

April 30-May 2, 2008 Atlanta, GA USA Portable & Micro Fuel Cells for Commercial & Military Applications





www.knowledgefoundation.com



CALL FOR SPONSORS, EXHIBITORS & POSTERS

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 preconference 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
- Luncheons
- Dinner Banquets
- 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 Lindsay Kennedy at (617) 232-7400 ext. 210 or email lkennedy@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 $(8 \frac{1}{2}'' \times 11'' \text{ with 1-inch margins})$ must be submitted no later than **April 7**, **2008** for inclusion in conference documentation. Additional poster submissions will be accepted until April 25, 2008 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 Small Fuel Cellssm 2008. 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.



For complete membership information go to: www.knowledgefoundation.com



CONFERENCE AGENDA

Special 1-day Symposium & Panel Discussion **Fuel Cells & Lithium Ion Batteries: Competition or Cooperation** Building Synergy Towards Hybrid Power Systems

This 1-Day Symposium will provide an interdisciplinary review, address the major issues and the current state-of-the-art in:

- Materials Development
- Technology Advancement
- Components Design and Compatibility
- System Integration and Performance
- Degradation, Safety, Reliability and Cost
- Application and Commercialization Toward Scale Up Production

as applied in various Li-ion batteries and fuel cell systems. In addition advances in the arena of hybrid battery/fuel cell systems in concert with other technologies will be discussed.

Case studies surveying comparable and/or mutually replaceable aspects of all these technologies including their increased use in small and medium scale portable devices to the present thrust towards safe, cost-effective and reliable applications will be presented.

Wednesday, April 30, 2008

SYMPOSIUM AGENDA

- 9:15 Registration and Refreshments
- 10:00 12:30 Presentations and Case Studies

12:30 Lunch

- 2:00 4:30 Presentations and Case Studies (cont'd)
- 4:30 PANEL DISCUSSION Fuel Cells / Lithium Ion Batteries / Hybrid Power Systems: Different Problems - Common Solutions
- 5:15 Concluding Remarks, End of Symposium





PORTABLE & MICRO FUEL CELLS FOR COMMERCIAL & MILITARY APPLICATIONS

April 30-May 2 2008

CONFERENCE AGENDA

Main Conference

Thursday, May 1, 2008

- 8:00 Registration, Exhibit Viewing/Poster Setup, Coffee & Pastries
- 8:35 Organizer's Opening Remarks

APPLICATION DRIVEN FUEL CELL DEVELOPMENT

Department of Energy Polymer Electrolyte 8:45 Membrane (PEM) Fuel Cell R&D Activities

Terry Payne, PhD, PE, Technology Development Manager, Hydrogen, Fuel Cell & Infrastructure Technologies Program, The U.S. Department of Energy

Though the DOE Hydrogen Program emphasizes polymer electrolyte membrane (PEM) fuel cells in passenger vehicles, the program also supports fuel cells for portable power applications where earlier market entry would assist in the development of a fuel cell manufacturing base. This talk will provide an update on the status of DOE PEM fuel cell development particularly for portable power, ongoing efforts to eliminate barriers, and the path being pursued.

Portable Warfighter Power Technology 9:15

H. Scott Coombe, PhD, PE, Chief, Power Technology Branch, Army Power Division, Research, Development, & Engineering Command (RDECOM), U.S. Army

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

9:45 Reformed-Methanol PEMFC Systems: Advancing **Toward Commercialization**

Dave Edlund, PhD, Vice President, PEM & Reformer System Development, Protonex Technology Corporation

Liquid fuels are attractive for portable and remote fuel cell applications due to their ease and convenience of handling. Protonex has been aggressively developing a family of portable PEMFC systems, rated at 250 W_e, that incorporate a compact methanol / water reformer and integral hydrogen purifier. Both military and commercial applications are targeted. This paper will discuss the technical design and system specifications as well as testing that has been conducted to achieve acceptable levels of durability and ruggedness.

