

ITEC 2025: Learn, Network And Solve Problems In Transportation Electrification

Now in its 14th year, [ITEC](#) has served as IEEE's premier conference on transportation electrification, fostering connections between industry and academia. This year's conference will be held from June 18-20, 2025, at the Anaheim Marriott, in Anaheim, California. The venue is within walking distance of Disneyland!



ITEC is aimed at helping the industry in the transition from conventional vehicles to advanced electrified vehicles. The conference is focused on components, systems, standards, and grid interface technologies, related to efficient power conversion for all types of electrified transportation, including electric vehicles, hybrid electric vehicles, and plug-in hybrid electric vehicles (EVs, HEVs, and PHEVs) as well as heavy-duty, rail, and off-road vehicles and airplanes and ships.

Plenary Talks

This year's program offers an impressive lineup of plenary speakers including:

- Hengchun Mao, president of Quanten Technologies
- Zubair A. Baig, senior technical fellow electrical systems, electric propulsion expert, Pratt & Whitney
- Xin Wu, technology-to-market advisor, ARPA-E
- Sanjeev Naik, director of Energy & Propulsion System Research Laboratory, GM
- Chris Mi, distinguished professor of electrical and computer engineering and director, GATE Center for Electric Drive Transportation, San Diego State University
- Marcello Canova, program director, NSF
- Gaudy Bezos O'Connor, EPFD project manager, NASA
- Charlie Roberts, executive director, Southwest Research Institute
- Venkat Viswanathan, associate professor, University of Michigan and co-founder, Battery Aero
- Scott Hotz, founder & CEO, Simplify Tech
- Momo Kechmir, vice president, electronics & systems engineering, EnerSys



Technical Tracks

While this year's program is not yet posted, for those new to the conference, the call for papers offers a general overview of the topics addressed at ITEC.

Paper proposal digests were solicited in the following or related technical track topic areas:

1. Power electronics and motor drives
2. Electric machines and actuators
3. Battery, fuel cell, hydrogen, and other energy storage
4. Superconducting and cryogenic systems and components
5. System dynamics, modeling, and control
6. Mission operation: energy, cost, emissions, and thermal management
7. Connected and autonomous vehicles, smart mobility, and vehicle functional security
8. Powertrain architectures: design, integration, packing, and optimization
9. Electrification of heavy duty and off-road vehicles

10. Design and optimization for electrified airplane, space, sea, and undersea transportation
11. Rapid prototyping, real-time simulation, HIL and SIL, verification, validation and testing
12. Smart and micro grids, EV-interacting grids
13. Battery chargers: onboard, wireless, fast, and ultra-fast
14. Safety, diagnostics, reliability, failure and fault mode protection, and EMI
15. Codes, Certification, standards, policies, and regulations and EcoCAR
16. Published IEEE PELS Transaction Papers in 2024 and 2025 (poster Only)

Another useful reference for first-time participants is last year's program, which is posted [here](#).

ITEC Exhibition: Discover The Latest Products And Technologies

ITEC creates space for highly positioned engineering professionals to network, collaborate and experience cutting-edge electrification technology of transportation. Come walk the expo to find solutions ranging from high-voltage test equipment to components, simulations and companies showcasing their latest innovations. Network with decision-makers and influencers in the transportation electrification industry.



Scenes from the ITEC 2024 exhibition.

Special Events

In addition to the in-depth technical program, ITEC 2025 will feature the following activities:

Welcome Reception

Experience an exciting start to ITEC+2025 at its Welcome Reception on June 17, 2025, from 6 to 8 PM. This event is a wonderful chance to chat with leaders in the field of transportation electrification.

Expect an evening filled with engaging conversations that will inspire and energize you for the insightful days ahead at the conference. Don't miss this unique opportunity.

Expo Reception

Come enjoy a walking dinner with networking to kick off the conference! Listen to music and great conversation on the evening of Wednesday, June 18th, 2025.

Tour of JPL

Join an exclusive tour of NASA's Jet Propulsion Laboratory on the morning of Friday, June 20th, from 9:30 AM to 12:00 PM. Please note that the tour group will depart from the hotel at 7:30 AM and will not return until approximately 1:30–2:00 PM, as JPL is located at least 80 minutes away. We look forward to an engaging and insightful experience exploring this world-renowned research facility. As of this writing, only 44 spots are available. So reserve your spot today.

For information on registration, click [here](#). For more on the exhibition, click [here](#). For all other information see the conference [home page](#) or email the [show organizers](#).