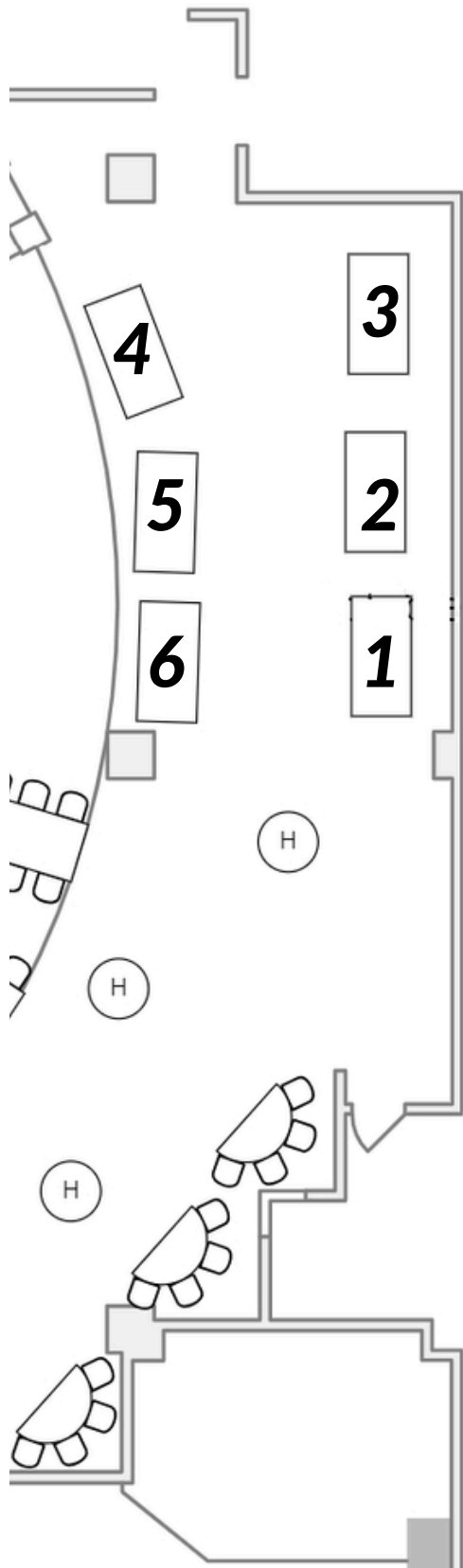


Table 1

VALIDERE

Table 2

LCO
TECHNOLOGIES

Table 3

 *L&T Technology Services*

Table 4

CarbonAi
CarbonAi™

Table 5

KUVA
GAS CLOUD IMAGING

Table 6

Waukesha
INNIO

AGENDA

7:15 a.m.	Registration
7:30 a.m.	Breakfast and Networking
8:00 a.m.	Welcome Soheil Asgarpour, President and CEO, Petroleum Technology Alliance Canada
8:05 a.m.	"Digital Innovation at Cenovus Energy" Mark Derry, Sr. Manager of Data Science and Advanced Analytics, Cenovus
8:25 a.m.	"The Journey from Hype to Value" Heather Wilcott, Upstream Digital Manager, Imperial Oil
8:45 a.m.	"Generative Ai and How it Can Impact the Energy Industry" David Chan, Product Lead, Industry, Amii



Fostering Growth & Innovation

ABOUT ALBERTA IOT

Our non-profit, member-based association exists to nurture and support the growth of Alberta's Internet of Things and emerging technology sectors. Our mission is to position Alberta as the worldwide leader in IoT and emerging technologies. We achieve this through our core pillars: amplifying Alberta's innovations, curating a unified voice in government, recruiting and fostering tech companies, facilitating access to capital, and cultivating tech talent.

Our Programs

MEMBERSHIP

Alberta IoT is committed to delivering member value through education programs, networking opportunities, and strategic partnerships that support talent development, growth, market access and technological advancement.

