

Dow and ExxonMobil announce agreement making Univation Technologies a subsidiary of Dow

On 2 Oct 2014, The Dow Chemical Company and ExxonMobil Chemical Company announced the signing of a definitive agreement to restructure the ownership of Univation Technologies LLC, currently a 50/50 JV between affiliates of Dow and ExxonMobil. This transaction will result in Univation Technologies becoming a wholly-owned subsidiary of Dow aligned to its Performance Plastics operating segment. Univation Technologies will continue to license its UNIPOL PE Process Technology, including swing capability for linear low density polyethylene and high density polyethylene. Additionally, Univation Technologies will continue to develop and supply all catalysts, including: UCAT Conventional, ACCLAIM Advanced Unimodal, XCAT Metallocene and PRODIGY Bimodal Catalysts. The transaction is expected to close by end-2014, pending regulatory approval.

Original Source: Dow Chemical, website: <http://www.dow.com> (2 Oct 2014) © The Dow Chemical Company 2014

Dyadic International reports licensing payment for commercial-scale C1-based cellulase enzymes

Dyadic International Inc has announced the receipt of a \$500,000 licensing payment from Abengoa Bioenergy for commercial scale production of Abengoa's proprietary cellulase enzymes, used for converting biomass into ethanol, developed under Abengoa's licence agreement with Dyadic.

Original Source: Dyadic International Inc, 2014. Found on PR Newswire, 1 Oct 2014, (Website: <http://www.prnewswire.com>)

Exxon backs biofuels R&D at Iowa State

A biofuels research programme is being established by ExxonMobil at Iowa State University to develop the use of fast pyrolysis for biomass conversion into oils that can be modified to transportation fuels.

Original Source: Chemical and Engineering News, 20 Oct 2014, 92 (42), 16 (Website: <http://www.cen-online.org>) © American Chemical Society 2014

Global Bioenergies makes progress on biosourced isobutene project

Global Bioenergies is about to start pilot industrial trials on its process for making biosourced isobutene. This work is part of the BioMA+ project launched in 2013 by Global Bioenergies, Arkema, and 2 CNRS laboratories. Long duration fermentation trials have already established the product's lack of toxicity, an advantage which results from a continuous fermentation process which also cuts operating costs. The process will now be used at a 10 tonne/d pilot installation with a 500-litre fermenter. The pilot unit was built on the Pomacle-Bazancourt site in collaboration with CNRS and its demonstration tool BioDemo. Global Bioenergies technology follows on from the creation of more productive strains and the optimisation of fermentation conditions. The BioMA+ programme is based on Global Bioenergies' isobutene technology and on the use of this product to manufacture methacrylic acid (used in the production of acrylic paints). The 3-year programme will run until 1 Oct 2016.

Original Source: Chimie Pharma Hebdo, 3 Nov 2014, (694), (Website: <http://www.industrie.com/chimie/>) (in French) © ETAI Information 2014

Lesaffre acquires Butalco

On 23 Jul 2014, yeast company Lesaffre announced its buyout of Switzerland's Butalco, a research firm focused on developing yeast strains for second-generation biofuels and biobased chemicals. France-based Lesaffre formed a new business unit in Mar 2014, Lesaffre Advanced Fermentation (Leaf) Technologies, to develop fermentation solutions for bioethanol and bio-chemicals. Leaf Technologies currently supplies an engineered yeast strain of *Saccharomyces cerevisiae* for the second generation ethanol sector.

Original Source: Oils and Fats International, Aug-Sep 2014, 30 (7), 12 (Website: <http://www.oilsandfatsinternational.com>) © Quartz Business Media Ltd 2014

Carlyle sells stake in PQ

CCMP Capital Advisors will be acquiring a 47% stake in the speciality chemical producer PQ Holdings

owned by Carlyle Group. Carlyle, together with PQ managers and Ineos, will still own 53% of the company. Meanwhile, Israel Chemicals will file for an IPO of equity on the New York Stock Exchange in order to raise \$522 M, equivalent to a 6% stake in the company.

Original Source: Chemical and Engineering News, 22 Sep 2014, 92 (38), 14 (Website: <http://www.cen-online.org>) © American Chemical Society 2014

Formosa awards ThyssenKrupp a planning contract for PDH plant

ThyssenKrupp Industrial Solutions has been awarded by Formosa Plastics Corporation (FPC) a contract for the establishment of 545,000 tonne/y propane dehydrogenation (PDH) facility at the petrochemical complex in Point Comfort, TX, US. Under the contract, the Steam Active Reforming (STAR) process of ThyssenKrupp Industrial Solutions will be made available to FPC. The contract includes basic engineering, licensing, delivery of the catalyst (STAR catalyst), detail engineering for the key equipment, and technical support during the entire project execution. The promising STAR process has been developed by Uhde.

Original Source: Chemical Engineering World, Oct 2014, 49 (10), 16 (Website: <http://www.cewindia.com>) © Jasubhai Group 2014

Technology from UOP to be used to produce renewable diesel for US military

On 1 Oct 2014, UOP LLC, announced that its advanced process technology will be used to produce renewable diesel for the US military through the US Department of Defense Advanced Drop-in Biofuels Production Project. Emerald Biofuels LLC will use the UOP/Eni Ecofining process technology to refine non-edible oils and animal fats into renewable diesel, also known as Honeywell Green Diesel, which is a drop-in replacement for conventional diesel derived from petroleum. Emerald is being supported by a \$70 M contract from the Defense department project, which is focused on creating economically viable production capacity for advanced drop-in biofuels, including feedstocks, refining, transportation and logistics.