www.knowledgefoundation.com

5th Annual International Conference

Lithium Mobile Power℠ 2009

November 12-13, 2009
Boston, MA USA

Advances in Lithium Battery Technologies for Mobile Applications

KNOWLEDGE FOUNDATION
TECHNOLOGY COMMERCIALIZATION ALLIANCE

Participating Organizations:

ABT Advanced Battery Technology
ALTAIR NANO
Boston Power
Battery Power Products & Technology www.BatteryPowerOnline.com
electrovaya
Micro Power
Motorola
PolyPlus
thermal hazard technology
Vecture Inc. design & manufacturing

www.knowledgefoundation.com

Lithium Mobile Power℠ 2009

Advances in Lithium Battery Technologies for Mobile Applications

Call for Sponsors & Exhibitors

SPONSORSHIP AND EXHIBIT OPPORTUNITIES

Attendees at this event represent the very top industry, government and academic researchers from around the world and provide an extremely targeted and well-qualified audience for exhibitors and sponsors. Your participation as an exhibitor or sponsor is the most cost effective way to gain high quality, focused exposure to these industry leaders. Among other benefits, sponsorship packages include your logo on marketing materials to promote your participation and expose your company to 10's of thousands of prospects prior to the program - in addition to the highly targeted audience we deliver at the event itself.

CONFERENCE SPONSORSHIPS

A variety of conference sponsorships are available which offer incremental levels of visibility to conference delegates at the event — as well as opportunities for marketing exposure prior to the event. Taking advantage of pre-conference options has the added benefit of getting your organization's name out to a large group of interested decision makers.

NETWORKING EVENT SPONSORSHIPS

These "mini" sponsorships offer representatives of your organization a dedicated opportunity to network with conference delegates — with your organization clearly recognized as the host of the event.

- Cocktail Receptions
- Dinner Banquets
- Luncheons
- Hospitality Suites

WORKSHOP SPONSORSHIPS

Your company may sponsor an instructional workshop (subject to approval) for delegates in conjunction with the conference. Highlight your organization's expertise! Delegate feedback indicates that these scientific/technical vehicles enhance retention of your organization's presence in their minds — increasing the potential for drawing customers long after the conference is over.

Call Craig Wohlers at (617) 232-7400 ext. 205 or email cwohlers@knowledgefoundation.com today for pricing information and customization options.

CALL FOR POSTER PRESENTATIONS

Industry and academic scientists are encouraged to submit poster titles for this event. One-page abstracts (8 1/2" x 11" with 1-inch margins) must be submitted by email to submit@knowledgefoundation.com no later than **October 8, 2009** for inclusion in conference documentation. Additional poster submissions will be accepted until **October 25, 2009** but may not be included in conference documentation. *Note: If you are submitting a poster, you MUST be registered and paid in advance to ensure that a posterboard is reserved for you.*

COMPREHENSIVE DOCUMENTATION AVAILABLE

Nothing can substitute the benefits derived from attending **Lithium Mobile Power 2009**. But if your schedule prevents you from attending, this invaluable resource is available to you. Please allow 3-4 weeks after the conference date for delivery. *Note: Documentation is included with conference fee for registered delegates.*

Lithium Mobile Power[sm] 2009

Advances in Lithium Battery Technologies for Mobile Applications

CONFERENCE AGENDA

Thursday, November 12, 2009

8:00 *Registration, Exhibit Viewing/Poster Setup, Coffee and Pastries*

8:50 **Organizer's Welcome and Opening Remarks**

APPLICATION DRIVEN Li-ION BATTERY DEVELOPMENT

9:00 **Materials and Design Strategies for High Power Li-Ion Batteries for HEV and PHEV**

K.M. Abraham, PhD, Chief Technology Officer, E-KEM Sciences; and Research Professor, Northeastern University

This presentation will review the state of the art in material choices for cell and battery construction, performance, safety and price of high power Li-ion batteries for HEV and PHEV applications

9:45 **PHEV Battery Performance in a Vehicle to Grid (V2G) Utilization Scenario: A Technological and Economic Analysis**

Jay Whitacre, PhD, Assistant Professor, Materials for Electrochemical Technologies Lab, Dept Materials Science and Engineering, Carnegie Mellon Univeristy*

