

Program Overview

Monday

10/28/2024

8:00 am- 5:00pm

Registration

First Morning Session

9:00 am- 11:00 am

Opening Remarks:

Karim Zaghib / Khalil Amine

- Panel Discussion:
 - Francois- Philippe Champagne
 - Pierre Fitzgibbon
 - Steven Chu
 - Brian Cunningham
- Steven Chu
- Stanley Whittingham

11:00 am- 11:30 am

Coffee Break and Exhibit

Second Morning Session

11:30 am- 1:10 pm

- Paolo Cerruti
- Qichao Hu
- William Chueh
- Jeff Sakamoto

1:10 pm - 2:40 pm

Lunch

First Afternoon Session

2:40 pm - 4:45 pm

- Marc Bédard
- John Muldoon
- Tobias Glossmann
- Elena Ligabue
- Marc Deschamps

4:45 pm - 5:15 pm

Coffee Break and Exhibit

Second Afternoon Session

5:15 pm - 6:30 pm

- Daniel Breton
- Yoshinori Kida
- Alex Yu

6:30 pm - 8:30 pm

Poster Session & Exhibit

Tuesday

10/29/2024

8:00 am- 5:00pm

Registration

First Morning Session

8:30 am- 10:15 am

- Peter Bruce
- Linda Nazar
- Richard Chleboski
- Fanny Bardé

10:15 am- 10:45 am

Coffee Break and Exhibit

Second Morning Session

11:45 am- 12:50 pm

- Ryoji Kanno
- Eric Desaulniers
- Chisu Kim
- Mike Finelli
- Jerry Chen & Qichao Hu

12:50 pm - 2:20 pm

Lunch

First Afternoon Session

2:20 pm - 4:05 pm

- Yi Cui
- Jie Xiao
- Saiful Islam
- Stefano Passerini

4:05 pm - 4:35 pm

Coffee Break and Exhibit

Second Afternoon Session

4:35 pm - 6:05 pm

- Jeff Dahn
- Jennifer Hiscock
- Kristine Persson
- Raf Goossens

8:00 pm - 11:00 pm

Banquet (Ticketed Event)

Palais des congrès de Montréal (710 A)

Wednesday

10/30/2024

8:00 am- 5:00pm

Registration

First Morning Session

8:30 am- 10:40 am

- Gerbrand Ceder
- Michael Thackeray
- Jagjit Nanda
- Atsuo Yamada
- Guohua Chen

10:40 am- 11:10 am

Coffee Break and Exhibit

Second Morning Session

11:10 am- 12:50 pm

- Sarah Sajedi & Gary Vegh
- Robert Kostecki
- Timothy McComb
- Zhongwei Chen

12:50 pm - 2:20 pm

Lunch

First Afternoon Session

2:20 pm - 4:00 pm

- Di Noto Vito
- Shoichi Matsuda
- Ghazaleh Nazari
- Xia Li

4:00 pm - 4:30 pm

Coffee Break and Exhibit

Second Afternoon Session

4:30 pm - 6:10 pm

- Guiliang Xu
- Yan-Kai Tzeng
- Sixu Deng
- Adrian Yao

6:10 pm - 6:25 pm

Closing Remarks

Agenda

9:00 AM - 9:10 AM OPENING REMARKS



KARIM ZAGHIB
Concordia University



CHRISTINE FRÉCHETTE
Minister of Economy, Innovation and
Energy, Québec

**9:10AM - 10:10 AM Panel Discussion: 5 Years of ABAA
Conferences: Updates on the Energy Transition in North America)**

MODERATOR: APHRODITE SALAS



**FRANCOIS-PHILIPPE
CHAMPAGNE**
Minister of Innovation, Science
and Industry, Canada



PIERRE FITZGIBBON
Former Minister of Economy,
Innovation and Energy, Québec



STEVEN CHU
Stanford University, USA
Former U.S. Secretary of Energy, USA



BRIAN CUNNINGHAM
U.S. Department of Energy, USA

SESSION CHAIR: KARIM ZAGHIB

10:10 AM - 10:35 AM



STEVEN CHU
Stanford University
What is needed for the widespread adoption of electric vehicles

10:35AM - 11:00 AM



STANLEY WHITTINGHAM
Binghamton University (SUNY)
Trends in Lithium Batteries: A Perspective for an American Future

11:00 AM - 11:30 AM COFFE BREAK AND EXHIBIT

SESSION CHAIRS: JUD VIRDEN / QICHAO HU

11:30 AM - 11:55 AM



PAOLO CERRUTI
Northvolt North America
Building a sustainable battery value chain in North America

