BEV CONFERENCE & EXPO | SERIES

WEAUTOMOTIVE GROUP

DETROIT, USA

NOVEMBER 15-16TH

2023 xEV

xEV ADVANCED BATTERY TECHNOLOGY INNOVATION USA

DRIVING THE FUTURE OF VEHICLE ELECTRIFICATION

NEXT-GENERATION BATTERY THERMAL MANAGEMENT SYSTEMS & TECHNOLOGIES

REDUCED COST | SYSTEM INTEGRATION | INCREASING POWER | IMPROVED PERFORMANCE | BATTERY EFFICIENCY | INCREASED RANGE | FAST CHARGING | IMPROVED SAFETY | BATTERY HEALTH

BOOK YOUR BOOTH AT NORTH AMERICA'S LEADING BTM EVENT

PRIORITY BOOKING NOW OPEN!

REGISTER NOW

50+ EXPERT SPEAKERS | 50+ PIONEERING EXHIBITORS | 350+ BEV PROFESSIONAL DELEGATES

HEADLINE SPONSOR 2023

ATF

PARTNERS 2023

Parker Lord | BUILDING TRUST | Sika

NETWORK BREAK SPONSORS

ING XINGMOBILITY

CO-SPONSORS 2023

ELANTAS | Noble.AI | Henkel | SEKISUI | DUPONT | bdtronic | TOX PRESSOTECHNIK

NEOGRAF SOLUTIONS | ENGINEERED FLUIDS | ARNOLD BlueFastening Systems | POLY-NOVA north america | circunomics | Chroma

AdvanTech INTERNATIONAL | EVONOMY Electrification, AI, Connectivity

Call: US +001 (313) 799 2911 | EU +44 7932 631 029 | info@we-automotive.com | battery-innovation-usa.com

CUTTING-EDGE INSIGHT **DELIVERED BY EXPERTS** AND **THOUGHT LEADERS** INCLUDING:

Our programs are diligently researched and curated in partnership with the Automotive Manufacturing community, to **ensure they address the most pertinent current challenges and key investment areas.** This level of detail is part of our pioneering approach to content and ensures that we attract the highest level of attendees.

Bob Galyen
Conference Chair: Retired Chief Technical Officer | CATL

Dr Cecile Pera
Director | OROVEL

Karl Plattenberger
Chief Engineer Powertrain, Calibration & Thermal Systems | Mahindra Automotive, NA

Gary Testa
President & CEO | Engineered Fluids

Timothy Vokes
Application Engineering Manager | Parker Lord

Bret Trimmer
Applications Engineering Manager | NeoGraf Solutions

John Williams
VP, Technical Services | Aspen Aerogels

Waldemar Linares
Manager Advanced Simulation Technologies | AVL

Elizabeth Knazs
Business Dev Mang, Electric Vehicle & Battery Engineering Adhesives | HB Fuller

Dr Yan Shao
Technical Marketing Manager | Wacker

Rich Byczek
Global Technology Dir. Transport Technologies | Intertek

Avinoam Rubinstain
CEO | CARRAR

Sumin Zhu
Founder & CEO | AMPCERA

Marc Auger
Business Development Manager | Coherent

Chris Churchill
Sr. Technical Service Manager | Rogers Corporation

Troy Waldherr
Vice President Sales and Operations | TOX® PRESSOTECHNIK USA

Thomas Schwoerer
President | Zeltwanger

Eric Rountree
CEO and Head of Business Development | EC Power

Pierson Cheng
E-mobility Industry Manager | TRUMPF

Michael Yarnall
President | bdtronic

Chris Korson
Market Segment Manager, Chassis and Structural Applications | BASF

Hadwan Hadwan
Senior eMobility Application Dev Engineer | BASF

Victor Oancea
SIMULIA R&D Technology Senior Director | Dassault Systemes

Anthony R. Giesey
SVP of Automotive & Mobility | Evonomy

John Comai III
Vice President of Sales and Commercial Development | LION Smart North America INC

Alexander Teufl
Global Technical Expert Resins | VonRoll

Tal Sholklapper
CEO & Co-Founder | Voltaiq, Inc

Eric Michielutti
Director, Lithium Ion Product Technology | Clarios

Michael Kaas
EV Applications Engineer | ATF Inc.