10:15 Direct Ethanol Fuel Cells: An Emerging Technology with Reduced Logistic Footprint for Military and Civil Applications

Michael Krausa, PhD, Fraunhofer Institute for Chemical Technology ICT, Germany*

Fuel cells could become a valuable tool to increase the running time of military devices or civil appliances. However, fuel logistics must be ready to introduce this technology. As we will show, ethanol offers in this regard a number of advantages compared to both hydrogen and methanol. Further on, we will show some recent developments, in particular in electro-catalysis, which should make this technology feasible in the near future *In collaboration with: Carsten Cremers

10:45 Refreshment Break, Exhibit/Poster Viewing

DMFC FOR MOBILE ELECTRONICS — FROM TECHNOLOGY THROUGH APPLICATION TOWARD MANUFACTURING INFRASTRUCTURE

11:15 Micro Fuel Cell System for Mobile Consumer **Electronic Devices**

Shuji Goto, and Tadashi Senoo, Manager, Materials Laboratory, Sony Corporation, Japan

We are developing micro fuel cell systems for mobile consumer electronic

devices. The system consists of series-connected direct methanol fuel cells, a fuel pump, a fuel cartridge, a Li-ion polymer battery and a power management circuit. We have achieved high power output, high energy efficiency and overall system size reduction by the combination of material development, power management algorithm development and component downsizing.

11:45 Mobile DMFC: Enhancement of Stack and System Stability

Inseob Song, PhD, Principal Manager-Fuel Cell Project, Samsung SDI Co, Ltd, Samsung, Korea*

Recent advancements on mobile DMFC system will be presented. Stack and system stability regarding the commercial aspects of Note PC application will be mainly concerned. Unique structure of fuel flow field and sealing component of 15W stack showed thermal stability in the range of user application. System design of 120Wh DMFC system having robust fuel management and system loop for continuous 10 hr operation will be discussed. And the author would like to share the characteristics of power performance of system showing that this technology moves one step forward to commercialization. *In collaboration with: K.Choi, H.Cho, and H.Chang, Samsung Advanced Institute of Technology, Korea

12:15 Creating a Global Fuel Cartridge Manufacturing and Distribution Infrastructure

Carl Kukkonen, PhD, CEO, Direct Methanol Fuel Cell Corporation, a VIASPACE Company

No one will buy a fuel cell powered notebook computer or cell phone unless fuel cartridges are readily available. Similarly no company will bring out fuel cartridges unless fuel cell powered products are in the marketplace. Obviously the products must be coordinated. The presentation will address progress in developing and meeting safety standards, and obtaining regulatory approval to carry fuel cells and cartridges on airplanes. Cartridge standardization is another issue - will the industry develop similarly to printers where each printer has a separate cartridge design, or will it be more like disposable batteries with a few standard sizes. Global manufacturing and distribution issues will also be discussed, including economics, national preferences and language issues, and branding. It is important to remember that the portable electronics OEM is selling the fuel cell powered device, however the consumer that buys the notebook computer is the person that buys cartridges in the aftermarket.

12:45 Luncheon Sponsored by The Knowledge Foundation Technology Commercialization Alliance

SOFC

2:00 **ONEBAT: Micro-Solid Oxide Fuel Cells for Battery Replacement in Portable Electronics**

Jennifer L.M. Rupp, PhD, Institute for Nonmetallic Inorganic Materials, Department of Materials, ETH Zurich, Switzerland*

In the Swiss ONEBAT project micro-Solid Oxide Fuel Cells (µ-SOFCs) for replacement of batteries in portable electronics are fabricated. These are miniaturized solid oxide fuel cells in which the active fuel cell components anode, electrolyte and cathode - exist as thin films forming a free-standing membrane on a substrate. The total thickness of the fuel cell membrane is less than 1 μ m in thickness and of 200 μ m in diameter. First fuel cell membranes delivered more than 150 mW/cm² at 550°C, and gave by their obtained theoretical open circuit voltage of 1.06 V the proof-of-concept for the technology. These ONEBAT µ-SOFCs are integrated in a larger system with reformer, postcombuster and insulation, and will later operate on propane buthane fuel mixtures from gas-lighters. *In collaboration with: D.Beckel, H.Galinski, A.-B.Hütter, U.P.Mücke, R.Tölke, T.Ryll, B.Scherrer, and L.J.Gauckler

2:30 **Adaptive Materials and Portable SOFCs: Military Applications**

Aaron Crumm, PhD, President, Adaptive Materials Inc.