This talk will describe work done to examine the degradation of common $LiFePO_4$-based Li-ion batteries when used in urban driving conditions combined with afternoon grid-level load shifting (V2G). A technical evaluation of cell performance will be given and an economic model will be presented that shows the potential benefits of using V2G/smart grid technology with PHEV battery packs. *In collaboration with: S.Peterson and J.Apt, Carnegie Mellon University

10:15 **Transforming Lithium Ion Superpolymer Battery Technology from the Lab to Commercial Electric Vehicles**

Sankar Das Gupta, PhD, Chairman & Chief Executive Officer, Electrovaya Inc., Canada

This paper will explore the steps and lessons that Electrovaya has taken with regard to transforming its technology innovations from the lab into commercial electric vehicle applications. Clean transportation is enabled by its energy storage solution. Electrovaya's Lithium Ion SuperPolymer technology has transformed over the years as it has evolved with underlying chemistries, from the earliest days of cobaltate, to phosphate, to manganese. In addition to the fundamentals in nanomaterials and new chemistry innovations, Electrovaya has also focused on the broader elements that are necessary for commercialization of electric vehicle product. This is the focus of this paper. Specifically, it will investigate strategies to overcome thermal variance, vibration tolerance, packaging, and scale-up issues.

10:45 *Networking Refreshment Break, Exhibit/Poster Viewing*

11:15 **Changing the Way the World Views Portable Power**

Christina Lampe-Onnerud, PhD, Founder and CEO, Boston-Power Inc.

In this presentation, we will share insights into user demand for untethered mobility and the advancements in lithium-ion battery technology poised to fulfill that requirement. New benchmarks in cycle life, performance, reliability, fast charge, environmental sustainability and safety will be highlighted. We will also discuss a new industry model where battery providers work directly with designers of end-products, ranging from portable electronics to vehicles, to deliver whole new generations of products optimized to meet customers' increasing demands for anywhere, anytime mobility.

11:45 **Beyond Li-Ion, A Strategy for Step-Change Improvement in Energy Density**

Steven J. Visco, PhD, Chief Technical Officer and Vice President, PolyPlus Battery Company

The invention of protected lithium electrodes (PLEs) enables the development of a new generation of ultra-high energy density batteries. These electrochemical systems are semi-fuel cells where a PLE is coupled with an external redox species supplied to the positive electrode (i.e. oxygen or water). Isolation of the oxidant from the battery housing is expected to yield benefits in terms of safety in that the energy for the cell reaction is not contained in the battery itself; this may be particularly important for large traction batteries. The unique aspects of these PLE cells offer step-change improvements in batteries on land, in the sea, and in medical devices. The state-of-the-art will be covered in the presentation.

12:15 **Session Q&A and Concluding Discussion**

12:30 *Luncheon Sponsored by the Knowledge Foundation's Membership Program*

MATERIALS CHALLENGES - ELECTRODES

2:00 **Lithium-Ion Batteries Using Ni-Based Cathode Material for High Capacity and Reliability**

Yasuhiko Hina, Staff Engineer, Lithium-Ion Battery Business Unit, Energy Company, Panasonic Corporation, Japan

At this time, many mobile devices powered by Li-ion batteries require high energy density. Our solution to satisfy this advanced technology requirement takes advantage of Ni-based cathodes already in use in our Li-ion battery. We will report on the features and benefits of this advanced Ni-based cathode technology.

2:30 **High Energy Density Lithium Cells**

Sébastien Patoux, PhD, DRT/LITEN/DTH/LCE, French Atomic Energy Commission - CEA, France

The presentation will first focus on high capacity

($LiMO_2 \cdot LiMn_2O_3$) layered oxides as a promising solution for the positive electrode of Li-ion batteries. We will present the latest results obtained at CEA-LITEN on this family of materials, with very good reversible capacity at the level of 250mAh/g at room temperature. At the negative electrode, the interest in silicon-carbon composites has been abundantly discussed in the literature. Here, several synthesis routes investigated at CEA-LITEN, from CVD process to mecano-chemical route, an others, will be discussed together with optimization of the electrode making. Results on 2-3Ah prototype cells will finally be reported with a significant improvement in energy density.

3:00 Nano-$Li_4Ti_5O_{12}$ Based Lithium Ion Battery for HEV and PHEV Application

Veselin Manev, PhD, Director R&D, Altairnano Inc.

