

Li-Air: Argonne opens new chapter in battery research (w/ Video)

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(PhysOrg.com) -- Argonne National Laboratory has engaged in battery research and development for more than 40 years. More than 10 years ago the research facility made a strategic decision to expand its research of Lithium-ion batteries, with a particular focus on developing applications for electric cars.

That decision, and subsequent investments for research by the U.S. Department of Energy, have yielded technology transfer agreements, 149 inventions, more than 40 patents and four R&D 100 Awards.

In a natural progression, Argonne is now pursuing research into Lithium-air batteries. Li-air batteries use a catalytic air cathode that converts oxygen to lithium peroxide, an electrolyte and a Li anode.

Ensuring safe operation of the battery is one of the major challenges involves developing materials that will ensure reliability and safety. While the potential of Li-air batteries is great, the research to get there will take time and close working relationships with industry, who will eventually adopt the technology for commercial application. Watch Michael Thackeray, Distinguished Argonne Fellow, discuss this adaptation.

Provided by Argonne National Laboratory ([news](#) : [web](#))

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