Adaptive Materials has been aggressively developing micro-tubular solid oxide fell cell technology for military applications over the last seven years. Often overlooked at the lower power levels, Solid Oxide Fuel Cell (SOFC) technology offers a key advantage for use in portable applications; commercially available

©2008 Knowledge Foundation. Agenda, times and titles of presentations are subject to change. Please visit www.knowledgefoundation.com for the latest Program updates.



Main Conference (cont.)

hydrocarbon fuels. AMI systems operate at energy densities in excess of 1200 wh/kg, with the potential opportunity to exceed 1500 Wh/kg. These metrics far exceed current battery technologies and offer a significant weight reduction for individual soldiers and critical equipment. This presentation will outline AMI's system development efforts and military field trial results.

PEM / HYDROGEN — FROM TECHNOLOGY TO APPLICATION

3:00 Methodology for Robust Design of Small Fuel Cell Systems: Application to Unmanned Aerial Vehicles

Tom Fuller, PhD, Professor, Director of the Center for Innovative Fuel Cell and Battery Technologies, Georgia Institute of Technology*

Aircraft and fuel-cell systems are strongly coupled in UAVs. A methodology is developed for modeling, design, and control of fuel-cell systems that is computerbased, application-integrated, parametric, and optimizeable. By embedding the design structure matrix into an optimization scheme, the optimizer can better identify configurations, design rules, families of high performance fuel-cell aircraft. Demonstration flight data and characterization of a fuel cell powered aircraft are presented. In addition, sample experimental results from HiL testing of the powertrain of a long endurance fuel cell powered UAV are presented with discussion. *In collaboration with: T.Bradley, Mech. Engineering/GaTech

3:30 Refreshment Break, Exhibit/Poster Viewing

4:00 Fabrication of 3D Micro Fuel Cells for Cell Phones

Allison M. Fisher, PhD, Principal Staff Scientist, Motorola Labs -Energy Technologies Lab, Motorola

Cell phones are a particularly challenging application for fuel-cell based power systems because of volume limitations. A fuel cell/battery hybrid power source of the same volume as a current cell phone battery (10 cm³-2.5 Wh) requires a smaller battery and a fuel cell with high power density and efficiency in order to achieve an overall energy density higher than that of the battery alone. Traditional planar fuel cell system approaches are not expected to be able to meet these requirements. Motorola is developing an alternative fuel cell design based on a three dimensional membrane electrode assembly. The high aspect ratio of this design provides a high surface area for hydrogen oxidation/oxygen reduction, and is fabricated using semiconductor processing methods combined with self-assembly and other wet chemical methods. In this design, thousands of 3D micron-sized fuel cells can be fabricated in a 1 cm² footprint. This presentation will describe our progress toward the fabrication and testing of these unique fuel cells.

4:30 Development of Micro-Fuel Cells Using Carbon Monoliths

Hanna Rajantie, PhD, Research Scientist, Johnson Matthey, United Kingdom*

We have developed a micro fuel cell for portable applications using carbon monoliths to replace flow-fields and gas diffusion layers on the anode side. An air-breathing prototype hydrogen fuel cell has been constructed and performance proven. Using methanol as a fuel, the monolith porosity can be tuned to allow high concentrations of methanol to be used. For different power requirements different cell configurations, including bipolar, monopolar and variants of these, are preferred to optimise the volumetric power density. "In collaboration with: J.Sharman, D.Thompsett, Johnson Matthey Plc; D.Brown, MAST Carbon Technology Ltd, UK; B.Sowerby, et al, C2 Chandler Consulting, UK

5:00 From Concept to Product - Development and Scale-Up Production Implementation for myFC's FuelCellSticker™ Technology

Björn Westerholm, CEO, and Anders Lundblad, PhD, CTO, myFC AB, Sweden

Fundamentals for industrialization in micro fuel cells: What needs to be accomplished to be able to start the commercialization wave? The FuelCellSticker™ has proven to be an outstanding technology in terms of performance, conformability and cost. Today, its performance has reached 600 mW/cm³ with a lifetime of over 2000 h. Design conformability is demonstrated through a radius smaller than 6 mm. Cost target can be reached

via cheap and effective production technology. Interest from market is created via myFC's FuelCellPlatform development, as exemplified in designed chargers that are suitable for mass production. Proof of concept demonstration projects are currently realized through industrial collaboration projects. The talk will discuss technological advances versus market demands and how they are met in the development and industrialization process that myFC is currently pursuing.

