PLUGVOLT®

Battery Seminar 2026

Jul. 14, 2026: Day 1 – Battery Training Tutorials

8:00 am – 5:00 pm	Registration Open
8:00 am – 8:25 am	Breakfast with Networking **Sponsored by YTC AMERICA**
8:25 am – 8:30 am	Welcome Note
8:30 am – 9:30 am	**Tutorial A: Advances in Electrolyte and Additive Design for Next-Generation Lithium Metal Batteries** Professor Zhenan Bao and Elizabeth Zhang – Stanford University This tutorial will highlight recent advances in electrolyte engineering for high-energy lithium metal batteries, including our group's latest developments in solvent design. I will also discuss complementary additive strategies that enhance interphase stability, improve Coulombic efficiency, and extend cycling life. Attendees will gain an integrated perspective on electrolyte–electrode interfacial control.
9:30 am – 10:30 am	**Tutorial B: Beyond Graphite – Next-Generation Anode Materials for Lithium-ion Batteries** Assistant Professor Kent Griffith – University of California San Diego Graphite is a low-cost, abundant, low-voltage, high-capacity anode material for lithium-ion batteries. It is straightforward to understand why graphite dominates the anode market. The first question we will address then is 'Why?' look beyond graphite. From there, we will investigate the materials that provide functionality—energy density, power/charge rate, lifetime, safety—that cannot be met by graphite.
10:30 am – 11:00 am	Coffee with Networking
11:00 am – 12:00 pm	**Tutorial C: Tracking Cathode Degradation in Real Time Using Electrochemical Impedance Spectroscopy (EIS), Dynamic EIS, and Distribution of Relaxation Times (DRT)** Assistant Professor Regina Garcia-Mendez – Johns Hopkins University Cathode degradation often begins as subtle impedance growth before capacity fade is obvious. This tutorial shows how to diagnose degradation mechanisms using Electrochemical Impedance Spectroscopy (EIS), including dynamic EIS collected during battery cycling, and interpret overlapping processes with the Distribution of Relaxation Times (DRT), which converts frequency data into a distribution of time constants. We will also highlight emerging joint-domain (hybrid) impedance spectroscopy for solid-state batteries (SSBs), which combines time- and frequency-domain data to enable much faster measurements.
12:00 pm – 1:30 pm	Lunch with Networking
1:30 pm – 2:30 pm	**Tutorial D: Insights from Monitoring Battery Expansion During the Formation Cycle** Associate Professor Jason Siegel – University of Michigan This talk will explore the correlation among the formation protocol, the first-cycle coulombic efficiency, the first-cycle irreversible battery expansion, and cycle life. We show that monitoring changes in battery thickness can provide key insights into this critical last stage of manufacturing.
2:30 pm – 3:30 pm	**Tutorial E: Integrating Physics-Based Simulations and Machine Learning to Fast-Track Battery Materials Innovation** Garvit Agarwal – Principal Scientist, Schrodinger Developing next-generation batteries requires deep insight into complex phenomena like ion transport and the SEI. Integrated physics-based modeling and machine learning approaches are revolutionizing the development of next-generation battery chemistries. We demonstrate how ML Force Fields and advanced ML models can rapidly predict material properties, significantly reducing R&D timelines for high-performance energy storage systems.
3:30 pm – 4:00 pm	Coffee with Networking
4:00 pm – 5:00 pm	**Tutorial F: Scaling-Up Cell Manufacturing – Challenges & Opportunities** Celina Mikolajczak – Industry Advisor This tutorial will focus on the challenges and opportunities of high-volume manufacturing scale-up and the role of a localized ecosystem of suppliers in building a stable manufacturing base. We will discuss factory design, tool specification, planning for ramp-up, and training of staff. We will also discuss some of the common pitfalls encountered in establishing gigafactories and how to avoid these.
5:00 pm – 5:30 pm	**Wrap-Up (Summary & Conclusions)**

**Agenda subject to change without notice. All rights reserved.*

Chairperson: Dr. John Warner – Chief Customer Officer at American Battery Solutions

Jul. 15, 2026: Day 2 – Energy Storage Systems in eMobility Applications

8:00 am – 6:00 pm	Registration Open
8:00 am – 8:30 am	Breakfast with Networking **Sponsored by YTC AMERICA**
8:30 am – 9:00 am	**Opportunities and Challenges of Solid-State-Battery Cathode Materials** Minghong Liu – Ford
9:00 am – 9:30 am	**Turning Compliance Into Competitive Edge – Sustainability As Innovation Catalyst** Julian Bigi – BMW North America
9:30 am – 10:00 am	**Propulsion System Architectures** Oliver Gross – Stellantis
10:00 am – 10:30 am	Coffee with Networking **Sponsored by MACCOR**
10:30 am – 11:00 am	**Disrupting Pilot Training Economics with All-Electric Propulsion** Rod Zastrow – Bye Aerospace
11:00 am – 11:30 am	**Certification-Grade Energy Storage for Electric Aviation** Robin Amisse – H55
11:30 am – 12:00 pm	**Powering Vertical Lift – The Critical Battery Requirements Separating Hybrid from All-Electric eVTOLs** Phil Gow – Horizon Aircraft
12:00 pm – 1:30 pm	Lunch with Networking **Sponsored by ELEVATED MATERIALS**
1:30 pm – 2:00 pm	**Advanced Materials – Solutions for Next-Generation Battery Innovation** Jianan Zhang – Tinci Materials
2:00 pm – 2:30 pm	**Silicon Anodes Driving Mobility Innovation – Enabling Faster Missions and Extended Coverage** Ionel Stefan – Amprius
2:30 pm – 3:00 pm	**High Specific Energy Batteries That Exceed 1,000 Wh/kg for Tripling the Range of Aerial Platforms** Shashank Sripad – And Battery Aero
3:00 pm – 3:30 pm	Coffee with Networking **Sponsored by MACCOR**
3:30 pm – 4:00 pm	**Engineering Ultra-Thin Lithium Films for Prelithiated Anodes and Stabilized Lithium Metal Batteries** Subra Herle – Elevated Materials
4:00 pm – 4:30 pm	**Advanced Separators and Metal Management – Benefits of Less Metal on the Anode** Brian Sisk – Sepion Technologies
4:30 pm – 5:00 pm	**Binder-Free Electrodes Enabling Significant Performance Gains in Li-ion Batteries** Sean Brahim – YTC America
5:00 pm – 5:30 pm	**Accelerated Lithium-Ion Cell Aging Characterization Using Targeted Pre-Aging and Adaptive Current Profiles** Brennan Campbell – AVL
5:30 pm – 7:30 pm	**Cocktail Reception with Industry Networking**