Scott Krusinski
Product Manager | Avery Dennison

Frank Billotto
Business Development Leader – Americas | DuPont

Steffen Mueller
Research & Development Applications Manager | IPG Photonics

Dr. Samy Panneerselvam
Vice President, Research and Development | Caresoft Global Inc.

Dr. Sankar Nallapati
Advanced Battery Module Engineer | General Motors

Nathan Saliga
Chief Engineer | One | Our Nex Energy

Mark Rimkus
Co-Founding Director and CEO | EV Thermal Flow Solutions

Harmanpreet Singh
Senior Battery Mechanical Engineer | Monarch Tractor

Xiangchun Zhang
Principal Application Eng, Modeling & Simulation, Energy Storage, Artificial Intelligence | MathWorks

HEADLINE SPONSOR 2023

ATF

PARTNERS 2023

Parker Lord | BUILDING TRUST | Sika

NETWORK BREAK SPONSORS

XING MOBILITY

CO-SPONSORS 2023

ELANTAS | Noble.AI | Henkel | SEKISUI | DUPONT | bdtronic | TOX PRESSOTECHNIK

NEOGRAF SOLUTIONS | EF ENGINEERED FLUIDS | ARNOLD BlueFastening Systems | POLY-NOVA north america | circunomics | Chroma

AdvanTech INTERNATIONAL | EVONOMY Electrification, AI, Connectivity

JOIN NORTH AMERICA'S LARGEST ANNUAL EVENT FOR xEV ADVANCED BATTERY TECHNOLOGY EXPERTS

Directly Addressing The Key Challenges, Technologies, Strategies, Engineering, Material And System Solutions To Optimises Battery Life, Safety & Range

Driving The Future Of Vehicle Electrification

xEV Advanced Battery Technology Innovation USA 2023, will be held in Detroit - USA, on the 15-16th of November for a packed two-day event. The #1 conference & exhibition to match OEM and Battery Manufacturer requirements with expert material, solution, and technology providers.

For over a decade WeAutomotive Group has organized the industries leading conferences and exhibitions – covering vehicle electrification, where chief battery technologists from leading automotive OEMs, leading suppliers and key members of the supply chain, discuss the latest challenges, learning objectives and technology innovations in the rapidly expanding market of advanced electric vehicles and the batteries, and battery systems, that will power them.

Taking place in person on the 15-16 November 2023, the Advanced Battery Technology Innovation USA Summit, returns to Detroit.

Following the huge success of our west coast summit earlier this year Battery Thermal Management USA, California – we are combining our two leading events to cover both key topics across a much bigger way!

Take part in this industry must-attend event, where battery technologists from leading automotive OEMs and their key suppliers address the current challenges, pressing learning objectives and examine. breakthrough technologies shaping the future of vehicle electrification

Key Topics

Battery Thermal Management
Battery Design & Integration
Battery Management & Battery Intelligence
Battery Management Systems
Battery Safety
Battery Cooling Plates
Battery Components
Battery Pack Assembly / Integrator
Adhesives, Sealing & Bonding
BEV Architectures
Material Suppliers
Joining Technologies & Solutions
Battery Pack Design & Material
Battery Assembly
Battery Materials
Powder Coatings
Cabling & Connectors
Cells & system
Battery Applications
Battery Manufacturers
Battery Components
Battery Assembly
Sustainable Lightweight Solutions
Battery Second Life Opportunities
Beyond Li-ion
Solid-State Batteries
Testing Solutions
Pressure Sensitive Adhesives &Tapes
Battery Manufacturing
Renewable Energy Systems
Simulation & Modelling
Recycling Li-ion Batteries
Battery Charging / Fast Charging
Battery Components
Gap Fillers
Electrification of The Off-Road Vehicle Market
Battery & Fuel Cell Development
Electric Systems Development
Advanced Engineering
Technology Solutions
Advanced Lightweight Structures
Dispensing Systems & Robots
Liquid Systems
Sealing Systems
EVONOMY Data Ecosystem