April 30-May 2, 2008

5:30 Selected Oral Poster Highlights

10th Annual II Fuel CellsSM 2008

PORTABLE & MICRO FUEL CELLS FOR COMMERCIAL & MILITARY APPLICATIONS

5:45 Concluding Discussion, End of Day One

Friday, May 2, 2008

8:15 Exhibit/Poster Viewing, Coffee and Pastries

DMFC – PERFORMANCE, APPLICATION, COMMERCIALIZATION

9:00 Technological Advancement vs. Platinum Cost Optimization Paradigm for DMFC

Detlef Stolten, Professor, Dr-Ing, Director, Institute of Energy Research / Fuel Cells, IEF3, Jülich Forschungszentrum, Germany*

DMFC system originally developed for a class 2 lift truck is used as a prototype for stack and system design optimization and for outlining the cost analysis for small-to-medium size DMFCs. The DMFC system has been proven to work for 500 hours under dynamic operation. It was completely fitted into the battery trough including all of the peripheral components, electronics and control. Future full costs for operation have been evaluated and compared with a hydrogen fuel cell solution and the conventional lead acid battery system. Using a DMFC for this application turned out to be viable for the easy handling of the liquid methanol over hydrogen and the investment and labor intense re-charging process of batteries. The drawback of comparably high platinum investment with DMFC stacks is resolved by a stack rental model. Though, cost of the system over life-time, interest considered, is affordable if not attractive, the higher investment for platinum in the first place may be considered an obstacle by customers. A side-by-side multi-parameter analysis of the stack and systems design vs. performance and cost will be presented. *In collaboration with: J.Werhahn, J.Mergel

9:30 Passively Operated Vapor-Fed Direct Methanol Fuel Cells for Portable Applications

Christopher Hebling, PhD, Head of Department Energy Technology, Fraunhofer Institute for Solar Energy Systems ISE, Germany*

The impact of structural parameters and operating conditions has not been researched yet for vapor-fed operation of a DMFC at near-ambient conditions. Thus, a detailed parameter study that included reference cell measurements to assess anode and cathode losses separately was performed. Among other parameters like temperature or air stoichiometry, different opening ratios that controlled evaporation of methanol into the vapor chamber were examined. Water management was found to be a critical parameter for a vapor-fed DMFC. Depletion of water inside the anode catalyst layer, especially at higher current densities, decreased performance of the fuel cell substantially. Back diffusion of water from the cathode to the anode was examined. A micro-structured cathode electrode that increased water back diffusion due to a reduced mass transfer resistance was developed and investigated. *In collaboration with: S.Eccarius, F.Krause, T.Manurung, C.Agert, Fraunhofer ISE; K.Beard, U. South Carolina

10:00 The Crucial Step: From Prototypes to Commercial Product

Jens Müller, PhD, CTO, SFC Smart Fuel Cell AG, Germany*

The step from prototypes and field trials to real products is still a major challenge. Only very few fuel cell players have managed to show real market traction so far. This presentation will discuss the success factors which enabled SFC to sell more than 7,000 fuel cell systems to date - on a truly commercial basis. The

©2008 Knowledge Foundation. Agenda, times and titles of presentations are subject to change. Please visit www.knowledgefoundation.com for the latest Program updates.



PORTABLE & MICRO FUEL CELLS FOR COMMERCIAL & MILITARY APPLICATIONS

CONFERENCE AGENDA

Main Conference (cont.)

presentation will feature SFC's product portfolio including the company's latest portable fuel cell systems, as well as several of the industrial applications in which SFC fuel cells are used worldwide. *In collaboration with: P.Podesser, C.Boehm

10:30 Refreshment Break, Exhibit/Poster Viewing

DMFC — THE MATERIALS AND COMPONENTS CHALLENGE

11:00 Advances in Hydrocarbon Membrane Development

Philip Cox, PhD, Vice President of Product Development, PolyFuel Inc.