SCIENCE PARK

The Science Park, powered by Alberta IoT, is a virtual ecosystem that uses machine learning to match industry partners with researchers, assets and academia, enabling innovative solutions to real-world problems.

[LEARN MORE AT THE SCIENCE PARK.COM](https://www.thesciencepark.com)

FAST TRACK BUSINESS ACCELERATOR

Our comprehensive virtual accelerator program is designed to equip scale-up companies involved in IoT and emerging tech with the knowledge and resources needed to grow to new heights.

START UP VISA PROGRAM

As one of Canada's designated accelerator organizations, we offer international scale-up businesses with the support and resources to successfully establish themselves in Alberta's tech ecosystem.



Let's Connect



@ALBERTAIOT

AGENDA

8:55 a.m.	Technology Spotlight Validere: Lindsay Campbell, Senior Advisor, Carbon Strategies
9:00 a.m.	Session 1: Sensor and Analytics Systems for Emissions Detection and Reduction Moderator: Bruce Duong, Senior Manager, Digital Innovation and Recovery Technologies, Alberta Innovates Panellist: Taryn Humphreys, Director, Business Development, Qube, "Results and Learnings from Regulatory Approved Alt-FEMPs Using Continuous Monitoring" Panellist: Thomas McArthur, VP of Customer Operations, Kuva Systems, "Intelligent Camera Systems for Methane Emissions Detection and Quantification" Panellist: Curtis Hughes, Senior Sales Executive, SensorUp, "SensorUp E-Mission Control, a Multi-sensor, Multi-scale Methane Emissions Platform of Methane Measurement, Reporting, Verification, and Repair"
9:55 a.m.	Networking Break: Process Ecology
10:15 a.m.	Session 2: Analytics and Artificial Intelligence for Emissions Reductions and Economics Moderator: Mark Guirguis, Director, Business Development, Oil and Gas, Spartan Controls Panellist: Brenna Barlow, Vice-President, Innovation (Methane), Global Markets, BMO Radicle, "Leveraging Data Solutions to Meet Transparency and Innovation Needs" Panellist: Liz O'Connell, President, and Co-Founder, Arolytics, "Data Tools to Forecast, Plan, and Execute an Optimized Emissions Management Strategy" Panelist: Logan Downing, Co-Founder and CEO, Carbon Assessors Panellist: Thomas Fox, President, Highwood Emissions Management, "The Evolving Role of Methane Measurement in Canadian, US, and EU Regulations."
11:15 a.m.	"Science Park: Fostering Innovation & Collaboration" Patrick Weinmayr, Executive Director, Alberta IoT
11:35 a.m.	"Quantum City, where quantum technology becomes quantum solutions" Megan Lee, Managing Director, Quantum City
11:55 a.m.	Technology Spotlight LCO Technologies: Steve Froehler, Owner and Director
12:00 p.m.	Lunch and Sponsor Recognition
1:00 p.m.	"Unlocking the Frontline with Technology" Andrea Hine, Connected Worker Product Owner, Suncor Energy

AGENDA

1:20 p.m.	"From Near-Miss to Safe Workspaces: How AI-Powered Computer Vision Transformed Inspection Practices in the Energy Sector" Mack Andrews, Senior Manager, Business Development, AltaML and Mark Franklin, Manager of Technology and Innovations, Kleinfelder
1:40 p.m.	Technology Spotlight INNIO Waukesha: Chris Heisler, Digital Sales Leader
1:45 p.m.	Networking Break
2:15 p.m.	Session 3: Digital Use Cases and Applications Part 1 Moderator: Nannette Ho-Covernton, Sustainability Leader, Spartan Controls Panellist: Andrea Crook, Co-Founder & CEO, OptiSEIS, "Optimizing Land Footprint Reduction and Subsurface Resolution for the New Energy Economy" Panellist: Ling Bai, Managing Partner, VL Energy Ltd., "Exploring the Power of Predictive Emissions Monitoring Systems" Panellist: Paul Blaha, VP, Market Development, Drishya AI Labs Inc, "Engineered AI: Digitalisation of Industrial Assets with Digital Twins"

