

Iceland special Batteries, Super Capacitors, Fuel Cells & EV's Seminar

August 18th -19th, 2016 – Iceland

The seminar program focuses on present and future needs of portable and stationary electrochemical energy sources and highlights the latest technological developments designed to satisfy application requirements and their value chains.

The program reviews primary, rechargeable, reserve batteries, fuel cells, ultra-capacitors systems and their accessories.

The special Iceland battery seminar takes a practical focus to Iceland, is tailored to Icelandic needs and points out potential business cases for Iceland in the value chain.

Especially for the Icelandic seminar, content in the modules fits the Iceland interests like grid storage, or high-density energy solutions including aluminum as material and more (e.g. shipping/drilling if applicable).

We will also include a special presentation with an outlook on Iceland's value chain positioning opportunities.

The seminar program reviews typical cycle life aspects of designing and manufacturing energy source solutions: from application energy requirements, power source electrical and mechanical design, cells selection, cells evaluation tests, battery prototype, acceptance tests, design and manufacturing techniques, testing, mass production, safety issues, transportation, use and disposal.

The program trains attendees on safety issues along the energy source solution cycle life.

The program focuses on grid storage, and Batteries, Super Capacitors, Fuel Cells and Metal Air systems for EV's.

Key Benefits

Batteries & Fuel Cells Seminar provides:

- Full review of current and future electrochemical energy sources.
- Training on cells selection, design, manufacturing, testing, safety, and transportation and disposal aspects of energy sources.
- Basic knowledge for new industry members entering the field.
- Expands the knowledge of industry members already working in the field.
- Training on Energy Sources Database software – a vital tool for optimal energy source design.

Seminar Program Topics

- Battery characteristics
- Primary cells & batteries
- Rechargeable cells & batteries
- Battery design process
- Battery safety
- Battery disposal
- The "smart battery"
- Oil & Gas & Geothermic drilling battery market
- Battery testing systems
- Energy storage for the grid
- Fuel cells
- Ultra Capacitors
- The E-Mobility revolution
- xEV's Batteries
- xEV's Fuel Cells and Metal Air systems
- xEV's battery swap
- xEV's Charging infrastructure

Seminar Schedule

August 18st & 19th, 2016

Seminar Location

Reykjavik
TBD

Local Partner

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Who Should Attend?

- Battery and energy sources users
- Pack assemblers
- Cell makers
- Energy sources suppliers
- Academic researchers
- R&D engineers
- Market researchers
- Safety supervisors
- Battery shippers and disposals
- E-Mobility industry members
- Others industry members

About Shmuel De-Leon

Shmuel De-Leon is Founder and CEO of Shmuel De-Leon Energy, Ltd.

Shmuel is a leading international expert in the business of Power Sources, Energy storage and Ev's.

Prior to founding the company, Shmuel held for over 20 years various positions as a power sources, engineering and quality control team manager.

Shmuel holds BSc. in mechanical engineering from Tel-Aviv University and MBA in quality control and reliability engineering from the Technion Institute in Haifa as well as an Electronic Technician's diploma.

Shmuel De-Leon Energy Ltd. provides unique tools for the energy sources industry, such as Consulting, Training, Conference organizer, Market research reports Market research reports Energy Sources Database, Market research reports, Energy Sources Solutions, Industry News weekly newsletter.

Seminar Pricing

	Commercial	Academic **
Icelandic Special*	starting at € 500 + VAT	
Regular price (early bird until 1st July available)	€ 929 + VAT	€ 465 + VAT

* price decreases with the number of Icelandic participants, starting at EUR 500* (+VAT if applicable) with 20 participants. With your help, we can go down to a rate of 300** Euros (+VAT if applicable) per (Icelandic) participant with 35** participants.

