



A U.S. Department
of Energy National
Laboratory

News Release

Contact:

Angela Y. Hardin, Argonne
(630) 252-5501
ahardin@anl.gov

Jill Midkiff, Kentucky
(502) 564-2611
(502) 330-1185

For immediate release

Kentucky, Argonne partner to help build domestic battery industry

ARGONNE, Ill. (April 8, 2009) – The Commonwealth of Kentucky, and the [University of Kentucky](#) (UK) and [University of Louisville](#) (U of L) are partnering with Argonne National Laboratory to establish a national Battery Manufacturing R&D Center to help develop and deploy a domestic supply of advanced battery technologies for vehicle applications that will aid in securing U.S. energy independence, reduce greenhouse gas emissions and help in strengthening the economy.

“Advanced batteries will play a significant role in the future energy and economic security of the United States,” said Kentucky Gov. Steve Beshear. “At this time, nearly all large-scale advanced battery production is in Asia, with the United States having only limited manufacturing capabilities. To address this situation, the United States must quickly develop improved advanced battery technologies and significantly ramp up domestic production capabilities in order to become the hands-down global leader of these technologies.”

“The Kentucky-Argonne partnership will help in turning the tide on U.S. battery development and support President Obama’s goal to have one million Plug-in Hybrid Electric Vehicles on the road by 2015,” said Argonne Director Robert Rosner. “It will help to bridge the gap between research and commercialization by facilitating the development and deployment of advanced manufacturing processes for lithium-ion and other advanced batteries.”

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Argonne National Laboratory is a U.S.
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Kentucky-Argonne partnership – add one

The center's major goals would be to support the development of a viable U.S. battery manufacturing industry; make it easier for federal labs, universities, manufacturers, suppliers, and end-users to collaborate; develop advanced manufacturing technology to reduce advanced battery production costs; and accelerate the commercialization of technologies developed at national laboratories and universities.

“The center will initially focus on lithium-ion battery manufacturing R&D,” said Mark Peters, deputy associate laboratory director of Energy Sciences & Engineering at Argonne. “In the long-term, the center would help in the development of technologies that would enable a significant increase in energy densities, including lithium-air and zinc-air systems for vehicle applications and advanced batteries for cost efficient and long-life grid power storage applications.”

The formation of a national Battery Manufacturing R&D Center has been endorsed by Ford Motor Company, as well as battery manufacturers, including those in the recently formed National Alliance for Advanced Transportation Battery Cell Manufacturer, which was organized to produce advanced lithium-ion battery cells for transportation applications in the United States.

The center will be located in central Kentucky to leverage the expertise and research facilities at U K and U of L. Complementary R&D capabilities and facilities will also be located at Argonne.

“Central Kentucky is an ideal location for a national Battery Manufacturing R&D Center,” said Larry Hayes, Gov. Beshear's Cabinet Secretary. “Not only does Kentucky have an experienced auto industry-related workforce, but the region is within 500 miles of more than 4,800 auto-related vehicle manufacturers, including 69 vehicle assembly plants. We are especially proud that the University of Kentucky and the University of Louisville both have significant battery-related intellectual property that can support the activities of the center.”

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Kentucky-Argonne partnership – add two

The center may be eligible to receive funding from the Commonwealth of Kentucky through bonds, research tax credits and other incentives programs for future spin-off companies. The Kentucky universities will contribute land, buildings, donor funds, R&D grants funds, R&D grants funds and “Bucks for Brains” researchers. Argonne and Kentucky will also pursue other funding opportunities.

Argonne is a multi-disciplinary research facility and a leading federal laboratory for transportation-related R&D. Argonne scientists and engineers perform basic and applied research on advanced materials and diagnostics for electrodes and cells; model battery life expectancy, and electrochemical cell design and performance; and test cell and battery systems. Argonne will dedicate research and other staff to support the center.

Cooperatively, Kentucky will be able to contribute expertise from UK’s [Center for Manufacturing and Center for Applied Energy Research](#), the [Automotive Manufacturing Technical Education Collaborative](#), the [Center for Applied Energy Research](#) the University of Louisville’s [Institute for Advanced Materials and Renewable Energy](#), [Rapid Prototyping Center](#), [Micro/Nano Technology Center](#), and [Logistics and Distribution Institute](#), and the Conn Center for Renewable Energy Research and Environmental Stewardship.

About Argonne

Argonne National Laboratory seeks solutions to pressing national problems in science and technology. The nation’s first national laboratory, Argonne conducts leading-edge basic and applied scientific research in virtually every scientific discipline. Argonne researchers work closely with researcher from hundreds of companies, universities, and federal, state and municipal agencies to help them solve their specific problems, advance America’ scientific leadership and prepare the nation for a better future. With employees from more than 60 nations, Argonne is managed by UChicago Argonne, LLC for the U.S. Department of Energy’s Office of Science.

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Additional comments from Kentucky, Argonne officials

"Argonne is the ideal organization for Kentucky to partner with in developing a national Battery Manufacturing R&D Center. Argonne's expertise and leadership in advanced battery technology research and development and its links to the broader automotive industry will complement Kentucky's experienced automotive industry-related workforce and efforts by the University of Kentucky and University of Louisville to supply graduates who are able to help manufacturers compete in the global marketplace."

- Deborah Clayton, Commissioner, Kentucky Department of Commercialization and Innovation

"The opportunity this partnership offers Argonne to host University of Kentucky and University of Louisville faculty and students is invaluable not just to the lab, but to the nation. Working one-on-one with faculty, post-docs and students will allow Argonne to help in the training of a broad battery workforce. Currently, there are too few trained battery engineers, scientists and production workers to conduct research and enable steady growth of the domestic advanced battery sector."

- Ed Daniels, Director, Energy Systems, Argonne National Laboratory

The University of Kentucky is excited to participate in the development of a national Battery Manufacturing R&D Center with Argonne. Not only will this partnership be a great educational opportunity for our students, it also will give them the chance to contribute to the creation of what will be a strong battery manufacturing industry in the United States."

- Lee Todd, President, University of Kentucky

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Additional comments – add one

"From an academic perspective, the Kentucky-Argonne partnership will provide our science and engineering students with the opportunity to work with a research organization the caliber of Argonne National Laboratory. Argonne is unique in that it has broad and commanding presence in battery R&D. It has a transportation and systems analysis programs that take research breakthroughs and apply them in technologies that can be commercialized."

- James Ramsey, President, University of Louisville

"Argonne National Laboratory, the University of Louisville and the University of Kentucky will be able to deepen their collective scientific and engineering know-how under this partnership. We will be able to provide strong support to companies that build advanced manufacturing capabilities and produce affordable batteries."

- Gary Henriksen, Manager, Electrochemical Energy Storage Department