LANYARD SPONSOR



convrg™

AGENDA

<p>3:00 p.m.</p>	<p>Session 4: Digital Use Cases and Applications Part 2</p> <p>Moderator: Heather Herring, CEO, Make It So Inc. Panellist: Ahad Sarraf, Lead Engineer, Process Ecology, "Real Time Emissions Tracker" Panellist: Yoeri Geerits, Head of Growth, CarbonAi OttoMate, "CarbonAi Data Sweetspot: Pairing optimized human workflow with automated digital measurement, reporting and verification (D-MRV)" Panellist: Krzys Palka, CEO, Akiné Inc. "Cutting to the Chase with Emissions"</p>
<p>3:45 p.m.</p>	<p>Technology Spotlight Carbon Ai Ottomate: Yoeri Geerits, Head of Growth</p>
<p>3:50 p.m.</p>	<p>Technology Spotlight L&T Technology Services Ltd., Kiran Dasari, Vice President - Digital Engineering, North Americas</p>
<p>3:55 p.m.</p>	<p>Closing Remarks Marc Godin, Director of Technology, Petroleum Technology Alliance Canada</p>
<p>4:00 p.m.</p>	<p>Networking Reception</p>
<p>5:30 p.m.</p>	<p>Adjournment</p>

BIOGRAPHIES



AHAD SARRAF - SESSION 4 LEAD ENGINEER, PROCESS ECOLOGY

Ahad is an experienced process and research engineer specializing in emissions mitigation technologies, process simulation, and optimization. As a Lead Engineer at Process Ecology Inc., he has led studies and developed web-based tools for sustainable development in the oil and gas industry. With expertise in modeling and optimization, Ahad has contributed to projects such as methane emissions mitigation and the development of simulation tools for oil and gas processes. Ahad holds a Master of Science in Chemical Engineering from University of Alberta, and he is dedicated to finding innovative solutions for a sustainable future in the energy sector.



ANDREA CROOK - SESSION 3 CO-FOUNDER & CEO, OPTISEIS

Andrea Crook, P.Geoph, is the co-founder & CEO of OptiSeis Solutions Ltd., where she leads a team focused on innovation and operational excellence, and has helped develop EcoSeis, a method for achieving a 50% land footprint reduction while safely acquiring high-quality subsurface data. At OptiSeis, she oversees advancements in geophysical research, seismic acquisition design, operations, processing QC, and interpretation services, as well as software development.

Andrea graduated from the University of Manitoba with a B.Sc. Honours in geophysics and continues to engage academically by acting as an instructor for the Society of Exploration Geophysicists, as well as actively contributing to the field of geophysics with numerous award-winning papers and presentations. Andrea is the recipient of the 2019 Canadian Society of Exploration Geophysicists Technical Achievement Award and is the Society's 2023 Symposium Honouree, and she also sits on the Board of Directors for the Clean Resource Innovation Network (CRIN).

Andrea's extensive geophysical experience in seismic processing and geophysical operations was established at Shell Canada and Boyd PetroSearch. She is a member of the Association of Professional Engineers and Geoscientists of Alberta, the American Association of Petroleum Geologists, the Society of Exploration Geophysicists, the Canadian Society of Exploration Geophysicists, and the European Association of Geoscientists and Engineers.



ANDREA HINE - UNLOCKING THE FRONTLINE WITH TECHNOLOGY CONNECTED WORKER PRODUCT OWNER, SUNCOR ENERGY

As a Product Owner within Suncor's Digital Innovation and Development team, Andrea leverages her extensive front-line experience and creative mindset to drive technology initiatives. With a decade of field expertise and a fervent dedication to empowering workers, Andrea plays a pivotal role by delivering tools that enhance safety and efficiency.