** Copy of an Academic Institute ID is required

*** 10% discount for 3+ group attendees (only for regular price)

**** Pricing includes hard copy print out of all seminar presentations & refreshments

Sponsor & Exhibit Opportunities

Exhibitor and Sponsor will receive:

- 1 roll-up display at the seminar room
- Advertisement materials on a side table in the seminar room
- Logo in the seminar program, agenda and seminar web site
- Extra 10% discount on attending the seminar

Pricing: € 475 + VAT

Thursday, August 18, 2016

This is a draft agenda and subject to change. We add more Iceland specific content or point out areas of interest in the next update.

08:00 – 08:30 Registration

08:30 – 09:00 IceVenture Presentation – Jumpstarting the ecosystems and value chain positioning for Iceland

This includes a view on e.g. production, software and high energy density solutions and EV.

09:00 – 09:30 Module 1: Battery Characteristics

This session introduces a historical prospective of batteries, detailed battery definitions and features (electrical, mechanical, standards, etc.). Module 1 lays the foundation for the attendants to share a common “battery language” and provides all the background needed for upcoming modules.

09:30 – 10:30 Module 2: Primary cells & Batteries

This session reviews and compares primary battery chemistries (Alkaline Manganese Dioxide, Zinc Carbon, Zinc Chloride, Silver Zinc, Nickel Oxyhydroxide, Lithium Iron Disulfide, Lithium Iodine, Lithium Manganese Dioxide, Lithium Carbon Monofluoride, Lithium Sulfur Dioxide, Lithium Thionyl Chloride, Lithium Sulfuryl Chloride, Lithium Bromine Chloride and High Power Organic Lithium).

10:30 – 10:45 Coffee Break

10:45 – 12:15 Module 3: Rechargeable cells & batteries

This session reviews and compares rechargeable batteries chemistries (Nickel Cadmium, Nickel Metal Hydride, Rechargeable Alkaline, Lithium Ion and Lithium Polymer).

12:15 – 13:15 Lunch Break

13:15 – 14:15 Module 5: Battery Design Process & Optimization

This session introduces battery design processes (cell and raw materials selection, cell level testing, battery design documents, battery electrical, mechanical and safety design and final verification tests (electrical, mechanical, safety).

14:15 -15:15 Module 6 Oil & Gas & Geothermal battery market

15:15 – 15:30 Coffee Break

15:30 – 17:00 Module 7: Battery Safety

This session introduces the safety risks along the battery cycle life and provides safety guidelines for safety event elimination. Module 8 also addresses the procedures involved in handling safety events, including first aid.

Friday, August 19, 2016

09:00 – 09:25 Module 8: Battery Disposal

This session introduces battery disposal requirements and updates disposal status in Europe and the US.

09:25 – 09:50 Module 9: The "Smart Batteries"

This session introduces the “Smart Battery” technology, including single wire and smart battery communications bus and its advantages.

09:50 – 10:30 Module 10: Battery testing systems

This session introduces battery testing techniques, available systems and their features.

10:30 – 10:45 Coffee Break

10:45 – 11:30 Module 11: Energy Storage for the Grid

This session introduces and reviews the common energy storage systems for the grid. Focus is on high energy density and solutions around aluminum.

11:30 – 12:30 Module 12: Fuel Cells

This session reviews and compares fuel cell types and their market status (Alkaline, Molten Carbonate, Phosphoric Acid, Proton Exchange Membrane, Solid Oxide and Direct Methanol).

12:30 – 13:30 Lunch Break

13:30 – 14:15 Module 13: Ultra Capacitors

This session reviews and compares ultra capacitor types and their market status.

14:15 – 17:00 Module 14: EV Energy Solutions

This session introduces EVs driving range problem and energy solutions.

- The new electric automotive revolution
- EV Batteries
- EV Fuel Cells
- EV Metal Air systems
- EV Battery SWAP
- EV Charging infrastructure

**Pre-Registration Form - Energy Storage Seminar
August 18th – 19th , 2016**

Contact Details (*Required)

Company *	First Name*	Last Name*
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Title	City*	Zip Code*
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Street*	Country*	State
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Phone*	Mobile	Fax
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Email*

Date, Place & signature	Signing you agree to the terms and conditions
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*Please complete the registration form, sign it and return to:

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Or to:

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