DAY 1 I xEV Battery Thermal Management

Next-Generation Battery Thermal Management Systems And Technology

Next-Generation Thermal Management Solutions To Optimise Battery Safety & Performance

Evaluating The Different Thermal Management Technologies Deployed To Ensure Cells Operate Under The Optimal Temperature Conditions

Comparing The Relative Benefits Of Air & Liquid, Direct And Indirect Cooling In Terms Of Cost And Efficiency

Meeting The Specific Thermal Management Challenges Of Ultra-Fast Charging And Increased Range

Minimizing The Risk Of Thermal Runaway Propagation In Different Battery Designs

How To Improve Thermal Efficiency, Enhance Lightweighting & Integration Capacity Of Components And Further Advance BMS Capacity

Thermal Conductive Adhesives For Next-Generation Cell-to-Pack Configurations

Engineering Single-Phases Immersion Cooling For Thermal Management Of Lithium-Ion Batteries Optimal Design Of Thermal Management Systems – At The System Level

Disruptive Next-Generation Thermal Adhesive Solutions For Battery Applications

Temperature Counts: Increasing xEV Safety Comfort, Range And Performance With Sensors

Achieving Battery Safety With Advanced Thermal Management Solutions

Engineering The Thermal & Safety Challenges In Next-Generation Battery Packs

Don't Just Delay Thermal Propagation – Stop It

Fast Charging & Thermoregulation: Battery Assessment By Means of A Multi-Scale Multi-Domain

Material For Complex Thermal Management Systems

Cell Monitoring With Electrochemical Impedance spectroscopy To Extend Battery Life And Prevent Thermal Runaway

Selecting The Right Material For Battery Thermal Management Evaluating The Potential Of Passive Thermal Management Solutions Such As Phase Change Materials (PCMs) and heat pipes (HPs)

DAY 2 I Battery Tech Cells & Systems

Optimizing the Safety, Capacity and Lifespan of Lithium-Ion Batteries with Battery Management Systems, Battery Intelligence Innovations & Battery Pack Advancements

Battery Design & Integration

Battery Management & Battery Intelligence

New Opportunities For The Cell & BMS Industry

The Road To A Solid-State Powered Future Battery Technology Challenges For Commerical Vehicles

Faster Charging, Higher Efficiency, Longer Range Immersion Cooling Technology For Cylindrical Lithium-Ion Cells

Innovations & Developments in EV Architecture For Performance Vehicles

High-Performance EV Powertrain Development & Battery Pack Design

Latest Methodologies In Battery Testing

High Precision Calorimetry And Measurement Of Heat Generation For EV Li-Ion Cells

Fast Charging Optimization Of Lithium-Ion Battery Cells

ESTEEMED CONFERENCE CHAIR 2023

"A fantastic representation of technology innovation, attended by an entire cross section of industry technical professionals, surely one of the best in class events"