PTAC

PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA

BIOGRAPHIES



BRENNA BARLOW - SESSION 2 **VICE PRESIDENT, METHANE INNOVATION, BMO RADICLE**

As BMO Radicle's VP of Methane Innovation, Brenna works to connect clients, regulators, GHG programs and technology suppliers to progress and develop new ways to monetize methane emissions reductions in energy and industrial sectors. This works spans several industries, including energy, electricity, waste management and livestock/agricultural production services. Brenna experience with emissions research, LDAR programming, methane detection and quantification technologies, environmental services, offset project development and carbon markets expertise brings a unique view to any organization on a pathways to understand, reduce and monetize their emissions. Brenna is based in Alberta, Canada, but works with client and industry organizations in the United States, Australia, the Middle East, and Africa.



BRUCE DUONG - SESSION 1 **SENIOR MANAGER, DIGITAL INNOVATION AND RECOVER TECHNOLOGIES, ALBERTA INNOVATES**

Bruce currently works with Alberta Innovates as a Senior Manager in the Clean Resources team, identifying, evaluating, developing, and investing in new and emerging technologies with a focus on digital innovation. Since 2019, Bruce has built a portfolio of digital projects through the Digital Innovation in Clean Energy program which has invested more than \$6.4MM in 30 projects to develop and bring to market technologies that create jobs in the digital economy, reduce GHG emissions and contribute to environmental innovations in water and land management. Bruce is a professional engineer and has a bachelor's degree in mechanical engineering from the University of Calgary and a master's degree in clean energy engineering from the University of British Columbia.



CHRIS HEISLER - TECHNOLOGY SPOTLIGHT **DIGITAL SALES LEADER, INNIO WAUKESHA**

As the Digital Sales Leader at INNIO's Waukesha Engine, Chris Heisler specializes in educating and training customers on SKIDIQ product suite, a cloud-based platform that delivers unparalleled user benefits by combining INNIO's Waukesha engine analytics with Detection's real-time compressor monitoring and optimization technology. Chris brings over a decade of sales leadership experience to his role, most recently in a global sales role providing digital and automation solutions to the oil and gas industry. Chris has a BA in Business Administration from Mercyhurst College in Erie, PA.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

BIOGRAPHIES



CURTIS HUGHES - SESSION 1 **SENIOR SALES EXECUTIVE, SENSORUP**

With over 15-years in the oil and gas sector, Curtis Hughes is a seasoned executive with a rich background in sales, commercialization, and market development, navigating Fortune 500 corporations and startups. Operating from Calgary, Alberta, Curtis has allocated several years to forging strong alliances with key industry players, including oil and gas operators, service companies, technology firms, regulatory officials, and non-governmental organizations. The primary objective of steering these partnerships is to significantly abate methane intensity in the oil and gas sector while facilitating the consistent delivery of indispensable energy resources worldwide.



DAVID CHAN - GENERATIVE AI AND HOW IT CAN **IMPACT THE ENERGY INDUSTRY** **PRODUCT LEAD, INDUSTRY, AMII**

David is the Product Lead - Industry at Amii. His team works with clients to ensure their needs are understood and met, and to help them advance on their journey along the AI Adoption Spectrum. Before coming to Amii, David led a data science team in the not-for-profit tech sector in Alberta and obtained his PhD from the University of Calgary. David also holds a PMP designation.



HEATHER HERRING - SESSION 4 **CEO, MAKE IT SO INC.**

Heather Herring is a professional engineer and proud alumna of the Haskayne School of Business. She is known for her ability to pinpoint the essential elements of an idea, business, challenge or person and use her leadership, innovation, and management skills to identify opportunities for excellence. As a coach, she supports client companies in business, communications and customer development. Often described as passionate, driven, and admired for her ability to forge connections between people and industries, Heather shines brightest at the intersection of cooperation, collaboration and competition to drive success for all parties.