11:55 AM - 12:20 PM



QICHAO HU
SES AI
Powering a New Era of Electric Transportation on Land and in the Air
with Li-Metal Batteries

12:20 PM - 12:45 PM



WILIAM CHUEH
Stanford University
Nanomechanics of Brittle Solid Electrolytes

12:45 PM - 1:10 PM



JEFF SAKAMOTO
Mechanics of Electrode-Surface Phenomena in Solid-State Batteries

1:10 PM - 2:40 PM LUNCH

Rooms (516 A -E)

SESSION CHAIRS : ELENA LIGABUE / JOHN MULDOON

2:40 PM - 3:05 PM



MARC BÉDARD
Lion Electric
Batteries : the Beating Heart of Evs

3:05 PM - 3:30 PM



JOHN MULDOON
Toyota Research Institute of North America
An Odyssey though the Uncharted waters of Post Lithium Ion Batteries

3:30 PM - 3:55 PM



TOBIAS GLOSSMANN
Mercedes Benz
Battery Energetics – Key Insights for better Electric Vehicles

3:55 PM - 4:20 PM



ELENA LIGABUE
Ferrari
The future challenges of sports vehicle batteries

4:20 PM - 4:45 PM



MARC DESCHAMPS
Blue Solutions
An overview of Blue Solutions: lithium metal battery performance,
lithium foils, industrialization and recycling

4:45 PM - 5:15 PM COFFE BREAK AND EXHIBIT

SESSION CHAIRS: WILLIAM CHUEH

5:15 PM - 5:40 PM



DANIEL BRETON
Electric Mobility Canada
Update on the Canadian EV market: new challenges and opportunities

5:40 PM - 6:05 PM



YOSHINORI KIDA
Panasonic Energy
Panasonic Energy's Innovation in Battery Technology for EV

6:05 PM - 6:30 PM



ALEX YU
Factorial Energy
Charting Progress: The present and the future of solid-state batteries

6:30 PM - 8:30 PM



EXHIBIT & POSTERS

Rooms (710 B)

SESSION CHAIRS: FANNY BARDE / PETER BRUCE

8:30 AM - 9:00 AM



PETER BRUCE

University of Oxford
Anode and cathode interfaces in lithium metal – ceramic electrolyte batteries

9:00 AM - 9:25 AM



LINDA NAZAR

University of Waterloo
Solid Electrolytes and Interfaces in Sodium Solid State Batteries

9:25 AM - 9:50 AM



RICHARD CHLEBOSKI

24M Technologies
24M Impervio™ Technologies: Stop Periodical Massive Recalls and Fires of Lithium Ion Cells, and Enabling 1000 Mile per Charge Batteries

9:50 AM - 10:15 AM



FANNY BARDE

SOLITHOR
SOLITHOR's Solid Composite Electrolyte: Enabling low pressure operation Lithium metal Solid-State Battery

10:15 AM - 10:45 AM **COFFE BREAK AND EXHIBIT**

SESSION CHAIRS: MIKE FINELLI / ERIC DESAULNIER

10:45 AM - 11:10 AM



RYOJI KANNO

Tokyo Institute of Technology
Solid electrolytes for all-solid-state battery - Synthesis, conduction mechanism, battery properties

11:10 AM - 11:35 AM



ERIC DESAULNIERS

Nouveau Monde Graphite
The Story of Nouveau Monde Graphite: Challenges & Opportunities in Establishing a Local Champion for Graphite Anode Materials in North America

11:35 AM - 12:00 PM



CHISU KIM

Hydro-Québec
Multi-dimensional approaches making solid-state batteries more practical for EV applications

12:00 PM - 12:25 PM



MIKE FINELLI

Syensqo
Building a Sustainable North American EV Value Chain: The Role of Critical Materials – Syensqo's Perspective

12:25 PM - 12:50 PM



JERRY CHEN
Nvidia



QICHAO HU
SES AI

AI-accelerated Materials Discovery for Next-Generation Li-Metal Batteries

12:50 PM - 2:20 PM

LUNCH

Rooms (516 A -E)

SESSION CHAIRS: STEFANO PASSERENI / JIE XIAO

2:20 PM - 2:50 PM



YI CUI

Stanford University
Enabling lithium metal anodes: materials, electrolytes and tools

2:50 PM - 3:15 PM



JIE XIAO

Pacific Northwest National Laboratory
Progress of Battery 500 Consortium

3:15 PM - 3:40 PM



SAIFUL ISLAM

University of Oxford
Atomic-Scale Insights into Structural and Redox Properties of Lithium-Rich Cathode Materials

3:40 PM - 4:05 PM



STEFANO PASSERENI

Karlsruhe Institute of Technology
Ionic liquid electrolytes for high-Energy Lithium Batterie

4:05 PM - 4:35 PM **COFFE BREAK AND EXHIBIT**

SESSION CHAIRS: XIA LI

4:35 PM - 5:00 PM



JEFF DAHN

Dalhousie University
All dry-synthesis of positive electrode materials for Li-ion batteries competes head to head with material made by traditional methods.