PolyFuel's current generation of hydrocarbon fuel cell membranes exhibit methanol crossover levels that are 1/2 to 1/3 of those of competing fluorocarbon membranes. PolyFuel's membranes are being incorporated into a rapidly increasing share of DMFC systems that have been demonstrated by the leading portable fuel cell system developers. While pleased with this accomplishment, PolyFuel recognizes that there is still room for continued improvement, and with the support of funding from the Advanced Technology (ATP) Program within the National Institute for Standards and Technology (NIST), PolyFuel has embarked on a 24 month program to reduce the level of fuel crossover by a further 75% from PolyFuel's current low levels, without negatively impacting the electrochemical performance of the fuel cell itself. PolyFuel will provide an update on the progress toward the development of this next generation hydrocarbon membrane for portable DMFC applications.

11:30 Low Cost Membrane and Catalyst Development for Portable Fuel Cells

Arumugam Manthiram, PhD, Professor, Electrochemical Energy Laboratory & Materials Science and Engineering Program, The University of Texas at Austin

Direct methanol fuel cells are appealing to replace lithium ion batteries in portable devices, but their commercialization is hampered by high cost, durability, and operability problems, which are in turn linked to severe materials challenges. This presentation will focus on the development of novel low cost polymeric membranes that exhibit suppressed methanol crossover as well as low cost nanoalloy catalysts for oxygen reduction reaction that exhibit high tolerance to methanol.

12:00 Advanced DMFC Electrocatalyst for Portable Applications

Hanwei Lei, PhD, DMFC Project Leader, Cabot Fuel Cells, Cabot Corporation

Cabot has developed a new electrocatalyst platform based on spray conversion. Superior carbon supported catalysts have been developed to address the commercialization barriers for DMFC portable applications. Cabot PtRu/C catalysts have unique aggregate morphology with small crystalline size, high degree of alloy and high dispersion of the active phase, which results in MEA's higher power, better durability and lower costs. Recent technological advancements in Cabot DMFC catalyst and MEA development and implementation will be discussed.

12:30 Lunch on Your Own

PEM / HYDROGEN — ADVANCES IN TECHNOLOGY AND APPLICATION

Military Fuel Cells for Tactical Power Generation 2:00 and Battery Charging

Eric Simpkins, Vice President, IdaTech, LLC

IdaTech has developed two small fuel cell systems for commercial, defense and civil applications. A fully integrated 250 Watt portable fuel cell power plant has applications as a battery charger or stand-alone power plant. This system is commercially available, and will be hardened for defense applications. A fully integrated 3 kW fuel cell system has been developed for the Army, that is fueled with flightline jet and diesel fuels.

Remote Surveillance System Powered by PEM 2:30 **Fuel Cell**

Vesna Stanic, PhD, Senior Research Scientist, EnerFuel, Inc

EnerFuel has developed a Remote Surveillance System (RSS) that is able to send images wirelessly through the existing cellular network. The RSS can operate independently from months to a year depending on the frequency of image generation and sending. A hybrid power system that includes a battery, solar cell and PEM fuel cell system, provides the power for the RSS's independent operation. However, the key elements for the reliable and long run time are PEM fuel cell and hydrogen system. At the presentation the performance data of the RSS, and more specifically PEM fuel cell and hydrogen system, will be presented and discussed in details.

3:00 Molecular Relaxations and Morphology of Perfluorosulfonate lonomers for Fuel Cell **Applications**

Kirt A. Page, PhD, Polymers Division, National Institute of Standards and Technology

Perfluorosulfonate ionomers (PFSI's) are of great importance in polymer electrolyte membrane fuel cell (PEMFC) applications. In order to optimize membrane performance, it is essential to understand the development of morphology and the structure-property relationships in these materials. Since the influence of the electrostatic interactions in these ion-containing polymers governs the developing structure, the overall goal of these studies has aimed to expand our fundamental understanding of the influence of electrostatic interactions on chain dynamics and developing morphology in PFSI materials.

