

NEWS PRODUCTS MULTIMEDIA PEOPLE COLLECTIONS EDGE SEARCH



- Ford and DowAksa formalize agreement to advance the adoption of cost-effective carbon fiber components through technology validation and proof of concept to reduce vehicle weight and increase fuel efficiency without sacrificing strength
- Agreement provides pathway for a high-volume manufacturing partnership
- New joint development agreement accelerates joint research announced in January in partnership under new U.S. composites manufacturing institute

Ford and DowAksa today signed a joint development agreement (JDA) to formally advance research on cost-effective, high-volume manufacturing of automotive-grade carbon fiber, a material poised to play a significant role in the drive to make vehicles lighter for greater fuel efficiency, performance and capability.

The agreement, between Ford Motor Company, Ford Global Technologies and DowAksa -

a 50/50 joint venture between The Dow Chemical Company and Aksa Akrilik Kimya Sanayii A.Ş – will combine DowAksa's feedstock capacity, carbon fiber conversion and downstream intermediates production capabilities with Ford's expertise in design, engineering and high-volume manufacturing. The goal is to produce materials that make cost-effective carbon fiber composite parts that are much lighter than steel but meet automotive strength requirements.

"This joint development agreement reinforces Ford's commitment to our partnership with DowAksa, and our drive to bring carbon fiber components to the broader market," said Mike Whitens, director, Vehicle Enterprise Sciences, Ford Research & Advanced Engineering. "The goal of our work here fits within the company's Blueprint for Sustainability, where future Ford vehicles will be lighter with optimized performance that would help consumers further improve fuel economy and reduce emissions."

"Today's agreement marks another milestone in the partnership to develop lightweighting solutions for the automotive industry," said DowAksa Chairman Heinz Haller. "Ford and DowAksa's collaboration will accelerate delivery of advanced materials and technologies to meet and exceed expectations for high performance and fuel economy."

"Automotive manufacturers' use of carbon fiber composites has been hindered by the absence of both high-volume manufacturing methods and affordable material formats," said DowAska Vice Chairman Mehmet Ali Berkman. "This partnership combines the individual strengths of each company to target these challenges."

The JDA allows the companies to collaboratively generate new, lower-cost automotive grades of carbon fiber that can be applied to aligned and random fiber formats while maintaining compatibility with both thermoset and thermoplastic matrices. The agreement also includes a pathway for potential extension of development collaboration into a commercial manufacturing partnership.

"DowAksa is committed to bringing the benefits of carbon fiber to the industrial marketplace," Berkman added.
"By entering into this agreement, DowAksa is taking a serious approach to providing environmentally sustainable solutions, the goal being the manufacture of much lighter vehicles with optimized performance and cost, which will ensure reduced fuel consumption and exhaust emissions."

As announced in January, the companies will be part of the Institute for Advanced Composites Manufacturing Innovation (IACMI), announced by President Obama as part of the larger National Network for Manufacturing Innovation supported by the U.S. Department of Energy. The JDA will facilitate the companies' efforts in conjunction with IACMI to overcome the high cost and limited availability of carbon fiber in automotive applications.

#### ABOUT FORD MOTOR COMPANY

Ford Motor Company, a global automotive industry leader based in Dearborn, Michigan, manufactures or distributes automobiles across six continents. With about 187,000 employees and 62 plants worldwide, the company's automotive brands include Ford and Lincoln. The company provides financial services through Ford Motor Credit Company. For more information regarding Ford and its products worldwide, please visit <a href="http://corporate.ford.com">http://corporate.ford.com</a>.

#### ABOUT DOWAKSA

DowAksa was formed in June 2012, combining the strengths of Dow, as the world leader in epoxy chemistry and resins, and the capabilities of Aksa, the number one producer of acrylic fibers. The 50:50 joint venture offers high-quality, reliably supplied, competitively priced carbon fiber for industrial usage, focused on the transportation, energy and infrastructure markets. See more about our capabilities at www.dowaksa.com.

# **CONTACTS**

# **■** BRIAN GLUCKMAN

**QUALITY COMMUNICATIONS** 

202.337.0808 202.210.0008 MOBILE bgluckman@gloverparkgroup.com

# DEEPTIE SETHI

QUALITY COMMUNICATIONS MANAGER

313.594.0949 313.348.0554 MOBILE sdeeptie@ford.com



+90 212 393 01 01 irem.cavusoglu@dowaksa.com

© 2015 THE FORD MOTOR COMPANY ALL RIGHTS RESERVED

## COMPANY

ord Corporate

Ford Vehicles

\_incoln Vehicles

Ford Social

i acitities

media@ford.com

## CONNECT

Twitter

**f** Facebook

Instagram

#### POLICIES

Privacy Policy