SpectraPower™ | Shmuel De-Leon Energy Ltd

2nd Li-Ion-Solid Electrolyte & Lithium Metal (Liquid & Solid Electrolyte) Rechargeable Cell Manufacturing Seminar, January 21-22, 2020

This seminar focuses on the technology, design and manufacturing of rechargeable li-ion solid state electrolyte & lithium metal (solid & liquid electrolyte) cells. In practical sessions, cell assembly will be performed in hands-on training by starting with raw materials and going through to the final cell assembly, test and characterization.

The lecture program gives insights into the latest cell technology trends for materials and manufacturing equipment as well as state-of-the-art process technologies.

The seminar takes place on site at SpectraPower's Battery Lab in Livermore CA, USA. Livermore is a major winegrowing area 1 hour east of San Francisco.

Key Benefits

The seminar provides

- Theoretical & Practical sessions to learn about all li-ion solid state & lithium metal cells production steps
- Direct insight into a state of the art lithium rechargeable cell production line
- Supporting lectures with practical sessions technology, processes and machinery
- Updates on latest technology trends in lithium rechargeable batteries

Who Should Attend?

- Battery & Electrochemistry Industry Members
- Battery Material Makers Members
- Battery Manufacturing Equipment Makers
- New Technology Startups
- Potential Investors in lithium technology
- Academic Researchers
- Other Industry Members

Seminar Program Topics

Practical On-Site Sessions

- Electrode preparation
- Material handling
- Coating process
- Cell assembly
- Package sealing
- Formation process

Lectures

- Li rechargeable cell technology overview
- Lithium rechargeable manufacturing
- Solid Electrolytes for lithium batteries
- Solidstate Li metal battery equipment, processes, and cell teardown analysis
- Cell design
- High Energy Cathodes for Lithium Metal Rechargeable Cells
- Battery safety
- Next generation lithium metal and li-ion solid electrolyte technologies market review 2019
- Tear down & Analsys of Solid State Thin Film Cells

2nd Seminar Schedule

January 21-22, 2020

Seminar Location

SpectraPower LLC
460 Lindbergh Ave,
Livermore, CA 94551 USA

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Presented by SpectraPower and Shmuel De-Leon Energy **Day 1 – Tuesday, January 21, 2020**	
8:00-8:30 am	Registration, Continental Breakfast, and Networking SpectraPower LLC, 460 Lindbergh Ave, Livermore, CA 94551 USA
8:30-9:00 am	Introduction Welcome, Introduction and Opening Remarks James Kaschmitter (SpectraPower) Speaker Introductions Shmuel De-Leon (Shmuel De-Leon Energy Ltd) Dr. Ernest Demaray (Demaray LLC), Assoc. Prof. Evan Reed (Stanford University), Steve Pierce (SpectraPower), Aubert Demaray (SpectraPower), Dr. Sumin Zhu (Ampcera), Dr. Emery Brown (Ampcera)
9:00-10:00 am	Fundamentals of Rechargeable Lithium Battery Technology **James Kaschmitter (SpectraPower)**
10:00-10:15 am	Morning Break
10:15-11:15 am	Battery Safety Shmuel De-Leon (Shmuel De-Leon Energy Ltd)
11:15-12:15 am	Modelling and Selection of Solid-State Electrolytes **Assoc. Prof. Evan Reed (Stanford University)**
12:15-1:00 pm	Lunch in Conference Area
1:00-2:00 pm	Manufacturing of Lithium Rechargeable Batteries **James Kaschmitter (SpectraPower)**
2:00-3:30pm	Lithium Metal Rechargeable Cell Design and Fabrication **Steve Pierce (SpectraPower)**
3:30-3:45 pm	Afternoon Break
3:45-4:00 pm	Laboratory Safety Training **Aubert Demaray (SpectraPower)**
4:00–4:30 pm	Electrode Slurry Prep and Coating - Practical Training **(SpectraPower)**
4:30-5:00 pm	Electrode Preparation - Practical Training **(SpectraPower)**
5:00-6:00 pm	Break and transition to Dinner at a nearby restaurant
6:00 pm	Dinner and Networking

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Day 2 – Wednesday, January 22, 2020	
8:00-8:30 am	Continental Breakfast and Networking SpectraPower LLC, 460 Lindbergh Ave, Livermore, CA 94551 USA
8:30-10:00am	Overview and Performance of Solid-State Microbatteries Equipment and Processes for Solid-state Lithium Metal Batteries (PVD equipment) **Dr. Ernest Demaray (Demaray LLC)**
10:00-10:15 am	Morning Break
10:15-11:30 am	Lithium Rechargeable/Solid State Battery Markets 2019 **Shmuel De-Leon (Shmuel De-Leon Energy Ltd)**
11:30-12:00 am	Beyond Li-Ion Cell market 2019 (>300 Wh/Kg Cells) **Shmuel De-Leon (Shmuel De-Leon Energy Ltd)**
12:00-12:45 pm	Lunch in Conference Area
12:45-1:45 am	Materials for Solid-State Electrolytes **Dr. Sumin Zhu (CEO) and Dr. Emery Brown (Sr. Scientist) (Ampcera Inc)**
1:45-2:45 am	Tear Down & Analysis of Solid-state Thin film Li Metal Cell **Dr. Ernest Demaray (Demaray LLC)**
2:45-3:00 am	Afternoon Break
3:00-4:15 pm	Single & Multi-layer Li Metal Rechargeable Pouch Cell Assembly with liquid electrolyte – Practical Training **(SpectraPower)**
4:15-5:00 pm	Li-Ion Solid state Cell, Lithium Metal Rechargeable Cell Formation and Testing – Practical Training **(SpectraPower)**
5:00-5:30 pm	Q&A and Summary of Seminar **All**
5:30 pm	End of Seminar

Seminar Pricing

Registration

Commercial Registration:	$3000 + VAT
Academic and Government employee registration*:	$1500 + VAT

* Full time students only. Copy of Academic Institute ID is required, Government employee ID

10% discount for 3+ group attendees.

The number of participants is limited.

Pricing includes:

1. Hard copy print-out of all presentation except the market report presentation. The attendants will not get a copy of the two market reports that will be presented by Shmuel De-Leon at the seminar. The participants will be able to purchase a copy with 25% discount.
2. Continental breakfast, lunch and refreshments for both days
3. Dinner on the first evening

Event Registration and Release of Liability Form:

All attendees will be required to sign an Event Registration and Liability form in order to participate in the seminar. All Attendees who wish to participate in the practical training sessions must attend the Laboratory Safety training on the first day and follow the safety guidelines and instructions of SpectraPower personnel.

Booking is concluded after receiving confirmation from SpectraPower that they have received Payment and a signed copy of the Event Registration and Liability form.

Cancellation of registration:

Written notice only will be accepted:

Until December 30th, 2019 – 50% refund

From January 1st, 2020 – No refund

Remarks:

In case that the seminar will have to be cancelled due to force majeure, due to speaker's preventions or due to lack of participants, the participants will be informed accordingly no later than 7 days before the event. The seminar fee will be refunded in this case.

Contact Person for registration:

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SpectraPower LLC
460 Lindbergh Ave
Livermore, CA 94551
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650 269 7297

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Registration Form

Company*

First Name*

Last Name*

Title

City*

Zip Code*

Street*

Country*

State

Phone*

Mobile

Email*

Fax