The performance of high specific power & high rate capability cells with nano-$Li_4Ti_5O_{12}$ negative electrodes developed in particular for HEV and PHEV application will be discussed. Data for capacity retention during continuous discharge at up to 80C rate corresponding to 45 sec cell's full discharge duration will be displayed. The cycle life in excess of 25,000 cycles, at 8C charge/discharge rate & 100% DOD will be presented. Particular attention will be paid on the excellent calendar life performance of Altairnano's $Li_4Ti_5O_{12}$ based cells. A data from accelerated calendar life test suggesting capacity fade below 1% after 25 years calendar life at room temperature will be displayed. Finally the results from safety tests performed on these cells showing no safety events will be displayed.

3:30 Novel Materials Development for High Specific Energy Li-Ion Cells

Ratnakumar Bugga, PhD, Principal Member Technical Staff, Electrochemical Technologies Group, Jet Propulsion Laboratory / CalTech

Abstract not available at time of printing. Please visit www.knowledgefoundation.com for the latest Program updates

4:00 *Networking Refreshment Break, Exhibit/Poster Viewing*

APPLICATION DRIVEN Li-ION BATTERY DEVELOPMENT - II

4:30 Large Format Li-Ion Batteries Development at Leclanché

Karl-Heinz Pettinger, PhD, Chief Executive Officer and Director, Leclanché Lithium GmbH, Germany

Lithium-ion batteries are becoming more and more important in the world market of energy devices. The applications of a new generation of lithium ion cells goes from automotive to solar, passing through all telecom and standby/emergency applications. All of these and other possible application areas share the same need for reduced material costs, long life, very high safety and increased utilization temperature range. Leclanché has developed large format Li-ion cells for diverse applications. Various cell sizes (10-20 Ah) are currently available and those cells are the building blocks for different batteries design adapted for costumers. In the present paper, we would like to present some development trends and the performance of large format Li-ion cells in terms of specific energy, power and life.

5:00 Ambient Operation of Li/Air Batteries

Jason Zhang, PhD, Chief Scientist, Battery Technology Energy & Environment Directorate, Pacific Northwest National Laboratory

Li/air batteries have attracted significant attention recently because their theoretical specific energy is much higher than other battery systems. Most of previous works on Li/air batteries have been done in pure oxygen environment. However, ambient operation is required to realize the full potential of Li/air batteries. Our works on primary Li/air batteries operated in ambient conditions will be reported in this presentation. Various factors (including electrolyte selection, oxygen selective membranes, and high capacity electrode preparations) which affect battery operations will be analyzed. At last, the main challenges on the ambient operation of Li/air batteries will be discussed.

5:30 High Energy Density Li/CF_x Battery for Soldier Portable Power Sources

Sheng S. Zhang, PhD, Research Chemist, Sensors and Electron Devices Directorate, U.S. Army Research Laboratory*

Lithium/carbon monofluoride (Li/CF_x with x=1) batteries are known to have the highest theoretical specific capacity among all commercially available primary lithium batteries. These batteries are being developed by the Army to reduce the size of current BA-5590 battery packs for soldier portable power sources. Main problems of Li/CF_x batteries are the low power capability and the initial voltage delay, which are related to the intrinsically low electrical conductivity of CF_x material and the slow kinetics of Li-CF_x cell reaction. These problems result in heat generation in the discharge of Li/CF_x batteries, especially at high current rates or at low temperatures. In an ac-impedance spectrum, the slow kinetics is indicated by a high cell reaction resistance (R_{cr}) that is considered to be the main source for the heat generation of Li/CF_x batteries. In order to improve power capability of such batteries, we attempted two approaches: (1) thermal treatment of CF_x material in the presence of an organic compound or carbon back as an additional carbon source to form carbon subfluorinate ($CF_{x-\delta}$) that is known to have better power capability, and (2) use of a $LiBF_4$-AN (acetonitrile)/BL (γ-butyrolactone) electrolyte in which the reactivity of metal lithium with AN is suppressed while the substantially high ionic conductivity is remained. In this presentation, we report improvement on the discharge performance of Li/CF_x batteries by these two approaches.
*In collaboration with: D.Foster and J.Read

6:00 *End of Day One*

Friday, November 13, 2009

8:00 *Exhibit Viewing/Poster Setup, Coffee and Pastries*

MATERIALS CHALLENGES - ELECTROLYTE

9:00 Electrolyte Solution for Li Ion Batteries

Doron Aurbach, PhD, Professor, Head of Electrochemistry Group, Dept of Chemistry, Bar Ilan University, Israel

We review in this talk the main families of solvents relevant to Li ion batteries and the Li salts available as electrolytes. Matching solution compositions to the types of system used (e.g. high voltage systems, batteries with Li metal anode, batteries for low temperatures) is thoroughly discussed. Main electrode-solutions interactions and surface chemistry in conventional & advanced Li ion batteries is reviewed. Thermal reactions of selected important systems are discussed as well. We describe families of ionic liquids that can be relevant to Li batteries and report about new work on this important topic. Possible use of additives for several purposes: electrodes surface modification, enhanced safety features, over-charge protection etc. with several working examples, is discussed as well.