Her varied career has included serving as the Executive in Residence with Zone Startups Calgary and extensive work in academia, private and public sector companies with a focus on energy and sustainability. She was responsible for securing research grants and developing VR and 3D printing research facilities at the University of Calgary; focusing the R&D program, overseeing field pilots for new oil sands technologies, and formulating the creation of COSIA for Total E&P Canada; and exploring the emergence of the digital oil field at Laricina.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

BIOGRAPHIES



HEATHER WILCOTT - THE JOURNEY FROM HYPE TO VALUE UPSTREAM DIGITAL MANAGER, IMPERIAL OIL

Heather has an M.Sc degree in chemical engineering from the University of Calgary and 25 years of diverse experience with Imperial Oil. She has worked in the upstream business in a variety of engineering and leadership roles supporting operating sites, major projects and operations integrity before moving into the digital world. Heather has been leading Imperial's Upstream Digital Accelerator for the last 5 years. Her team is a fusion team of IT, business and data science experts that focuses on delivering strategic digital projects that bring highest value to the upstream business.



KIRAN DASARI - TECHNOLOGY SPOTLIGHT VICE PRESIDENT - DIGITAL ENGINEERING, NORTH AMERICA

Kiran is a Digital transformation leader with 28 years of industry experience and has successfully executed digital transformation and multi-disciplined engineering programs across industry verticals. He has delivered product design & development programs, Engineering Services, Operations, and Digital Engineering solutions. He has expertise in multiple facets of Digital engineering – Industry 4.0 Solutions, Industrial Internet of Things (IIOT) – Design and Development of sensors, electronics platforms, Edge Gateways, Software Applications and platforms, Real-time embedded systems, Control systems, AI & ML, Predictive Engineering Analytics, Cognitive Systems, Digital Twins, Mathematical Modelling & Simulation, Asset Performance Management, Remote Monitoring, and Diagnostics solutions and services. Kiran has full life cycle Product development and Innovation experience with a hands-on contribution in the areas of – System Engineering, Product Design: Electronics Hardware, Firmware, Application Software, Reliability Stress Analysis, Product Design Qualification, Design Engineering transfer, Production support, and post-production support. Developed multiple specialized engineering competencies and built multi-discipline engineering teams for industry majors. Mentored and developed engineering leaders. Delivered and Managed programs across Energy and Utilities, Industrial, Medical, Aerospace, Railroad Led technical discussions and workshops with strategic customers at the C-level and decision-makers in the technical and business hierarchy for engineering solutions, digital transformation strategies, and execution plans. Presented company portfolio and solutions at various industry forums – PTC LiveWorx, Global Digital Forum, Predix, and CS Week.



KRZYSZTOF PALKA - SESSION 4 CEO, AKINÉ INC.

Founder and CEO of Akiné Inc, Krzysztof (Kris) Palka, is an engineer, scientist and serial entrepreneur with a focus on efficiency and productivity. A pioneer in the digital oilfield, Kris sees automation combined with digital transformation as critical on the road to more efficient hydrocarbon production. Kris understands the acute need to provide operators and production engineers with accurate, transparent and actionable data. His focus is on developing technology to create resilience in the industry, more efficient and rewarding processes and to empower field operators and engineers to be the best at what they do.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

BIOGRAPHIES



LINDSAY CAMPBELL - TECHNOLOGY SPOTLIGHT **SENIOR ADVISOR, CARBON STRATEGIES, VALIDERE**

Lindsay Campbell brings almost 15 years of experience in the Alberta oil and gas sector. Prior to joining Validere, she worked with the Alberta Energy Regulator (AER) as a senior emissions specialist. In this role, she was a lead contributor in the development and implementation of methane emission reduction requirements in Directive 060. Lindsay also created a new regulatory process that enabled the deployment of innovative methane detection technologies at a scale not realized before in Alberta.