CATL NAATBatt INTERNATIONAL

SPEAKER
BOB GALYEN
RT. CTO CATL, CHAIRMAN NAATBATT

LEADING OEMs & BATTERY DEVELOPERS ATTENDING THIS YEAR

Who Is Attending

Alelion, **Amazon**, Andreas Stihl, **Automotive Cells Company**, AVL, **Banner Batterien Oesterreich,** BMZ, BrightVolt, **Caterpillar, Cellforce,** China Euro Vehicle Technology, **Clarios,** CUSTOMCELLS, **Daimler, East Penn, ENOVIX,** Exide Technologies, EVE, **EVONOMY Group,** Factorial Energy, **Farasis Energy, Ford,** Forsee Power, **FREYR, General Motors,** GS Yuasa, Hankook, Hino Motors, **Hitachi, Honda,** HOPPECKE Batterien, **Hyundai,** InoBat Auto, KTM, LG Energy Solutions, **Litens Automotive,** Log9, **Lotus**, LytEn, MAGNA STEYR, MAHLE, **Mazda, Mercedes-Benz, Natrion,** NingDe Amperex Technology, **Nissan,** Northvolt, Nyobolt, **Panasonic, Porsche, QuantumScape, Renata, Renault,** Rimac Automobili, **Robert Bosch, Rolls Royce,** SAFT, Sakuu, **Samsung SDI, Scania,** Sebang Global Battery, **Siemens Mobility**, Sion Power, **Sionic Energy, SK, Skeleton Technologies,** Solid Power, **Stellantis, StoreDot, Toshiba, Toyota,** Traton, **Volkswagen, Volvo,** Yanmar, **Zeta Energy & more.**

Past Attendees

Chief Engineer – Battery Electric & Plug-In Hybrid Vehicles, Chief Engineer, Electrified Propulsion System, **Chief Engineer,** Electrical System, Head, **EV Engineering Systems,** Head of Vehicle Electrification Technology, **Head of Hybrid and EV Battery System,** Chief Scientist, **Energy and Systems,** Head of Vehicle Architecture, **Head of Systems and Control Engineering,** Electrification Project Engineer, **Head of Research,** Materials and Manufacturing, **Group Product Director Hybrid and Electric Systems,** Lead Engineer, **Electrical Systems Engineering,** Lead Engineer, **Electrified Powertrain,** Head of Body Structures/Body in White, Battery Electric Vehicle Global Lead Engineer, **Global Battery Systems Engineering,** Battery Research Engineer, **Technical Manager – Innovation Management,** Chief Engineer & Technical Leader – Energy Storage & Systems

07:30

Registration | Breakfast Reception

08:30

Chairs Opening Remarks |

Bob Galyen, CTO NAATBatt , Retired CTO – **CATL**

- How to improve thermal efficiency, enhance lightweighting & integrational capacity of components and further advance BMS capacity
- Utilizing new design techniques, resistance to fire materials & emerging tools for reduced safety and thermal runaway risk
- Battery pack integration & thermal optimization at the system level

08:55

Next-Generation Thermal Management Solutions To Optimise Battery Safety, Performance Capacity And Lifespan

Cecile Pera PhD. Battery Electric Vehicle Expert **OROVEL Ltd.**

- Battery Thermal Management: Trends in electric vehicles
- Examining where we stand now and what challenges remain: Future outlook and possible technological solutions in development
- How can an optimal thermal management system strategy be developed and what are the next-generation objectives?
- Assessing current technologies and methods for thermal conductivity and inclusion technology
- Implementing thermal management to optimize battery life
- How to effectively measure and evaluate thermal management solutions
- The role of material science in thermal management
- How close are we to consolidating an industry-standard in thermal management architecture?

09:20

How Pressure-Sensitive Adhesives Enable Advanced EV Battery Designs

Scott Krusinski, Product Manager, Automotive & Other Transportation, **Avery Dennison**

- Various design trends and engineering challenges are driving interest in new and effective bonding solutions for EV battery pack materials
- These solutions include high-performance tapes featuring pressure-sensitive adhesives. Such tapes provide not only effective bonding, but help address issues related to flame retardancy, boosting dielectric, and optimizing design and assembly
- In this session, Scott Krusinski, Avery Dennison Performance Tapes product manager for Automotive & other Transportation, will showcase the benefits of pressure-sensitive adhesive technology. He'll discuss why it's a sound solution for a wide range of pack applications and provide an overview of Avery Dennison's capabilities related to EV batteries

09:45

Thermal Conductive Adhesives for Next Generation Cell-to-Pack Configurations

Timothy Vokes, Application Engineering Manager, Thermal Management Materials and Structural Adhesives, **Parker Lord**

