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Field of Energy Storage Premieres New Conference Format

Fraunhofer ISE is to Lead the Scientific Organization of the First ees Europe Conference in Munich, Germany

Experts from industry, research and organizations will get together in Munich to discuss the newest developments, innovations and trends in the energy storage sector at the upcoming ees Europe conference. From June 9-10, 2015, eight sessions are devoted to themes covering the entire value chain of energy storage technologies. The scientific organization of the conference will be managed by Fraunhofer ISE. The Institute will also be presenting its own research results on lithium ion battery formation. The first ees Europe conference is to take place at the same time as the established ees Europe exhibition in conjunction with Intersolar Europe, the world's leading exhibition for the solar industry.

The ees Europe conference celebrates its premiere from June 9-10, 2015 as a self-contained conference and accompanies the ees Europe exhibition for batteries and energy storage systems as well as Intersolar Europe. "With the conference, the electrical storage sector now has a platform where storage solutions for PV and other renewable energy applications as well as the topics of energy management and uninterruptible power supply (UPS) are addressed. The international exchange across all sectors generates a synergy effect that advances the entire industry," explains Dr. Matthias Vetter, department head of "PV Off-Grid Solutions and Battery System Technology" at the Fraunhofer Institute for Solar Energy Systems ISE in Freiburg and Chairman of the

Fraunhofer Institute for Solar Energy Systems ISE

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premiered ees Europe conference. The main themes to be addressed are electrical self-consumption in private homes and businesses, large storage systems for renewable energies and grid integration, safety and standards as well as selected topics in the field of production technology.

Scientific Highlights at the ees Europe Conference

R&D in the area of batteries and energy storage will intensify in the course of our energy system's transformation to renewable energy. "In the past year, the prices for solar electricity have dropped by one quarter, not least due to the latest research results and developments," says Markus Elsässer, CEO of Solar Promotion GmbH. Some of the newest scientific trends will be presented at the ees Europe conference: Fraunhofer ISE, for example, will introduce its most recent results on accelerated formation of lithium ion batteries. "In order to reduce the costs of these storage technologies, lithium ion batteries must be produced more cost-effectively. Formation, the process in which a defined charge/discharge sequence is carried out for the first time, is an important, but expensive and complicated, manufacturing step in battery production. Our research and development has enabled us to optimize this process," says Stephan Lux, head of "ServiceLab Batteries" at Fraunhofer ISE. Within the project "Protrak", Fraunhofer ISE simulates processes that take place during formation. Based on these investigative results, new procedures for formation have been developed that are much faster and also improve the characteristics of the lithium ion battery at the same time. Already first positive results are observed by the Freiburg scientists. Namely the battery cells, undergoing the new faster formation procedure evidence the same stability as those using the conventional procedure.

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About ees Europe

The ees Europe is Europe's largest exhibition for batteries, energy storage systems and innovative production. More than 300 exhibitors present their product offers, covering the entire spectrum of energy storage solutions from production through to specific user applications. In 2015, the ees Europe exhibition is accompanied by its own scientific conference for the first time. The premiered <u>ees Europe conference</u> takes place from June 9-10, 2015 at the International Congress Center Munich (ICM).

Text of the PI and photos can be downloaded from our webpage: www.ise.fraunhofer.de

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Employee working at a glove box at Fraunhofer ISE. She is filling electrolyte in lithium ion cells before formation. @Fraunhofer ISE

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