Prior to joining the AER, Lindsay worked in Government Relations for Encana (now Onvintiv), a major gas producer in Canada and the U.S., where she evaluated the environmental and operational implications of emerging provincial and federal climate and air policies, as well as water and wetland policies. Lindsay started her career in oil and gas working as an environmental engineer for Ecoventure, a consulting firm focused on reclamation and remediation for the oil and gas industry. This work gave her the opportunity to evaluate oil and gas sites across the Duvernay and Montney formations and the Horn River Basin.

A licensed Professional Engineer, Lindsay holds a B.Sc. in Civil-Environmental Engineering from the University of Alberta.



LING BAI - SESSION 3 **MANAGING PARTNER, VL ENERGY LTD**

Ling Bai, a visionary in the energy sector, empowers energy companies to harness the power of data, drive digital operations, reduce emissions, evaluate mergers and acquisitions, and embrace clean energy to enhance competitiveness and ensure sustainable profitability. With expertise in product innovation, strategy, emission reduction, regulatory compliance, ESG, and operational leadership, Ling brings a wealth of knowledge to the field. Ling holds a Duo-MBA from Queens University and Cornell University. Ling's educational background also includes a Master's degree in Geomatics Engineering, majoring in Environmental Engineering, and a Bachelor's degree in Environmental Science, both from the University of Calgary.

With 12 years of experience in the oil and gas industry, Ling has cultivated a unique blend of technical and business acumen, with a focus on air emission specialties and efficient business operations. Having worked for consulting firms as well as operational producing companies, Ling possesses a deep understanding of industrial challenges in predictive emission monitoring systems.

As a leader in the field, Ling Bai drives the energy industry forward by embracing data-driven innovations, sustainability practices, and operational excellence. Ling's visionary approach and comprehensive understanding of the industry contribute to the advancement of predictive emission monitoring systems and pave the way for a more environmentally conscious and efficient energy sector.



LIZ O'CONNELL - SESSION 2 **PRESIDENT & CO-FOUNDER, AROLYTICS**

Liz O'Connell is the President and a Co-Founder of Arolytics, an emissions software and modeling company that uses a sensor agnostic, integrated approach to support operators in their diverse emissions needs. Liz previously spent multiple years as a research scientist working to quantify, monitor, and reduce greenhouse gas emissions from 5,000 energy sites across Canada, and has authored numerous peer-reviewed publications on the topic of oil and gas methane emissions. In 2022, Liz was named to Forbes' Top 30 Under 30 in Energy.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

BIOGRAPHIES



LOGAN DOWNING - SESSION 2 **CO-FOUNDER & CEO**

Logan Downing co-founded Carbon Assessors in 2021 after his consulting clients began asking for advisory services on carbon markets. Seeing an opportunity, Logan built on his Downstream Oil and Gas marketing and trading experience to develop saleable supply/demand modelling, policy analysis, and price intelligence. Prior to Carbon Assessors, Logan ran his own consultancy working with large North American integrated Oil and Gas corporations. Most notably, he helped a client develop a new global trading practice from scratch that consistently delivers \$120M CAD in profit per year. Logan is a trained economist and his machine learning price setting algorithms can be found selling seven refineries worth of production across Canada and the USA.



MACK ANDREWS - FROM NEAR-MISS TO SAFE WORKSPACES: HOW AI-POWERED COMPUTER VISION TRANSFORMED INSPECTION PRACTICES IN THE ENERGY SECTOR

SENIOR MANAGER, BUSINESS DEVELOPMENT, ALTAML

Mack Andrews has over a decade of industry experience working as a chemical engineer in industrial automation and process control. He now leans on that deep knowledge and expertise to drive strategic direction at AltaML as a Senior Manager of Business Development.

Mack has worked on hundreds of artificial intelligence (AI) and machine learning (ML) use cases with clients spanning several sectors. With a focus on the energy industry, Mack has helped organizations leverage their data to develop AI-powered solutions that drive tangible business results, create operational efficiency, and reduce risks. Before joining AltaML, Mack co-founded a business in 2018, with all locations being acquired in 2021. Mack has a Bachelor of Science in chemical engineering from Queen's University.