- Current battery pack configurations – In the current, modular-based battery pack configuration, a minimum of two discrete thermal interface materials (TIMs) or "gap fillers" (GF) are typically employed to regulate the temperature of the modules and ensure safe, efficient performance.
- Trade-offs with conventional modular design – Challenges with the old design include added weight and volume from the inactive portions of the module which ultimately translates into compromised pack energy density.
- Next generation cell-to-pack configuration – Given these challenges, many EV and battery manufacturers are eliminating modules entirely and directly bond batteries to the cooling plate. This new module-free approach, referred to as "Cell-to-Pack" (CTP), reportedly increases volume-utilization space from 15-50%, depending upon battery cell design.
- The benefits of thermally conductive gap fillers – Cell-to-Pack configurations offer numerous benefits, including increased volume-utilization space from 15-50%, reduction in the number of parts up to 40%, less expensive, lower energy density cells given the extra space, improvements to pack energy density, and more!

10:10

Engineering Single-Phase Immersion Cooling For Thermal Management Of Lithium-Ion Batteries

Gary Testa, President & CEO, **Engineered Fluids Inc.**

- Air cooling is neither safe nor effective and this session will demonstrate the immediate advantages of SLIC technology as the superior solution
- Examining the drivers for immersion cooling
- Outlining the cooling fluid requirements for immersion cooling
- Examining the drivers for immersion cooling
- What is a Single-Phase, Liquid Immersion Cooling?
- Exploring coolants compatibility with materials used in Battery Management Systems
- Demonstration of how immersion Cooling with AmpCool extends battery life
- How to prevent fire propagation between battery cells using AmpCool Coolant

10:35

Reliable Battery Sealing Solutions That Enable Assembly Line Optimization: A Fast-Curing Silicone Adhesive For Thermal Stability

Dr Yan Shao, Technical Marketing Manager, **Wacker Chemie**

- A fast-curing, structural seal that will remain stable and reliable under high thermal stress, for electronics applications
- Multiple curing temperatures provide the flexibility customers need in their operations
- Fast cure at low temperature, with fast adhesion build-up

11:00

Morning Networking Break -

11:45

Disruptive Next Generation Thermal Adhesive Solutions For Battery Applications

Alexander Teufl, Global Technical Expert Resins, **VONROLL**

- Various solutions for cylindrical/ prismatic/ pouch cell modules and pack designs
- Combination of gap-filler and fixation / cast and forget approach
- High flexibility over the whole operating temperature
- Green and clean resins for environmental and health safety
- Homogenous heat dissipation through finetuned thermal conductivity
- Outgassing free formulation / no Silicones
- Excellent thermal shock behavior
- Non flammable and self extinguishing

12:10

How Two-Phase Thermal Management Can Solve the Critical Problems Facing EV Batteries

Avinoam Rubinstain , CEO, **CARRAR**

- This disruptive, holistic thermal management solution effectively addresses the significant challenges of cooling and heating the entire automotive battery system, powertrain, compute, and electronic components. The technology is based on two-phase immersion pool boiling for extremely efficient active control.

Our two-phase immersion TMS technology enables:
– Keeping battery cells at the optimal temperature
– Ensuring uniform temperature for the entire pack down to the cell level
– Indifference to ambient temperature
– 3X higher in-vehicle heat dissipation capacity

Delivering benefits
– Extending battery lifetime and warranty opportunity
– Delay and even prevent thermal runaway
– Makes battery charging possible at 10C+
– Same battery cell chemistry everywhere in the world
– Reducing the total cost of ownership for OEMs, dealers, and consumers
– Perfect for extreme and prolonged acceleration for high performance
– Growing the second-hand EV market

12:35

Achieving Battery Safety With Advanced Thermal Management Solutions

John Comai III, Vice President of Sales and Commercial Developmento, Lion Smart

- Mitigating thermal runaway heating and arresting flames using KULR's Thermal Runaway Shield (TRS)
- Test and analysis results for battery pack with and without TRS
- Addressing lithium-ion cell/battery transportation concerns with KULR's innovative solutions

