2018 IEEE Transportation Electrification Conference and Expo (ITEC ’18)

Long Beach Convention Center
Long Beach, CA, USA
June 13-15, 2018
www.itec-conf.com

Exhibit Hall Hours
Wednesday, June 13, 2018: 12:00 pm - 7:00 pm
Thursday, June 14, 2018: 12:00 pm - 7:00 pm

ITEC Sponsors:
<table>
<thead>
<tr>
<th>Exhibitor Directory</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Power Corp</td>
</tr>
<tr>
<td>Advanced Test Equipment Rentals</td>
</tr>
<tr>
<td>Altair Engineering, Inc.</td>
</tr>
<tr>
<td>Chroma USA</td>
</tr>
<tr>
<td>Cogent Power</td>
</tr>
<tr>
<td>D&amp;V Electronics</td>
</tr>
<tr>
<td>E&amp;M Power</td>
</tr>
<tr>
<td>Elantas PDG</td>
</tr>
<tr>
<td>Electronic Concepts, Inc.</td>
</tr>
<tr>
<td>Faraday Future</td>
</tr>
<tr>
<td>FF91</td>
</tr>
<tr>
<td>HBM Test and Measurement</td>
</tr>
<tr>
<td>Hioki USA</td>
</tr>
<tr>
<td>IEEE Industry Applications Society</td>
</tr>
<tr>
<td>John Deere</td>
</tr>
<tr>
<td>Karma</td>
</tr>
<tr>
<td>Karma Revero</td>
</tr>
<tr>
<td>LCS Company</td>
</tr>
<tr>
<td>Linear Labs</td>
</tr>
<tr>
<td>MacAUTO</td>
</tr>
<tr>
<td>Mathworks</td>
</tr>
<tr>
<td>Mentor Infolytica</td>
</tr>
<tr>
<td>Motor Design Limited</td>
</tr>
<tr>
<td>NH Research</td>
</tr>
<tr>
<td>Opal-RT</td>
</tr>
<tr>
<td>Plexim</td>
</tr>
<tr>
<td>Powersys Solutions</td>
</tr>
<tr>
<td>RTDS Technologies</td>
</tr>
<tr>
<td>Software Motor Company</td>
</tr>
<tr>
<td>Suzhou Zhongcheng New Energy Technology Co. Ltd.</td>
</tr>
<tr>
<td>TDK Lambda: High Power Division</td>
</tr>
<tr>
<td>Tridus Magnetics</td>
</tr>
<tr>
<td>IEEE Transportation Electrification Community/Power Electronics Society</td>
</tr>
<tr>
<td>Yunsheng USA</td>
</tr>
</tbody>
</table>
Established in 1989, Preen had become a major manufacturer of programmable AC and DC Power Sources and Static Type Frequency Converters. Preen is considered to be the world-leading manufacturer of large capacity power sources widely used in industrial, military, aerospace and new energy testing applications.

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Booth Representatives: Philippe Wendling and Tan Pham

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Impulse is the new standard for electric motor development, design and manufacturing. North America’s first motor manufacturing and design center with its own electrical steel mill to enable truly customized efficiency and performance solutions. We solve the world’s most unique motor problems with our LEAP innovation cycle and specialty materials.

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E&M Power combines leading edge technology and innovative design to produce superior EV/HEV motor drive inverter and DC power system test solutions. The Active Load Emulator for automotive traction inverter testing mimics the 4-quadrant electrical output of 3-phase synchronous or induction motor/generators under user-controlled speed, torque and temperature conditions thereby simulating an electric drive train. This electronic dynamometer, with facility requirements suitable for laboratory installations, offers significant advantages in test capabilities and flexibility, and low acquisition and operating costs. The DC Emulator product line is a 30kW to 1.2MW DC source/sink that emulates dynamic, complex bidirectional loads with best in class frequency response, deterministic streaming with <1us latency, bidirectional full-power slew rate of <100us and repeatable noise/ripple generation. Ideal for testing vehicle energy systems and components, including batteries, and for HIL with real-time simulation to emulate large switching and regenerative loads to study their effect on the whole power system.

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Electronic Concepts Inc. is a multinational electronics company which designs and manufacturers innovative film capacitors for global industries. We offer a unique combination of resources including vertically integrated manufacturing, modern and automated production, and broad engineering expertise. It is with these elements that allow us to design film capacitors that set the industry standard. ECI has the flexibility to handle any film capacitor requirement, with a commitment to quality and support. ECI holds qualifications for AS9100, ISO9001, TS16949 and UL 810 recognized.

We are a user-centric, advanced mobility company with headquarters in Silicon Valley and Southern California. Our team leverages the talents of passionate creators from the technology and automotive industries to bring premium, seamlessly connected electric vehicles.
**Design:**
FF 91 is the first production vehicle and flagship model from Faraday Future (FF). All-electric, autonomous-ready and seamlessly connected, it embodies our latest mobility advancements in performance, intelligence, and user experience. This is the reason we gave FF 91 a future-forward design that visually sets it apart from anything else on the road.

**Performance:**
Committed to breathtaking power that also allows us to breathe more freely, our engineers are pushing the limits of electric performance and range. Designed to be highly modular, our Variable Platform Architecture (VPA) securely houses the battery, powertrain and the FF Echelon Inverter – our first patent.

**Technology:**
Everything about our cutting-edge technology was created to make your life more connected, more engaging, more effortless. We designed our A.I. and user interaction to be as intuitive and convenient as possible, giving you back more of your invaluable time.