MARK DERRY - DIGITAL INNOVATION AT CENOVUS ENERGY

SR. MANAGER OF DATA SCIENCE & ADVANCED ANALYTICS, CENOVUS

Mark Derry is a data science leader and engineering professional with over 15 years of experience in the oil and gas industry. He is a Professional Engineer (P.Eng.) and has a Bachelor of Science in Mechanical Engineering from the University of Saskatchewan. Mark has worked at several companies including Nexen, CNOOC, Husky and now Cenovus.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

BIOGRAPHIES



MARK FRANKLIN - FROM NEAR-MISS TO SAFE WORKSPACES: HOW AI-POWERED COMPUTER VISION TRANSFORMED INSPECTION PRACTICES IN THE ENERGY SECTOR **MANAGER OF TECHNOLOGY AND INNOVATIONS, KLEINFELDER**

Mark Franklin is currently the Manager of Technology and Innovations at Kleinfelder. Kleinfelder is an EPC company made up of engineers, scientists, and construction professionals providing solutions that improve transportation, water, energy, and other private infrastructure throughout North America and Australia. Mark has over 20 years of experience working at Kleinfelder as a consultant, mainly in the oil and gas sector. Initially trained and working as a mechanical piping designer, his roles have evolved into many different areas throughout his career, including working as a designer, and within areas of business and marketing. He is now the 3D reality capture lead for Kleinfelder's innovations group. With a background in mechanical design and his history working for facility owner-operators (world-class-scale upstream and midstream facilities), he is knowledgeable in working with various services ranging from retrofits and condition assessments to advanced engineering analytics. He sees significant advantages in bringing forward new technologies to improve the oil and gas industry.



MARK GUIRGUIS - SESSION 2 **DIRECTOR, BUSINESS DEVELOPMENT, OIL AND GAS, SPARTAN CONTROLS**

Mark Guirguis has a track record of bringing technology and opportunity together in developing and delivering successful Environmental and Sustainability focused projects. With an Oil and Gas industry foundational education in Chemical Engineering from the University of Alberta, he has worked in industry for over 22 years. Some of the projects he has helped develop continue to drive millions of dollars annually in CO2 offset credits while taking the equivalent of thousands of cars off the road. Today, in addition to digitally-focused mentorship and solution development in the spaces where IT and OT converge, he works closely with organizations in developing meaningful projects to support their Digital Transformations and efforts to improve in the ESG space.



MEGAN LEE - QUANTUM CITY, WHERE QUANTUM TECHNOLOGY BECOMES QUANTUM SOLUTIONS **MANAGING DIRECTOR, QUANTUM CITY**

Megan Lee is Managing Director of Calgary's "Quantum City," with nearly 20 years experience across the full spectrum of research, innovation and commercialization. She has a significant depth of experience in various organizations from operational leadership at a publicly traded biotech company, to the world's top university-affiliated incubator to a large oncology research and care funder.

She is a recognized expert in conducting technical and business due diligence, start-up creation, strategy and management consulting, investment portfolio management and organization management of a growth stage biotech company, where she led the development of new pharmaceutical products and recorded multiple consecutive years of record turnover and profit. She has a MBA in entrepreneurship and technology commercialization and a PhD in Biochemistry.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

BIOGRAPHIES



NANNETTE HO-COVERNTON - SESSION 3 **SUSTAINABILITY LEADER, SPARTAN CONTROLS**

Nannette Ho-Covernton is a 1987 graduate from the University of Calgary's Schulich School of Engineering and joined Spartan Controls in 1995 after 8 years in the Engineering community. Nan's current role as Spartan's Sustainability Leader includes being Spartan's liaison to industry, education, innovation, and environmental communities. Her work lately has been centered on advancing innovation in the clean energy technology ecosystem and having conversations on policy and sustainable supply chain.

