Cabot Launches New Performance Additive for Advanced Lithium-Ion Batteries

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LITX50™ performance additive optimizes power and energy and reduces manufacturing costs of lithium-ion batteries for automotive and consumer electronics markets

BOSTON--(BUSINESS WIRE)--Feb. 28, 2012-- To meet the fast-growing demands of the battery market, Cabot Corp. (NYSE: CBT) announces the launch of the new LITX50™ carbon conductive additive which is designed to increase the power and energy for lithium-ion batteries used in electric and hybrid vehicles, as well as high-end consumer electronics.

In 2011, battery makers sold an estimated $8 billion of lithium-ion batteries globally. By 2020 this number is expected to grow to more than $18 billion, according to estimates by industry research firm Avicenne.

“The world needs sophisticated advanced battery technology if we are going to maximize the commercial potential of alternative energy vehicles,” said Fred von Gottberg, vice president and general manager, Cabot New Business Segment.

“Our LITX™ conductive additive enables Cabot to help car battery and lithium-ion battery manufacturers meet tough industry fuel economy challenges and significantly improve the performance of their products while lowering costs,” von Gottberg said. “This will accelerate the growth of these energy-efficient vehicles and consumer electronics.”

LITX50 performance additive reduces lithium-ion cell manufacturing costs

Cabot’s LITX50 conductive additive is designed to solve the challenge of getting the most power and energy out of a lithium-ion battery for electric and hybrid vehicles as well as high-end consumer electronics, at the lowest cost.

Lithium-ion batteries are able to store more energy and power in a small volume than any other currently available battery types. This performance attribute is particularly important due to the demand of high-capacity batteries for smartphones, tablets and electric vehicles - market developments that are pushing developers to explore new ways of raising performance safely and cost effectively. A key challenge is that today’s battery design is a compromise of several factors, including cost, safety and power versus energy.

Lithium-ion batteries have positive and negative layers, like any battery. Typically, the layers are made by coating a metal foil with a layer of battery materials. Thick layers are good for energy capacity, but not for delivering power as they are too resistive. Thin layers are good for power delivery, but weak for energy capacity as they do not hold enough battery material – meaning more layers have to be added to a high-power battery in order to have enough hours of run time or enough driving range.

LITX50 conductive additive improves the conductivity of battery electrodes which enables better power performance for thicker, higher energy layers. It also complements the new battery materials that developers are exploring for next generation electric vehicles and high-capacity consumer electronics. The properties of the LITX50 conductive additive promote both increased conductivity and efficiency in the battery layers at normal and cold temperatures. It also enables a more energy-dense layer coating that increases performance while lowering manufacturing cost.

“The LITX50 product is a multi-function additive that delivers improved performance across the board,” said Greg Romney, director of new business, Cabot New Business Segment. “It allows battery makers to coat thinner, more energy dense layers while also achieving superior performance under challenging low temperature conditions.”

To learn more, visit our website at http://www.cabot-corp.com/advanced-batteries or contact us at Battery.materials@cabotcorp.com. Cabot will be exhibiting at Battery Japan in Tokyo, Japan, February 29 – March 2 at Booth #W7-5 located in the Material/Component zone.

ABOUT CABOT BATTERY MATERIALS

LITX products are the first of a new Cabot family of performance additives for advanced batteries designed specifically to solve customer problems at the fundamental particle materials level. Through the application of Cabot’s deep portfolio of carbon materials and particle technologies, LITX additives can be modified to perform one or more critical functions to promote dramatic performance and durability improvements in lithium-ion batteries.

ABOUT CABOT CORPORATION

Cabot Corporation is a global specialty chemical and performance materials company headquartered in Boston, Mass, USA. Cabot’s other major products are carbon black, fumed silica, inkjet colorants, aerogel, elastomer composites, and cesium formate drilling fluids. The company’s website is: http://www.cabot-corp.com.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995: Statements in the press release regarding Cabot’s business that are not historical facts are forward looking statements that involve risks and uncertainties. For a discussion of such risks and uncertainties, which could cause actual results to differ from those contained in the forward looking statements, see “Risk Factors” in the Company’s Annual Report on Form 10-K.

Photos/Multimedia Gallery Available: http://www.businesswire.com/cgi-bin/mmg.cgi?eid=50184487&lang=en

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