

August 2011

[Around The Industry](#)

[Patents](#)

[Product News](#)

[Research & Development](#)

[Upcoming Events](#)

[Previous Month](#)

**ABT ARCHIVE**

**EXCLUSIVES**

**MEETING REPORT**

**BATTCON 2012 International Stationary Battery Conference**  
Hollywood, CA  
USA

**MEETING REPORT**

**BCI 124th Convention & Power Mart Trade Fair**  
Scottsdale, AZ  
USA

**MEETING REPORT**

**29th Florida Battery Seminar Part 2**  
Ft. Lauderdale, FL  
USA

**PHOTO REPORT**

**29th Florida Battery Seminar Part 1**  
Ft. Lauderdale, FL  
USA

**MEETING REPORT**

**Battery Power 2011**  
Nashville, TN

**AUGUST 2011**



GM has developed a system that uses "exhausted" Chevrolet batteries to supply 50kWh, thus powering a house for about 200 hours during power outages. See story below.

**AROUND THE INDUSTRY**

**GM, ABB Demonstrate Battery Re-Use Applications**

Research conducted by GM predicts that secondary use of 33 Chevrolet Volt batteries, which will have up to 70% of life remaining after their automotive use is exhausted, will have enough storage capacity to power up to 50 homes for about four hours during a power outage.

GM and ABB Group have demonstrated an energy storage system that combines a proven electric vehicle battery technology and grid-tied electric power

[Advanced search](#)

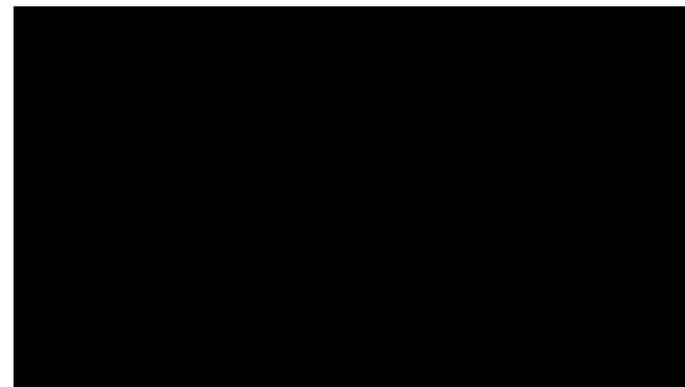
**MEDIA DESK**

**Advanced Battery Concepts - GreenSeal(R) Technology**

Better Batteries, Better World

GreenSeal

[video](#)

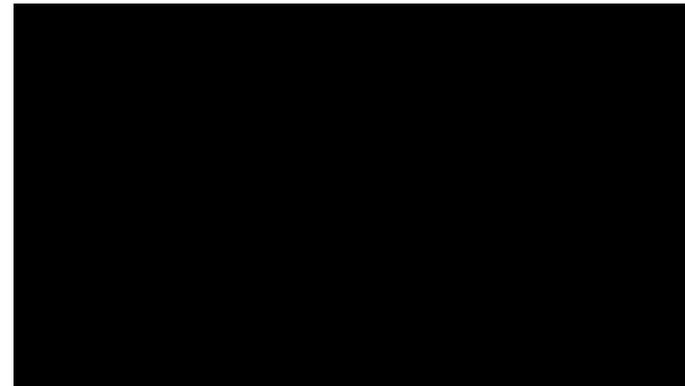


**Press Conference: Argonne National Lab Selected by DOE**

Press Conference

[YouTube](#)

[video](#)



**Advanced Energy Storage with Johnson Controls and**

USA

inverter.

MEETING REPORT

**EV2011VÉ Toronto  
The End Of The  
Beginning**  
Toronto, ONT  
Canada

MEETING REPORT

**28th International  
Battery Seminar And  
Exhibition - PART 2**  
Ft. Lauderdale, FL USA

PHOTO REPORT

**28th Florida Battery  
Seminar**  
Ft. Lauderdale, FL  
USA

TECH REPORT

**Dry Rooms: Why They  
Are Needed**

More Exclusives...

**SUBSCRIBE**

About

Advertise

Submit Your News

Advanced Battery Technology  
©2011 Seven Mountains  
Scientific  
ISSN: 001-8627

The two companies are building a prototype for 25kW/50kWh applications that could lead to Volt battery packs storing energy, including wind and solar energy, and feeding it back to the grid. Electricity from the grid could be stored by the system during times of low usage for use during periods of peak demand, saving customers and utilities money. During outages and brownouts, the battery packs could be used as back-up power sources. The team will soon test the system for back-up power applications.