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Jul. 16, 2026: Day 3 – North American Battery Supply Chain Build-up

8:00 am – 5:00 pm	Registration Open
8:00 am – 8:30 am	Breakfast with Networking **Sponsored by YTC AMERICA**
8:30 am – 9:00 am	**Yes, You Can Build a Successful and Globally Competitive Battery Value Chain in North America** Ken Hoffman – Traubenbach
9:00 am – 9:30 am	**Scaling the Silicon Battery Era – From Materials Innovation to Global Manufacturing** Rick Costantino – Group14 Technologies
9:30 am – 10:00 am	**Advances in Solid State Battery Technology Applications** Adrian Tylim – Industry Advisor
10:00 am – 10:30 am	Coffee with Networking
10:30 am – 11:00 am	**Design and Production of Advanced Fluorinated Electrolytes** Carl Thoemmes – Orbia Fluor & Energy Materials
11:00 am – 11:30 am	**Liquefied Gas Electrolytes for Advanced Li-ion Cells Towards Future Aviation Applications** Charlie Krause – South 8 Technologies
11:30 am – 12:00 pm	**Building Iron-Based Cathodes at Speed in the US** Wesley Michaels – Mitra Chem
12:00 pm – 1:30 pm	Lunch with Networking
1:30 pm – 2:00 pm	**Coated Separator Development – Technical Advances and Scaleup in the U.S.** Weston Wood – Entek
2:00 pm – 2:30 pm	**Reindustrializing the Energy Transition – Building a Collaborative, Resilient Battery Value Chain** Nathan Saliga – Our Next Energy
2:30 pm – 3:00 pm	**Aviation Isn't Automotive – Battery Supply Chain Requirements** Rachael Barritt – BETA Technologies
3:00 pm – 3:30 pm	Coffee with Networking
3:30 pm – 4:00 pm	**Scaling LG Energy Solution's North American Manufacturing Network** Philip Lienert – LG Energy Solution
4:00 pm – 4:30 pm	**Scaling Domestic Energy Storage – SK On's Safety-Driven GRIDON Block Architecture** Ray Saka – SK On
4:30 pm – 5:00 pm	**Electrovaya's Infinity Technology – Ceramic Based Innovations & Domestic Manufacturing for Mission Critical Applications** Raj Das Gupta – Electrovaya
5:00 pm – 5:30 pm	Closing Comments / End of Seminar

Register Online: PlugVolt Battery Seminar 2026 Online Registration Form

Location – Battery Seminar 2026

Holiday Inn San Jose – Silicon Valley
1350 North 1st Street
San Jose, CA 95112 USA
Tel.: (001) 408-453-6200

Pricing

January 1, 2026	Registration Opens
January 1, 2026 – May 09, 2026	Early Bird: $999/day, $1299/2 days or $1499/3 days
May 10, 2026 – July 04, 2026	Regular: $1099/day, $1399/2 days or $1699/3 days
July 05, 2026 – July 16, 2026	Late: $1199/day, $1499/2 days or $1799/3 days

- 10% group discount for 3+ attendees from the same corporation/institution (all attendees must register and pay at the same time)
- 25% discount for attendees from a government agency (a valid government ID is required)
- 25% discount for attendees from an academic institution (a valid academic institution ID is required)
- Contact us for additional attractive group discounts for parties of 5+ people attending from the same corporation/institution

PlugVolt® discounted room rate is available at the Holiday Inn San Jose – Silicon Valley until June 30, 2026, following which rooms may not be available and/or available at the prevailing rate. Reservations can be made directly at:

PlugVolt Battery Seminar 2026 Hotel Bookings

Program Outline

This seminar will provide an entire day of in-depth technical tutorials on solid-state batteries, next-gen anodes and cathodes, battery diagnostics, failure modes and best design practices for cell engineering, etc.

These presentations will be accompanied by complementary industry updates offered by subject matter experts from major multinational OEMs, Tier 1 suppliers and battery manufacturers. Topics will cover several existing battery chemistries and any specific performance requirements driven by their applications, challenges in bringing these batteries to volume production, recent advances for resiliency in the provision of metals and minerals, and securing a robust North American supply chain.

The seminar will also host an evening reception where attendees will have plenty of opportunities for industry networking.

Questions?

Contact JC Soman at 1-877-PLUGVOLT or juratesoman@plugvolt.com for more details, or visit our website www.plugvolt.com or www.batteryseminars.com

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