9:30 Role of Electrolyte on the Formation of Electrode Surface Films in Lithium Ion Batteries

Brett Lucht, PhD, Professor of Chemistry, University of Rhode Island

The development of lithium ion battery (LIB) electrolytes with improved thermal and electrochemical stability for electric vehicle (EV) applications will be presented. Typical LIB electrolytes have poor thermal stability. Significant energy fading occurs after several years. We have conducted an analysis of the reactions of common electrolytes on the surface of the electrodes after initial formation cycling and upon accelerated aging. Additives and novel salts were designed to improve performance.

10:00 Rechargeable MnO_2 in Aqueous Lithium Electrolyte: Good News and Bad News from a Battery Perspective

Manickam Minakshi, PhD, Senior Research Fellow, Dept of Extractive Metallurgy, Murdoch University, Australia

A new class of rechargeable manganese dioxide electrode (MnO_2) in aqueous electrolyte is described. Intercalation of lithium from the LiOH electrolyte into the vacant sites of a host MnO_2 has been achieved electrochemically is good news. The formation of a lithium carbonate layer from a LiOH electrolyte acts as a barrier for protons while permitting lithium ion insertion in aqueous solutions forming lithium intercalated manganese dioxide (Li_xMnO_2) upon discharge. This novel mechanism may be a key in transferring primary to secondary batteries using LiOH as electrolyte.

10:30 *Networking Refreshment Break, Exhibit/Poster Viewing*

SAFETY, TESTING, PERFORMANCE

11:00 Lithium Battery Platform Hazard Evaluation and Criteria

Clinton Winchester, PhD, Group Leader & Senior Technologist, Naval Surface Warfare Center (NSWC)*

The Navy has an active risk reduction and risk assessment technical effort aimed at lithium battery powered systems. Recent evolutions are aimed at quantifying risks to platform and personnel safety posed by "large format" lithium batteries, defined as large either as an accumulation of large high capacity cells or an accumulation of distributed batteries that equal equivalent energy storage. These large batteries and battery systems are similar or greater in size to electric vehicles and plug-in electric vehicle systems, utilize significantly more hazardous chemistries, and involve non-ideal conditions for operation and storage. The Navy has undertaken an aggressive risk reduction activity to quantitatively understand, test, and models reactions of large format lithium batteries to determine the survivability and mitigation of these battery fires, chemical releases. This effort will support risk analysis of battery driven events under a variety of ship and submarine casualty models. We will describe the recent events driving the expansion of quantitative, technical assessments in defining risks and casualties, as well as describing various results and initial finds. *In collaboration with: D.Fuentevilla, E.Shields, J.Banner, NSWC Carderock; J.Dow, Naval Ordnance Safety and Security Activity; and D.Cherry, Naval Sea Systems Command

11:30 Safe Lithium Battery with High Capacity and High-Energy Density Power Solution

Xinrong (Ron) Wang, PhD, Principal Scientist, Ultralife Corporation

The demand for lightweight batteries with high power and high energy density for mobile/portable applications is continuously growing. For military and commercial applications, the need for higher power systems is increasing. These systems will require safety, wide operating temperatures and readiness. We will present a unique cell design with lithium carbon fluoride-manganese dioxide hybrid chemistry. This system placed highest among all batteries at the Wearable Power Competition sponsored by the US government, demonstrating its superior power and safety capabilities.

12:00 Lithium Battery Safety and Performance; Applications of Calorimetry

Martyn Ottaway, PhD, Founder, Thermal Hazard Technology, England

As lithium batteries are being applied to more and more applications - commencing with small batteries (e.g. cell phones and laptops) culminating in large batteries, modules and packs (e.g. satellites and cars), there are many and varied challenges that relate to their performance and safety. A key aspect is heat release and thermal management. Calorimetry facilitates a quantitative understanding of thermal (and pressure) issues. Calorimetry has been employed to
(i) Determine effect of heat on and the heat generated by Li

Batteries; (ii) Understand aspects such as chemistry change, effects of use and ageing, problems with abuse - overcharging, penetration and crush; (iii) Quantify such effect on all battery size and to measure the thermal distribution over the battery surface; (iv) Measure the pressure generated internally within the battery and externally with the ability to analyze gas products. This presentation will focus on newer areas of applications such as thermal management of automotive packs, rapid discharge issues for vehicle and power tools batteries.