3:30 Refreshment Break, Exhibit/Poster Viewing

4:00 **Development of Direct Hydrogen Micro Fuel Cell** Technology

Sukhvinder P.S. Badwal, PhD, Chief Research Scientist, CSIRO Energy Technology; and Oreion Energy Australia Pty Ltd., Australia*

Direct hydrogen fuel cell (DHFC) technology is under development for a range of applications with power demand in the 1 to 200W range at Oreion Australia Energy (in collaboration with CSIRO). In this presentation the benefits of DHFC over direct methanol fuel cells, applications, the developmental program, micro fabrication technologies used for large volume manufacturing and performance of micro-fabricated components and stacks will be discussed. *In collaboration with: S.Giddey, B.A.Sexton, F.L.Glenn, F.T.Ciacchi, R.E.Clarke, and D.Fini

4:30 Rechargeable, Low-Pressure, High-Density Hydrogen Storage for Portable Fuel Cells

Michael Zelinsky, Director, Hydrogen Systems, Ovonic Hydrogen Systems LLC

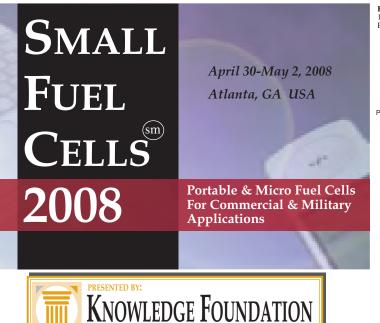
No single hydrogen storage solution is likely to solve the needs of all fuel cell applications as each technology has its own unique combination of advantages and disadvantages. This presentation will contrast various hydrogen storage methods, focusing on reversible metal hydrides. We will investigate how the technology works and examples of commercial fuel cell applications where it has been successfully deployed

5:00 A Microfluidic Fuel Cell with Flow-Through Porous **Electrodes**

Erik Kjeang, PhD, Institute for Integrated Energy Systems (IESVic), University of Victoria, Canada

A membraneless microfluidic fuel cell architecture incorporating flow-through porous electrodes is demonstrated. The proposed architecture solves the transport limitation of previous laminar flow-based microfluidic fuel cells. Improved performance is exhibited, including power densities up to 131 mW/cm² at room temperature. The flow-through cell architecture concurrently enables high levels of fuel utilization and cell voltage, reaching an overall energy conversion efficiency of 60% per single pass, and facilitates in situ regeneration of fuel and oxidant.

5:30 Concluding Discussion, End of Conference



TECHNOLOGY COMMERCIALIZATION ALLIANCE

Bookmark our website at www.knowledgefoundation.com REGISTER ONLINE! Knowledge Foundation 18 Webster Street Brookline, MA 02446 USA

3000

Exp.:

ONLINE

PRESORTED STANDARD U.S. POSTAGE PAID WATERLOO, IA PERMIT #134

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

REGISTRATION FORM

Please register me for	Member	Non-Member	
☐ Main Conference & Symposium (Commercial)	□ \$1359	□ \$1599	Become a member of th
□ Main Conference & Symposium (Acad./Gov.)*	□ \$934*	□ \$1099*	alliance & tal
□ Main Conference Only (Commercial)	□ \$1019	□ \$1199*	15% off you
□ Main Conference Only (Acad./Gov.)*	□ \$679*	□ \$799*	registration f
Poster Space Reservation	\$65	\$65	

□ I would like to become a member of the Knowledge Foundation Technology Commercialization Alliance: □ \$199/yr Individual Commercial Member □ \$149/yr Individual Government/Academic Member

□ I cannot attend, but please send the conference documentation.

□ Enclosed is my check for \$299. □ 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 #:_

D Please send me information on exhibit and sponsorship opportunities.

ax:

*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 March 28, 2008. When making reservations, please refer to the The Knowledge Foundation. Contact The Knowledge Foundation if you require assistance.

Venue: Omni Hotel at CNN Center 100 CNN Center Atlanta, GA 30303 For Hotel Reservations Contact: ANDERSEN TRAVEL Phone: (508) 429-6494 or 1-1 Fax: (508) 429-7380

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 The Knowledge Foundation, Inc. cancels an event, The Knowledge Foundation, Inc. cannot resume responsibility for any travel-related costs.

UNABLE TO ATTEND?

ou 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.