13:00

Thermal Management Strategies for Faster Charging, Extending Range and Preventing Propagation

Bret Trimmer, Application Engineering Manager, **NEOGRAF Solutions**

- Reviewing the latest goals and best current methods for EV battery thermal management.
- Examining the five factors that allow cells to charge quickly and discussing the single factor that pack designers can control
- Exploring the four primary strategies pack manufacturers use to prevent Thermal Runaway and the impact of each on fast charging, cell performance, and lifetime
- Each propagation control method introduces benefits or harm to the cells in terms of fast charging, cell cycle lifetime, charge rate, and driving range
- Understanding the three key advantages that graphite offers for thermal management.
- For applications where smaller-pack-size and lighter-weight are important, flexible graphite will be discussed as a direct substitute for aluminum

13:25

Network Lunch Break

14:25

Performance Under Pressure: Why PyroThin Thermal Barriers Get Better at End-of-Life

Preston Thompson, Manager, Program Engineering, **Aspen Aerogels**

- Preventing thermal propagation starts with the cell-to-cell (C2C) barrier
- Aspen Aerogels' PyroThin materials are widely recognized as providing the highest thermal performance in the industry, and recent testing is beginning to reveal why
- The surprising interactions between compressive loading and thermal behaviour are leading to some of the most space- and weight-efficient solutions available today

14:50

Battery Thermal Management Simulation: Combined Electrochemical-Thermal Model On Vehicle System Level

Waldemar Linares, Manager Advanced Simulation Technologies, **AVL**

- Introduction into Virtual Battery Development
- Discussion of modeling approach managing different scales and domains
- Electrical and Thermal Modelling at Cell/Module/Pack Level
- Model characterization and validation
- Impact of thermal regulation on battery performance/degradation

15:15

Efficient Thermal Management To Ensure Maximum EV Performance & Safety

Hadwan Hadwan, Senior eMobility Application Development Engineer, **BASF**

- The safety level of lithium-ion batteries depends not only on the cell-to-cell chemistry but also on the protection of connections around the battery modules, making thermal management activities a key process for EV manufacturers
- Analyzing high-performance solutions that are inherently flame resistant and more resilient to continuous high temperatures

15:40

How Selecting An Optimized Cell-To-Cell Pad Material Can Improve Volumetric Energy Density, Cycle Life And Safety In EV/HEV Packs

Chris Churchill, Sr. Technical Service Manager, **Rogers Corporation**

- This presentation will explore the key considerations to designing inter-cell battery packaging: battery performance, thermal runaway delay and reducing wasted space in the overall pack design
- Intrinsic material properties critical for cell-to-cell pressure management and validation through single cell application testing
- Review mechanisms to delay thermal propagation, material level test methods and single cell application test
- Selecting dual function battery pads maximize cell performance and safety while minimizing process steps and cost

16:05

Afternoon Network Break

16:35

Exploring the 4 Critical Adhesive & Sealant Pillars to Optimize Your High-Voltage Batteries In Electric Vehicles

Elizabeth Knazs, Business Development Manager, Electric Vehicle and Battery Engineering Adhesives, **HB Fuller**

- H.B. Fuller Supports EV OEMs and Tier manufactures by providing innovative materials, battery safety solutions, thermally conductive products, structural adhesives and sealing technologies. We provide complete turnkey solutions by including chemistry selection, product validation, production implementation, and technical support throughout the entire commercialization process
- Our patented EV Protect 4006 increases EV battery safety by improving protection against fires and thermal propagation. Additional key benefits include corrosion protection, semi-structural support, NVH properties, impact resistance, while helping to maintain a stable internal battery temperature from extreme external environments
- H.B. Fuller's next generation innovative adhesive and sealant solutions provide improved thermal management performance, increase structural rigidity, and seal against external environments. We are dedicated to developing products that help provide a safer battery for the future