Her commitment to giving back to her community is evident through her extensive volunteer work. She dedicates and contributes her time, resources and expertise to various not-for-profit groups and academic institutions, particularly in promoting and advancing youth and women in STEM – science, technology, engineering, and math.



PATRICK WEINMAYR - SCIENCE PARK: FOSTERING **INNOVATION & COLLABORATION** **EXECUTIVE DIRECTOR, ALBERTA IOT**

Pat is a seasoned executive with a diverse career spanning over 15 years in the technology sector and another decade in post-secondary education. Pat's technology journey has taken him through leadership roles at SMART Technologies, Pivotal CRM, and two startup ventures in optical networking and education.

What sets Pat apart is his unwavering dedication to the community, particularly in the higher education sector. He has held senior management positions at SAIT and NAIT, where he collaborated closely with industry to shape talent development and education strategies.

Outside of his professional pursuits, Pat also serves as a committee member for the Canadian Blockchain Consortium and actively contributes to the community as an avid cyclist and skier, volunteering with the Bragg Creek Trails Association.



PAUL BLAHA - SESSION 3 **VP, MARKET DEVELOPMENT, DRISHYA AI LABS INC**

Paul has more than 30 years of professional experience. As the VP, Marketing at Drishya AI Labs Inc, he helps with his marketing expertise in developing AI solutions for engineering services, oil and gas, utility, and power generation.

Over the past 23 years Paul has been an executive in Alberta with ATCO, Archer Cleantech, Stuart Olson, and Gemini Engineering. He is a professional engineer in Alberta as a member of APPEGA.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

BIOGRAPHIES



STEVE FROEHLER - TECHNOLOGY SPOTLIGHT **OWNER AND DIRECTOR, LCO TECHNOLOGIES**

Steve has been involved with the Oil and Gas industry since he was 21 years old. He started out as a journeyman pipe fitter, steam fitter, and instrument tech. Steve then got involved in sales, becoming a branch manager for Tyco valves and controls and later global business development manager for Anderson Greenwood, a division of Tyco. 20 years ago, he started LCO Technologies with the idea of providing high-quality products at the least cost option.



TARYN HUMPHREYS - SESSION 1 **DIRECTOR, BUSINESS DEVELOPMENT, QUBE**

Taryn Humphreys is the Director, Business Development at Qube Technologies where she leads and manages a diverse portfolio of projects and stakeholders to deliver environmental solutions for emissions monitoring. Taryn is an experienced engineering professional and has led and supported the development, operations, strategy, and growth of North American and International assets for over 15 years with Canadian Oil and Gas producers. Prior to joining Qube, Taryn held Senior Engineering roles at Modern Resources, Crescent Point Energy, and Talisman Energy. Taryn holds a Bachelor of Science in Materials Engineering from the University of Alberta and is a registered Professional Engineer with APEGA.



THOMAS FOX - SESSION 2 **PRESIDENT, HIGHWOOD EMISSIONS MANAGEMENT**

Thomas Fox is President of Highwood Emissions Management. His expertise is in methane detection and quantification technology, low carbon differentiated commodities, and forecasting emissions management strategies through simulation. At Highwood, Thomas works at the interface of industry, regulators, and innovators to evaluate and deploy cutting-edge emissions management solutions. He holds a PhD from University of Calgary and an MSc from McGill University.



YOERI GEERITS - SESSION 2 **HEAD OF GROWTH, CARBONAI OTTOMATE**

Yoeri has more than 20 years of experience in global marketing, finance, business development and strategy. He led the ING Group's first global marketing & sponsorship program and managed ING's entry into Formula One, which SportPro magazine described as the largest and most successful sponsorship in history. Yoeri has also led the Canadian sports division at Nielsen, the global leader in sports measurement, evaluation and intelligence.

Yoeri holds a Master's in Finance from the University of Brussels, Belgium.



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**

THANK YOU



PTAC

**PETROLEUM
TECHNOLOGY
ALLIANCE
CANADA**