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**HBM Test and Measurement**

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**Booth Representative:** Ed Russo

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The Industry Applications Society, as a transnational organization, is interested in advancement of the theory and practice of electrical and electronic engineering in the development, design, manufacture and application of electrical systems, apparatus, devices and controls to the processes and equipment of industry and commerce; promotion of safe, reliable and economic installations; industry leadership in energy conservation and environmental, health, and safety issues; creation of voluntary engineering standards and recommended practices; and the professional development of its membership.

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Karma Revero

PERFORMANCE
The Revero delivers exhilarating performance thanks to its lightweight aluminum spaceframe construction and the near limitless torque produced by the vehicle’s dual electric motors. Acceleration off the line is linear, smooth and swift.

DRIVABILITY
Responsiveness has never felt so supple. The low, centrally-mounted battery pack gives the Revero an exceptionally low center of gravity and near 50:50 weight distribution. The auto-leveling suspension system adjusts its stance when it needs to for perfect poise in all road conditions.

EXTENDED RANGE
The Revero’s lithium-ion battery powers its electric motors to turn the rear wheels – giving up to 50 miles of pure-electric driving range. After that, the gas-powered generator automatically engages to continue your journey. Should you find yourself at the end of the Revero’s 300-mile range, you have flexibility: you may recharge the lithium-ion battery or simply fill the gasoline tank and continue on to your destination.
LCS Company

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Booth Representative: Matt Ruvelson

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MacAUTO is the coordinating body for automotive research and education at McMaster University. The University’s numerous automotive-related research institutes and centers work with industry, government and academic partners in developing and commercializing new technologies including hybrid and electric vehicles, powertrains, and powertrain components and control.

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The design consulting services we offer cover all aspects of motor design from concept, performance optimization, through to test and prototype development. Our customers benefit from our years of experience in designing electric motors and in-depth knowledge of simulation techniques. Research and innovation is at the heart of what we do. We are active on several international research funded projects and have developed advanced motor solutions for the automotive and aerospace markets.

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NH Research, Inc. designs and manufactures power test instruments & solutions used to functionally test power & energy devices such as EV/HEV batteries, DC power supplies, converters, telecom rectifiers, chargers, adapters, grid tied inverters, stand-alone inverters and UPSs. NHR test equipment consists of power supply testers, power instruments such as AC and DC programmable electronic loads, regenerative battery test systems & battery simulator that provide multiple independent channels of charge/discharge testing on multiple battery modules, packs, DC regulators and motors. Flexibility to add more channels in parallel to support higher current requirements and also add channels can be done to increase channel count. Optional software packages are available and offer instrument & system level control to create cycle tests from basic to complex drive cycle testing for each channel or channel groups.
OPAL-RT is a world leader in real-time simulation and Hardware-in-the-Loop (HIL) testing equipment. OPAL-RT empowers engineers and researchers with accessible, cutting-edge, real-time simulation technology to accelerate the development of better products and more reliable energy transmission. Since 1997, industries including automotive, aerospace, power electronics and power generation have increasingly turned to OPAL-RT, transforming the company into a world leader in real-time simulation and Hardware-in-the-Loop (HIL) testing equipment for electrical, electro-mechanical and power electronics systems.

FROM IMAGINATION... TO REAL-TIME

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Plexim provides solutions for the design and test of power electronic and motor drive systems and their associated controls. Its flagship offering is the modeling software PLECS, available in the MATLAB/Simulink environment and as an independent platform. PLECS, known for its fast speed and robustness, includes a comprehensive component library comprising thermal, magnetic, and mechanical domains. The RT Box is a real-time simulation platform designed for Hardware-in-the-Loop (HIL) testing and Rapid Control Prototyping (RCP) that fully integrates into the PLECS software environment. The PLECS processor-in-the-loop (PIL) tool allows co-simulation of embedded code with an offline plant model.
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RTDS Technologies Inc., the exclusive supplier of the RTDS® Simulator, has been the world standard of real time digital power system simulation for over 20 years. Used by over 350 organizations in 43 countries worldwide, the RTDS Simulator has been established as the de facto method for testing the controls of high power systems, such as HVDC and FACTS. But it can do so much more for power electronics engineers. Today, the RTDS Simulator offers the fastest and most accurate solution for simulating power electronics in both high and low power applications. The controls for custom topology converters, drives, DERs, and microgrids can be tested in a closed loop using this powerful and flexible tool. Learn more about the RTDS Simulator at www.rtds.com.

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Booth Representative: Piyush Desai, Earl Fairall and David Miles

Software Motor Company (SMC) was founded in Silicon Valley to bring intelligence to electric motors, which consume over 45% of global electricity. SMC’s Smart Switched Reluctance Motor (SSRM) combines patented hardware and software control with modern IoT technologies to enable the most efficient, reliable, and intelligent motors on the market. SMC motors deliver energy savings of 20 to 50 percent compared to NEMA Premium Efficiency standards while providing full programmability and connectivity.
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TDK Lambda: High Power Division

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The IEEE Transportation Electrification Community coordinates broad and deep activities throughout the IEEE in the growing electrification revolution across transportation domains, including advances in electric and hybrid cars, more-electric ships and aircraft, rail systems, personal transport, and the motive, storage, power grid, electronic intelligence, and control technologies that make them possible. Creates leadership, professional development, standards development, and other opportunities for practitioners, researchers, students, and all IEEE members interested in electric transportation.
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