GM has appointed Pablo Valencia to the new position of senior manager for battery lifecycle management. He and his team will focus on assuring battery systems used in future Chevrolet, Buick, GMC and Cadillac vehicles will provide benefits beyond their use in the vehicle.

### Johnson Controls to Update Automotive Battery Plant

Johnson Controls Inc. reports it will convert an automotive battery plant to produce Absorbent Glass Mat batteries in a \$138.5-million project. The project in Toledo, Ohio, awaits final confirmation pending state and local government approvals. The Tier One automotive supplier indicated it expects to receive a combination of tax credits and incentives amounting to \$25 million from Ohio.

The converted plant would add 6 million to Johnson Controls' domestic AGM battery capacity by 2013. It would result in 50 new jobs and retain 400 existing positions.

Recently, Johnson Controls moved to dissolve a joint-venture partnership with Saft Groupe S.A., formed in 2006 to develop and manufacture lithium-ion vehicle batteries.

"Start-Stop vehicle technology is emerging globally as one of the most affordable options for consumers who want to buy a more fuel-efficient car for very little added cost up front," said Alex Molinaroli, president for Johnson Controls Power Solutions.

### East Penn Promotes Employees

East Penn Manufacturing of Lyon Station, Pennsylvania, has expanded the roles of four members of the company's SLI battery sales division.

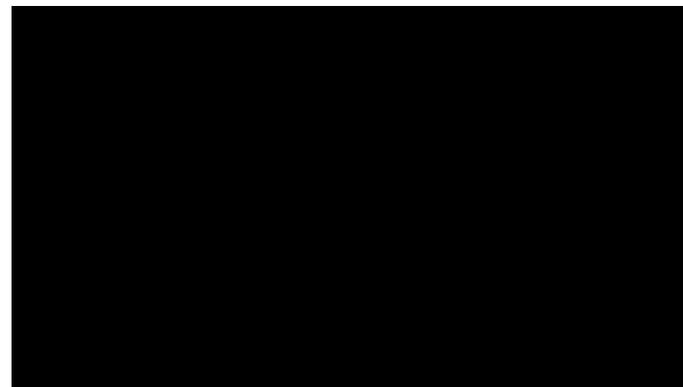
Peter Stanislawczyk has been promoted to VP of sales – aftermarket programs, automotive batteries. In this position, he will oversee major accounts and assist in the coordination of specific branding programs. Stanislawczyk joined East Penn in 1992 as a sales trainee. He graduated from the University of Delaware with a Bachelor of Science and Business Administration degree.

### Michigan SmartCo

Advanced Energy Storage is a green technology that is part of a national initiative to reduce reliance on imported fuels.

Johnson Controls

video



MORE NEWS

**Korean researchers develop new flexible, more stable lithium-ion battery**

Engadget

**Researchers use snail teeth to improve solar cells and batteries**

PhysOrg

**What holds energy tech back? The infernal battery**

The Olympian

**Lithium Batteries Central to Boeing's 787 Woes**

Time

**Bolivia - - the Saudi Arabia of lithium?**

Financial Times

**Stanford Battery Lasts 5X Longer**

Stanford News Service

**Battery Material Prevents Fires, Stores Five Times the Energy**

MIT Review

**Humble battery deserves more research**

ABC Science

**Department of Energy awards up to \$120 million for battery hub to Argonne-led group**

US DoE

advertisement

**TIMCAL**  
GRAPHITE & CARBON

**Graphite and conductive Carbon Black for Mobile Energy applications**

Alkaline - Lithium - Fuel Cell  
Carbon Zinc - Lead Acid  
Ni-based batteries  
and other power sources

**NEW!**

**G•NERGY**  
Optimized Carbon Black and Graphite Conductive Additives for Li-ion Batteries

**TIMREX**

- High-performance synthetic graphite powders
- Exfoliated graphite
- Potato®-shape graphite



Stanislawczyk

Jeff Coleman has been promoted to VP of sales, original equipment. He will support multi-national customers and oversee the account executives and the sales managers in this division. He will be involved in implementing business growth strategies for the original equipment division.

Coleman joined East Penn in 1988 as a sales trainee. He graduated from Indiana University of Pennsylvania with a Bachelor of Science degree and a concentration in marketing management.

