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**Press Release**

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**Tonen Chemical and ExxonMobil Chemical  
Tailored Film Introduced at 23rd International Electric Vehicle Symposium  
and Exhibition - Helps Improve Performance of Lithium Ion Batteries Used  
in Hybrid/Electric Vehicles**

On December 3 (US time), ExxonMobil Chemical Company (the chemicals division of ExxonMobil Corporation) issued a press release regarding the specialty business of TonenGeneral Sekiyu Kabushiki Kaisha's 100% subsidiary Tonen Chemical (head office: Minato-ku, Tokyo; Representative Director and President: P.P. Ducom). The release states that the new battery separator film technology that was announced on November 29 (release title: ExxonMobil Chemical's new film technologies help power next generation hybrid and electric vehicles) was presented at the 23rd International Electric Vehicle Symposium and Exhibition currently being held in Anaheim, California. A Japanese translation of the release is attached below.

Attachment: Exxon Mobil Chemical Company press release



## *News Release*

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**EXXONMOBIL CHEMICAL INTRODUCES TAILORED BATTERY SEPARATOR FILMS TO IMPROVE PERFORMANCE OF LITHIUM-ION BATTERIES IN NEXT GENERATION HYBRID AND ELECTRIC VEHICLES**

HOUSTON – December 3 –ExxonMobil Chemical showcased a new film technology platform for hybrid and electric vehicle batteries at the 23<sup>rd</sup> Electric Vehicle Symposium and Exposition (EVS-23) in Anaheim, Calif. on December 2-5, 2007.

ExxonMobil Chemical and Tonen Chemical, a 100% subsidiary of TonenGeneral Sekiyu Kabushiki Kaisha and ExxonMobil's Japanese affiliate, have developed new battery separator films that are expected to significantly enhance the power, safety and reliability of lithium-ion batteries used in hybrid and electric vehicles. As a result, the new film technologies have the potential to improve the energy efficiency and affordability of the next wave of lower-emission vehicles. Building off the new technology platform, ExxonMobil Chemical can adapt to emerging market needs by providing tailored film grades to meet specific battery maker or original equipment manufacturer requirements.

The new battery separator films are produced using a proprietary wet, bi-orientation manufacturing process that results in fine, highly uniform pores. The films are co-extruded using specially tailored, high heat-resistant polymers. By leveraging ExxonMobil Chemical's technology and polymer expertise to meet very specific hybrid and electric vehicle requirements, the new battery separator films exhibit a unique combination of properties including enhanced permeability, higher meltdown temperature and melt integrity, while maintaining quick shutdown performance and mechanical strength. The higher meltdown temperature significantly increases the film's thermal safety margin.

"One of our safety solutions improves the thermal mechanics of one of the battery's most vital components -- the separator," said Jim P. Harris, senior vice president, ExxonMobil Chemical Company. "With what are essentially very thin, but critical layers of highly-engineered film, you can improve the battery's safety performance and help make the next generation of hybrid and electric vehicles possible."

Separator film is an integral part of battery system design and critical to overall performance. ExxonMobil Chemical's new technology platform builds on twenty years of innovation and experience in lithium-ion battery separators, applying advanced polymer and process technologies with flexibility to tailor products to manufacturer requirements. ExxonMobil Chemical's testing demonstrates improved safety and power performance properties required by battery and original equipment manufacturers, and collaboration will help shorten critical market development time.

“These technologies are consistent with our long-standing commitment to improve energy efficiency,” said Harris. “We are investing resources to customize these new separator films to meet the specific lithium-ion battery system requirements and will continue to work with all manufacturers to speed the progress of next generation vehicles.”

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**About ExxonMobil Chemical**

ExxonMobil Chemical is a global leader in technology, product quality and customer service with petrochemical manufacturing and/or marketing operations around the world. For more information visit: [www.exxonmobilchemical.com](http://www.exxonmobilchemical.com).

**About Tonen Chemical**

Tonen Chemical, a 100% subsidiary of TonenGeneral Sekiyu Kabushiki Kaisha and an ExxonMobil affiliate, is the world’s second-largest producer of separator film for lithium-ion batteries. For more information visit: <http://www.tonengeneral.co.jp/apps/tonengeneral/english/index.html>.

**Note to Editors:**

1. The term "ExxonMobil Chemical" refers collectively to some or all of the companies affiliated with Exxon Mobil Corporation, and/or itself, which have chemical manufacturing and /or marketing operations around the world.
2. The term "Tonen Chemical" refers collectively to some or all of the of the companies affiliated with TonenGeneral, and /or itself, which have chemical manufacturing and /or marketing operations in Japan.