12:30 *Lunch on Your Own*

SYSTEM DESIGN & INTEGRATION

2:00 Battery Pack Design to Prevent Cell Damage in Transient Thermal Gradients

Robin Sarah Tichy, PhD, Technical Manager, Micro Power Electronics*

Users in all markets are demanding increased functionality in ever lighter and smaller packages, but industrial, military and medical equipment is often exposed to more extreme temperatures than consumer electronics, and in addition, the battery functioning at these temperatures or after exposure to temperature extremes is not just an expectation; it is a requirement. Extremely high temperature operation or survival provides a significant challenge for cells based on lithium chemistry. The upper range of safe operation for Li-ion cells is 60˚C, but traditional Li-ion chemistries present a significant danger if they are even exposed to temperatures above their thermal runaway point. Some new chemistries, however, have been introduced that are less reactive at high temperature. The new chemistries that are widely commercialized have cathodes based on iron phosphate, manganese spinel or a solid solution of Ni, Co and Mn oxide. The polymer separator will certainly melt if the cells are exposed to very high temperatures, rendering the battery inoperable, but there is some room between this temperature and the thermal runaway temperature. Therefore, these cells have the potential to meet the needs of applications where the battery must survive a very high temperature for a short period of time if the cells are protected. Our thermal modeling demonstrates that a battery pack can be designed to protect the cells from temperatures well over 100˚C for a short period of time. We will present a thermal model of cells enclosed in a battery pack and show how the packaging can be designed for protection in transient thermal gradients. The original dynamic heat transfer model will be discussed and verification of both the model and the battery pack design with a thermal chamber will then be presented.
*In collaboration with: R.Meyer, T.Sweetland, Micro Power Electronics; and C.Biber, Thermal Design

2:30 Internal Short Circuit in Li-Ion Cells

Hussein Maleki, PhD, Staff Scientist, Motorola Energy Systems Group, Motorola

Today's Li-ion cells using $LiCoO_2$ as cathode material are potentially vulnerable to internal short circuit (ISCr). We have investigated the effects of ISCr on thermal stability of Li-ion cells of various sizes (130 - 1100 mAh) using a combination of experimental (small nail penetration, small indentation, and cell pinch), thermal modeling, and IR-imaging. Among these, only the cell pinch test provides reasonable approximation of a high risk ISCr event. ISCr location plays a critical role in the consequences of an ISCr event. The effects of cell capacity and state of charge on ISCr are also evaluated.

3:00 Battery Age, Aging and Health

Bor Yann Liaw, PhD, Hawaii Natural Energy Institute, SOEST/University of Hawaii at Manoa

The paper will discuss a comprehensive approach to address the framework of battery service life issue. By clarifying the definition, we shall define the test protocols and necessary data collection and analysis for such a comprehensive approach to explore the possibility of prognosis.

3:30 *Networking Refreshment Break, Exhibit/Poster Viewing*

3:45 Designing the Battery Management System (BMS)

Ken Chisholm, Vice President of Engineering, Vecture Inc., Canada

The presentation provides an informative and useful appreciation of the considerations, methods and realisation of the battery management system (BMS). Safety, energy management (fuel gauging), cell balancing and embedded charging are considered. Other system functions such as DC/DC conversion are briefly discussed with the pack becoming a wider utility sub system component. The realisation of the BMS in a hot cramped world (heat, space & connectivity) is reviewed. Completing the presentation a discussion on assembly and testing of the battery pack.

4:15 $LiFePO_4$ Nonlinear Wave Phase Shift and High Order Frequency Modes for Next Generation Rechargeable High Power Li-Ion Battery System Design

Lynda Amirouche, PhD, Senior Product Scientist, Nano-TechPower Inc.