John Blackburn has been promoted to VP sales – proprietary brands and branch operations, automotive batteries. In this position he will maintain responsibility for all branch and subsidiary operations as well as Deka brand sales and distribution. In 1983, Blackburn joined East Penn in sales operations at Taylor and Blackburn, a subsidiary of East Penn.



Kubinak

Doug Kubinak has been promoted to assistant VP – private brands, automotive batteries. Kubinak will oversee a team that will focus efforts on building multi-national customer accounts, including program groups and branded accounts. Kubinak joined East Penn in 1985 as a sales trainee. He graduated from Shippensburg University with a degree in business management.



Coleman



Blackburn

### Sandia Battery Abuse Testing Lab Gets Stimulus

Sandia's world-renowned Battery Abuse Testing Laboratory is undergoing a major renovation so Sandia researchers can test larger batteries for electric and plug-in hybrid electric vehicles.

The nation's leading facility for battery testing was built in 1991, and has conducted thousands of critical scientific studies to evaluate the safety of batteries under every imaginable abuse scenario that a battery might face in the real world. Those studies included 12 years of testing for the FreedomCAR

Optimized Carbon Black and Graphite Conductive Additives for Li-ion Batteries

**TIMREX**

- High-performance synthetic graphite powders
- Exfoliated graphite
- Potato<sup>®</sup>-shape graphite
- Natural graphite powders
- Aqueous graphite dispersions

www.timcal.com

IMERYS

**Stanford Ovshinsky dies at 89**  
[Wikipedia](#)

**Self-Charging Battery Generates and Stores Energy Simultaneously**  
[Tree Hugger](#)

**Scientists develop lithium-ion battery that charges 120 times faster than normal**  
[ExtremeTech](#)

**New Spray-On Battery Could Convert Any Object into an Electricity Storage Device**  
[Scientific American](#)

**New nanostructure for batteries keeps going and going**  
[PhysOrg](#)

**Second Wind: Air-Breathing Lithium Batteries Promise Recharge-Free Long-Range Driving--If the Bugs Can Be Worked Out**  
[Scientific American](#)

**Liquid Battery Design Utilizes Heat from Charging and Discharging**  
[SciTech Daily](#)

**IBM Demos Uber Battery That 'Breathes'**  
[Wired](#)

**Volt production on hold for 5 weeks**  
[Detroit Free Press](#)



The \$4.2 million overhaul, paid for with federal stimulus funds, includes updating test bays, data acquisition systems and laboratory space, and hiring additional staff members to meet the growing demand for Sandia's battery safety expertise.

### **PowerGenix Betting on Micro-Hybrids**

PowerGenix of Scripps Ranch, California, the leading manufacturer of high performance, rechargeable NiZn batteries, has entered the micro-hybrid electric vehicle market with its first production prototype product.



PowerGenix has begun engineering qualification activities for the new battery with several automotive OEMs and will be fielding demonstration vehicles later this year. A more powerful and robust alternative to lead-acid batteries currently used in these start-stop hybrids, PowerGenix's NiZn offering is well positioned to dominate the multi-billion-dollar market opportunity.

PowerGenix's NiZn batteries are half the size and weight of lead-acid batteries, provide better charge acceptance and have a much longer lifespan. These performance advantages mean that NiZn batteries reduce vehicle weight and handle more start-stop events over a longer sustained life, significantly raising micro-hybrid fuel efficiency. Unlike other alternative technologies for start-stop vehicles, NiZn batteries are a single solution, powering all starting and micro-hybrid functions.

## Saft to Provide Energy Storage for SEPTA

Saft lithium-ion (Li-ion) battery technology will supply megawatt level energy storage for the Southeastern Pennsylvania Transportation Authority (SEPTA) Recycled Energy and Optimization Project. Saft was selected by Viridity Energy to design, manufacture and commission the battery, which will also be one of the first dual purpose trackside Energy Storage Systems (ESS) in the U.S.



The Energy Optimization project is designed to capture energy from rail cars through a regenerative braking process and then use the energy for accelerating trains and to generate revenue through demand-side participation in power markets. A strong pilot could lead to potential deployment at up to 32 SEPTA substations.

Saft will provide one Intensium Max20 Li-ion megawatt energy storage system to capture train braking energy and then discharge it back to the third rail to power trains leaving the station. The system will provide regenerative braking charge acceptance for SEPTA trains while simultaneously participating in the PJM Interconnection market for frequency regulation. This Li-ion Saft system will provide efficiency of 95%.