17:00

Thermal Management Of A Dual Chemistry Battery With Interweaved Cells

Nathan Saliga, Chief Engineer, **ONE**

- Rationale for selecting a dual chemistry architecture with interweaving cells
- LFP vs. Anode-Free and how safety plays a factor
- Importance of thermal management

17:25

New Process Solutions For Battery Systems Manufacturing

Michael Yarnall, President, **bdtronic**

- The manufacturing processes for batteries and where our technologies can be applied;
- Challenges of dispensing of thermal materials, volume shot sizes, etc
- The importance of surface pre-treatment in come applications
- Heat staking and the need to have good process control to achieve consistency and strong rivets

17:50

Tomorrow's BEV Batteries Will Be Intentionally Run at Higher Temperatures

Eric Rountree PhD, Head, Business Development & Special Projects, R&D – EC, **Power LLC**

- The benefits in high-temperature design for safety
- The benefits in high-temperature design for battery lifetime
- The benefits in high-temperature design for fast charging
- The benefits in high-temperature cell design for battery pack design
- Using thermally modulated cells to simplify high-temperature operation logistics

18:15

The Power Partnership Of High Voltage And Low Voltage Batteries

Eric Michielutti, Director, Lithium Ion Product Technology, **Clarios**

- The industry has seen incredible advances in high voltage cell manufacturing over the past several years with the rise and increase of electrified powertrains
- But what about the low voltage battery? Is there a future? Learn more about the ever increasing role of the 12V battery in electrified powertrains and how much vehicles in the future will depend on it

18:40

Chairs Closing Remarks

Bob Galyen, rt. CTO **CATL,** Chairman Emeritus of **NaatBaTT**

- Overview of the key industrial challenges discussed during the day
- Summary of the various technologies and technological areas covered
- Highlighting of any further topics, innovations or conversations that can be progressed