5:00 PM - 5:25 PM



JENNIFER HISCOCK

NRCan OERD
The Office of Energy R&D's Strategic Approach to Battery Innovation

5:25 PM - 5:50 PM



KRISTINE PERSSON

University of California, Berkeley
Data-driven Prediction of Electrode-Electrolyte Reactions

5:50 PM - 6:05 PM



RAF GOOSSENS

PEC
Hybrid Cell Manufacturing: The road to successful cell production in Europe and North America

8:00 PM - 11:00 PM



BANQUET (TICKETED EVENT)

Palais des congrès de Montréal (710 A)

SESSION CHAIRS: JIM GREENBERGER / GERBRAND CEDER

8:30 AM - 9:00 AM



GERBRAND CEDER

University of California, Berkeley

Single crystal DRX as earth-abundant cathode materials with long cycle life

9:00 AM - 9:25 AM



MICHAEL THACKERY

Argonne National Laboratory

Recent Developments in Lithium-Manganese-Oxide Electrochemistry

9:25 AM - 9:50 AM



JAGJIT NANDA

Stanford University

Sustainable Cathodes Chemistries for Next Generation Lithium-Ion Batteries

9:50 AM - 10:15 AM



ATSUO YAMADA

University of Tokyo

Redefined battery science and engineering after 100 years of Debye-Huckel theory.

10:15 AM - 10:40 AM



GUOHUA CHEN

City University of Hong Kong

oCVD/iCVD conductive-elastic co-polymer coating of Ni-rich cathode materials for high voltage operation

10:40 AM - 11:10 AM **COFFE BREAK AND EXHIBIT**

SESSION CHAIR: TIMOTHY MCCOMB / ROBERT KOSTESKI

11:10 AM - 11:35 AM



SARAH SAJEDI / GARY VEGH

ERA Environmental Management Solutions

Navigating New Regulations: Global vs. North American Perspectives and Life Cycle Assessment (LCA) for Battery Production



11:35 AM - 12:00 PM



ROBERT KOSTESKI

Lawrence Berkeley National Laboratory

Si-based intermetallic anodes for high performance Li-ion batteries

12:00 PM - 12:25 PM



TIMOTHY MCCOMB

Coherent

Current and Emerging Uses of Laser Technology in Battery Manufacturing

12:25 PM - 12:50 PM



ZHONGWEI CHEN

Dalian Institute of Chemical Physics

Rechargeable Zinc Batteries

1:15 PM - 2:20 PM

LUNCH

Rooms (516 A -E)

SESSION CHAIR: SARAH SAJEDI / GARY VEGH

2:20 PM - 2:45 PM



DI NOTO VITO

University of Padova

Advanced Electrolytes for Post-Lithium-Ion Batteries: δ -Metal Halides and Mechanisms

2:45 PM - 3:10 PM



SHOICHI MATSUDA

NIMS

Challenge for 500 Wh/kg class rechargeable lithium-oxygen batteries

3:10 PM - 3:35 PM



GHAZALEH NAZARI

Coherent

SHARP™ Technology for Lithium-Ion Battery Recycling

3:35 PM - 4:00 PM



XIA LI

Concordia University

Development of High-Performance Sustainable All-Solid-State Batteries

4:00 PM - 4:30 PM

COFFE BREAK AND EXHIBIT

SESSION CHAIR: GHAZALEH NAZARI / VITO DI NOTO

4:30 PM - 4:55 PM



GUILIANG XU

Argonne National Laboratory

Developing high-energy and long-life Na-ion batteries

4:55 PM - 5:20 PM



YAN-KAI TZENG

SLAC National Accelerator Laboratory

Optical Characterization of Ion Batteries

5:20 PM - 5:45 PM



SIXU DENG

Concordia University

Development of High-Performance Inorganic Solid-State Battery Cathodes

5:45 PM - 6:10 PM



ADRIAN YAO

STEER - Stanford/SLAC

How quickly can sodium-ion learn? Assessing scenarios for technoeconomic competitiveness against lithium-ion batteries

6:10 PM - 6:25 PM



KHALIL AMINE

CLOSING REMARKS