## NREL Supports Industry to Develop CAE Tools

The U.S. Department of Energy's National Renewable Energy Laboratory (NREL) recently awarded three industry teams, after a competitive procurement process, a total of \$7 million for the development of computer-aided software design tools to help produce the next generation of electric drive vehicle (EDV) batteries.

These projects support DoE's Computer-Aided Engineering for its Electric Drive Vehicle Batteries (CAEBAT) program. The objective is to help the automotive and battery industries design and develop a wide array of advanced EDV batteries more quickly, resulting in less expensive batteries.

The three industry teams working with NREL are EC Power, Penn State

University, Johnson Controls Inc., and Ford; GM, ANSYS, and Esim; CD-adapco, Battery Design LLC, A123 Systems, and Johnson Controls-Saft.

Selected teams will contribute 50% of the costs of the project over the next three years, bringing the overall budget to \$14 million. In addition to funding, NREL will provide technical support on battery electrochemical thermal modeling and testing to the teams.

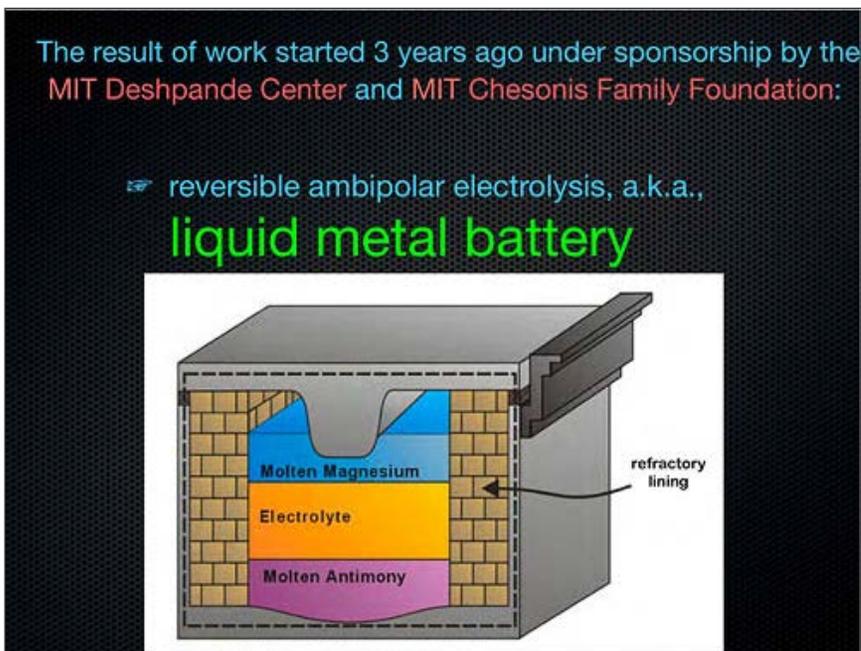
### NEC Launches Household Energy Storage System

NEC Corp. of Tokyo, Japan reports the launch of a household energy storage system equipped with Li-ion batteries that automatically controls electrical power in the home. Initially, 100 units will be available.

This system automatically enables interactive coordination with a power company's power supply system and a household's electric devices, solar power systems and other equipment.

This enables the system to store power when power consumption is low, then to use the stored power when power consumption reaches its peak. This reduces both the demand on power companies and household charges.

### Liquid Metal Secures MIT Patent Rights



Liquid Metal Battery Corp., a Cambridge, Massachusetts company founded in 2010 to develop new forms of electric storage batteries that work in large, grid-

scale applications, announced it had secured the rights to key patent technology from MIT and had received financing from France's Total and from a personal investment by Bill Gates.

Patents for all liquid metal battery inventions were licensed from MIT. The technologies were invented by Donald Sadoway; John Elliott, Professor of Materials Chemistry at MIT; and David Bradwell, whose doctoral research in the Sadoway laboratory was on liquid metal batteries. Sadoway and Bradwell, along with Dr. Luis Ortiz are founders of LMBC.

Affordable grid-level energy storage is the linchpin for massive deployment of renewable energy on the electric power grid. The approach being pursued by LMBC mixes the economies of scale in electrometallurgy with use of earth-abundant elements to achieve affordable electrical energy storage.

[NEXT >](#)

[UP ↑](#)