All Attendee Drinks Reception

BECOME A SPONSOR OR EXHIBITOR

MEET YOUR PROSPECTS

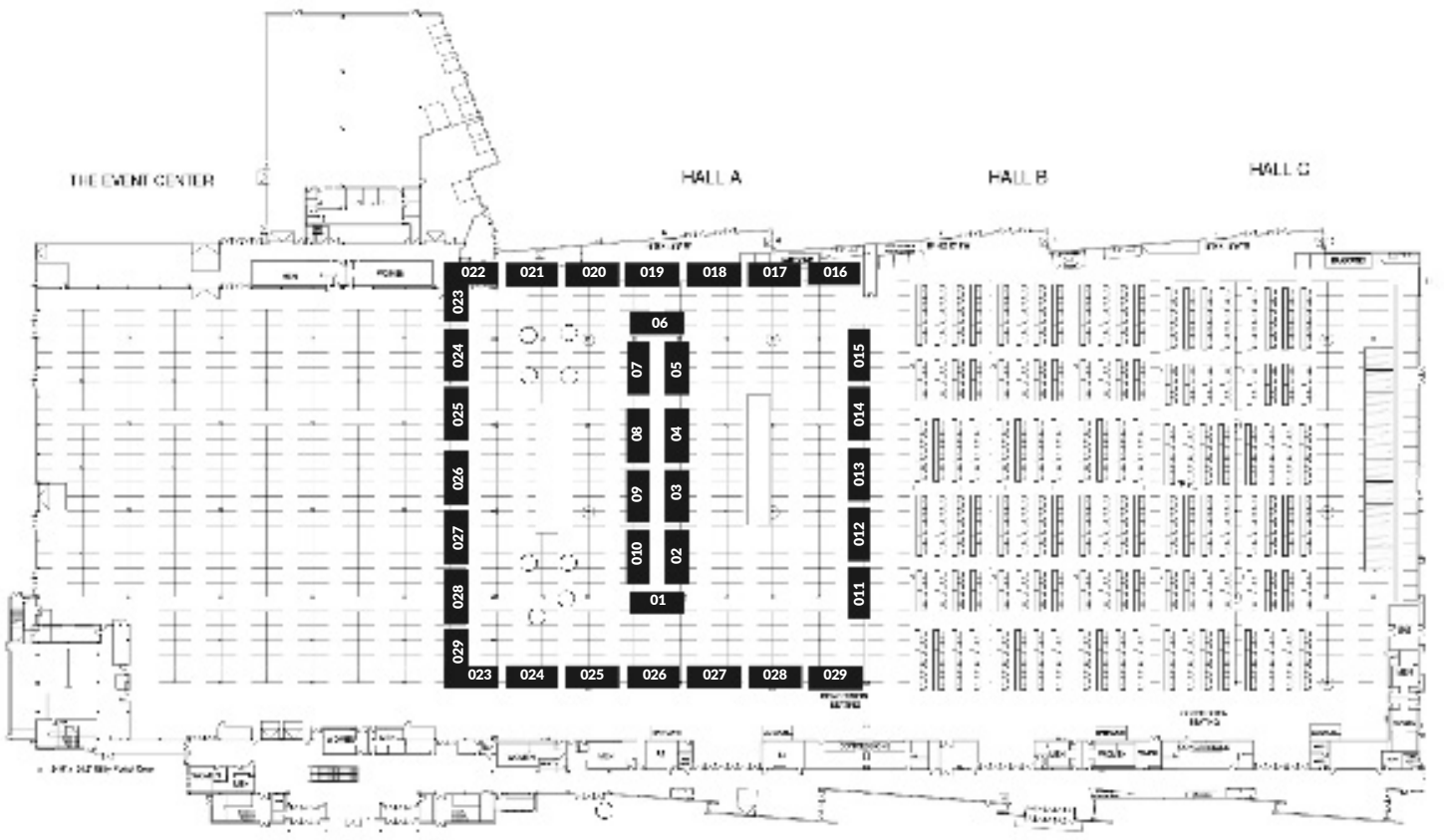
From advanced materials, battery pack monitoring and control innovation, to modular battery cooling systems, pack assembly, BMS and power electronics innovation - this is where the OEM decision making teams, come together to spend quality time with you at your booth. **70% OEM Attendance**

ENGAGE & PRESENT

Your opportunity to present to a captivated, dedicated audience. This is not a trade show where the agenda is something on the side where you can rest your legs. Our agenda is rigorously put together after months of research directly with OEMs - **and our attendees are here to learn for you!**

| SPONSOR, EXHIBIT OR SUBMIT A PRESENTATION FOR REVIEW - MAKE SURE THAT YOU ARE VISIBLE AND ENGAGING

| Floor Plan



DETROIT, **USA**

NOVEMBER 15-16TH

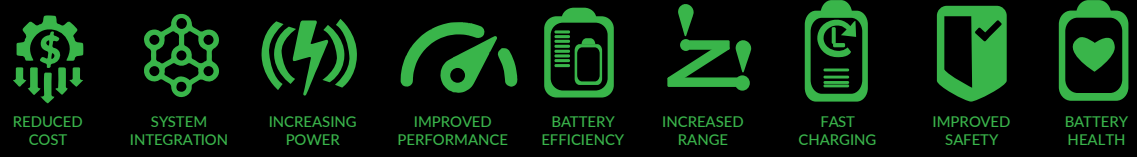
2023

xEV ADVANCED BATTERY TECHNOLOGY INNOVATION

USA

DRIVING THE FUTURE OF VEHICLE ELECTRIFICATION

NEXT-GENERATION BATTERY THERMAL MANAGEMENT SYSTEMS & TECHNOLOGIES



DON'T MISS OUT!

PRIORITY BOOKINGS NOW OPEN!

Email: info@we-automotive.com **Call:** US +001 (313) 799 2911 EU +44 7932 631 029

UK Head Office: 167-169 Great Portland Street, 5th Floor, London, United Kingdom NA Office: 6001 Cass Avenue, Detroit, MI 48202 ME Office: One Central 8th and 9th Floor, Dubai, United Arab Emirates