

Press release

nova-Institut GmbH (www.nova-institute.eu)
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Innovation Award "Bio-based Material of the Year 2016" – “Top 6” candidates nominated!

For the ninth year in a row, the Innovation Award "Bio-based Material of the Year" will be awarded to the young, innovative bio-based material industry, finding suitable applications and markets for bio-based products. The competition focuses on new developments in these areas, which have had (or will have) a market launch in 2015 or 2016. The winners will be elected at the International Conference on Bio-based Materials, 5-6 April 2016 in Cologne, Germany (www.bio-based.eu/conference).

This year, six bio-based materials and products have been nominated for the Award by the advisory board – out of more than 20 submitted products. The nominated companies are from the United States, Germany, Belgium, the United Kingdom and Sweden.

In a short 10-minute presentation, each of the six companies will introduce its innovation. The three winners will be elected by the participants of the conference and awarded with a prize, sponsored by InfraServ GmbH Knapsack at the dinner buffet. Interested parties can register at www.bio-based.eu/conference. 250 participants are expected.

The “Top 6” candidates are:

1) [Amyris Inc. \(US\): Myralene™-10 – New high-performance, sustainably sourced and cost-competitive solvent made from β-farnesene](#)

Myralene™-10 is a new high-performance, sustainably sourced, cost-competitive, environmentally advantaged solvent made from β-farnesene that Amyris produces in Brazil on a commercial scale by fermentation of sugarcane juice using special strains of baker's yeast. It is a low vapour pressure non-VOC solvent with superior solvating and degreasing power, excellent thermal, oxidative and hydrolytic stability, low odour, no colour, a favourable viscosity profile and readily biodegradable. It is non-toxic and has superior Environmental, Health & Safety (EH&S) and flammability safety profile. With regulatory approval in the USA (TSCA) and the EU (REACH) and USDA Biobased Product Certification, it was launched commercially in 2015. The first product line containing it is the Muck Daddy family of waterless hand cleaners and wipes.

2) [Covestro Deutschland AG \(DE\): Impranil®eco – Bio-based waterborne polyurethane dispersions for textile coatings](#)

Sustainability has an increasing impact on the product and raw-material purchasing decisions of consumers and brand owners. Covestro has developed a technology to raise the content of renewable resources in polyurethane dispersions (PUDs) up to 65%. This makes new levels of sustainability possible for PU synthetic materials (footwear, garment, accessories...). Thanks to this development, it is now possible to produce coated textiles with high performance and low content of fossil-based raw materials in each layer. The key benefits are: 43% – 65% renewable carbon content, not in direct competition with the food chain; can be used in every layer of the production of synthetic materials or coated textiles; drop-in of existing Impranil® PUD types, i.e. low reformulation efforts.

3) Evonik Nutrition & Care GmbH (DE): REWOFERM® SL 446 – Novel sophorolipid-type biosurfactant

REWOFERM® SL 446 is a novel sophorolipid-type biosurfactant. It is made by fermentation with a natural, non-GMO yeast using European sourced sugar and oil feedstock. Due to its environmentally benign production process, REWOFERM® SL 446 has a low carbon footprint and a Renewable Carbon Index (RCI) of 100%. It exhibits an excellent toxicological and ecotoxicological profile and is completely biodegradable. It is compliant with European Ecolabel requirements. It also behaves as a super-mild surfactant to the skin. Replacement of petrochemically based surfactants by REWOFERM® SL 446 boosts the foaming and the grease removal efficacy in hand dish wash formulations. Thus, it is possible to increase both the performance and the ecological footprint of your cleaning formulations.

4) Orineo BVBA (BE): Touch of Nature™ – Filled bio-based resin for stimulating biomaterials

Imagine the work and people involved in bringing coffee beans from their exotic plantation into your morning mug. Consider now the tiny fraction of the bean being brewed and the few minutes to empty your espresso. Well, Orineo has developed a new range of biomaterials based on the 80% waste of your cup of coffee, coffee grounds. They are biomaterials designed for a 20 years' lifetime. Plenty of time for nature to replenish the feedstock! And it does not stop here. Branded as Touch of Nature™, these materials look good, feel good and perform well. One more step? Same story with used cork stoppers, berry seeds, olive leaves, to obtain a range of colours and patterns based on nature. It's now commercial: liquid bio-based formulations for seamless floors, tabletops and furniture based on these sidestreams.

5) SIP Ltd (UK): SIPDRILL RS – First renewable, hydrocarbon drilling base fluid for high performance drilling mud systems

SIPDRILL RS is renewable alkene designed specifically for use in high performance drilling mud systems. SIPDRILL RS is 100% hydrocarbon, manufactured via the proprietary fermentation of sustainable sugar, producing farnesane, β -farnesene and n-hexadecene. Designed to meet exacting physical and eco-toxicological performance requirements, SIPDRILL RS exists in two forms; SIPDRILL RS (North Sea), >73% wt. renewable and SIPDRILL RS (GoM) >85% wt. renewable. SIPDRILL RS has been shown to perform exceptionally well in drilling muds, whilst exhibiting very low toxicity characteristics as mandated by the US EPA and CEFAS. SIPDRILL RS is thought to be the first 100% renewable, hydrocarbon drilling base fluid and will begin sale in fourth quarter, 2016.

6) Tetra Pak International S.A. (SE): Tetra Rex® Bio-based – World's first fully renewable package for chilled liquid food

Tetra Pak's biotechnology innovation, Tetra Rex® Bio-based, launched in 2015 is a significant industry achievement in sustainable packaging. The world's first fully renewable package for chilled liquid food is produced from nothing but renewable, recyclable and traceable FSC™ certified packaging and bio-based (bio-ethanol) plastic derived entirely from sugarcane. Full traceability of the carton's origins assures consumers, setting it apart from mass balance solutions. Following European market success, 100 million packs are expected to be delivered globally in 2016. Tetra Rex® Bio-based offers a win-win solution: a product benefiting both customers and the environment, while revolutionising the packaging industry with a fully renewable responsibly sourced innovation.

Click here for more information about the six candidates: <http://www.biowerkstoffkongress.de/award>

A collage of all nominated products can be downloaded at the following link (please include nova-Institute as source):

<http://bio-based.eu/media/16-02-26-Innovation-Award-2016-nominees.jpg>

Responsible under press legislation (V.i.S.d.P.):

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