The Li-ion rechargeable battery for the future auto industry, telecoms, military, medical and portable consumer electronic devices emerged as the primary efficient high energy density storage technology of choice. Nano-TechPower explores a new advanced high power density Li-ion battery design technology based on MIT's nonlinear wave intercalation dynamics. The development within this fundamental new phase shift and nonlinear higher order frequency modes of ion intercalation at the composite eco-friendly and thermally stable cathode level $LiFePO_4$. And to address manufacturing challenges and solutions over shocking results that a very small drops in Li capacity in the order of magnitude of 2% could result in 50% capacity power fading due to cathode surface defect, and also to revolutionize IC's integrated circuitry battery monitoring and diagnostics as well as Li-ion batteries integrated fuel gauges.

4:45 Selected Oral Poster Highlights/Concluding Discussion

5:15 *End of Conference*

For the latest program updates go to:
www.knowledgefoundation.com

5th Annual International Conference

Lithium Mobile Power 2009

Advances in Lithium Battery Technologies for Mobile Applications

November 12-13, 2009
Boston, MA USA

Knowledge Foundation Technology Commercialization Alliance
18 Webster Street
Brookline, MA 02446 USA

PRSRT STD
U.S. Postage
PAID
Boston, MA
Permit #
11

Please DO NOT Remove MAILING LABEL, Please make ADDRESS CORRECTIONS on label

KNOWLEDGE FOUNDATION
TECHNOLOGY COMMERCIALIZATION ALLIANCE

Bookmark our website at
www.knowledgefoundation.com
REGISTER ONLINE!

REGISTRATION FORM

3012 ONLINE

Please register me for	Member	Non-Member
❑ Commercial *(November 12-13, 2009)*	❑ $1019	❑ $1199
❑ Academic/Government *(November 12-13, 2009)**	❑ $679*	❑ $799*
❑ Poster Space Reservation	❑ $65	❑ $65

Become a member of the Alliance & take 15% off your registration fee

❑ I would like to become a member of the Knowledge Foundation Technology Commercialization Alliance:
❑ $229/yr Individual Commercial Member **❑ $49/yr Individual Student Member**
❑ $169/yr Individual Government/Academic Member

❑ I cannot attend, but please send the conference documentation.
❑ Enclosed is my check for $99. ❑ Invoice Me

❑ Enclosed is a check/bank draft for US$__________

❑ Invoice me ❑ Charge my Credit Card: ❑ VISA ❑ MC ❑ AMEX in the amount of US$__________

Card #:____Exp.: ____________________

❑ Please send me information on exhibit and sponsorship opportunities.

Name: ____

Job Title: ____

Organization: ____

Division: ____

Address: ____

City/State/Zip: ____

Tel:______________________________Fax: ____________________

Email: ____

*The academic/government rate is extended to all participants registering as full time employees of government and universities. To receive the academic/government rate you must not be affiliated with any private organizations either as consultants or owners or part owners of businesses.

FAX, MAIL, CALL, E-MAIL TO:

The Knowledge Foundation, Inc.
18 Webster Street
Brookline, MA 02446 USA
Tel: (617) 232-7400
Fax: (617) 232-9171
E-Mail: custserv@knowledgefoundation.com

Payment: All payments must be made in U.S. funds drawn on a U.S. bank. Please make check(s) payable to The Knowledge Foundation, Inc. and attach to the registration form even if you have registered by phone, fax or e-mail. To guarantee your registration, payment must be received prior to the conference. Confirmation of your booking will follow.

Discount Accommodations and Travel: A block of rooms has been allocated at a special reduced rate. Please make your reservations by October 10, 2009. When making reservations, please refer to the The Knowledge Foundation. Contact The Knowledge Foundation if you require assistance.

Venue: Hilton Boston Back Bay
40 Dalton Street
Boston, MA 02115

For Hotel Reservations Contact:

Andersen Travel
Phone: (508) 429-6494 or 1-800-229-6494
Fax: (508) 429-7380
Email: kramer@andersentvl.com

Substitutions/Cancellations: A substitute member of your company may replace your attendance at any time at no charge if you find your schedule prevents you from attending. Please notify us immediately so that materials can be prepared. If you do not wish to substitute your registration, we regret that your cancellation will be subject to a $100 processing fee. To receive a prompt refund, we must receive your cancellation in writing 30 days prior to the conference. Unfortunately cancellations cannot be accepted after that date. In the event that Knowledge Foundation cancels an event, The Knowledge Foundation cannot resume responsibility for any travel-related costs.

Unable to Attend?

You can purchase a full set of conference documentation. Simply check the box on the registration form and send it to us along with your payment. Please allow 4 weeks after the conference date for delivery.