

Press release

nova-Institut GmbH (www.nova-institute.eu)
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Six candidates are nominated for the innovation award “Biocomposite of the Year 2019” – Biocomposites are highly versatile: the choice is yours!

For the seventh year in a row, the innovation award “Biocomposite of the Year” will be granted to producers and inventors of innovative, new applications for biocomposites – Natural Fibre Composites (NFC) and Wood-Plastic Composites (WPC)

There has never been a greater demand for alternatives to classic plastic products as today. Nowadays, up to 80 % of plastics can be replaced by biogenic fillers such as wood flour and cork or by natural fibres for reinforcement. These days, biocomposites are available for almost every application: packaging, consumer goods, toys, handles, shoes, façade and terrace elements, floors, automotive parts and even room applications. This year’s nominated companies give a good picture about the emerging application fields for biocomposites: automotive, packaging, casing for consumer goods, instruments as well as solutions for construction such as facades.

The winners of the innovation award “Biocomposite of the Year 2019” will be chosen at the “8th Biocomposites Conference Cologne”, in Cologne, Germany (www.biocompositesc.com). Out of 15 applications, six new materials and products have been nominated for the innovation award by the conference advisory board. After a ten minutes presentation at the conference from each of the six candidates, the three winners will be elected by the participants and honoured with the innovation award, sponsored by Coperion GmbH, at the festive dinner buffet.

What to expect? The “Top 6” candidates in detail, in alphabetic order:

Bcomp (CH): PowerRibs™– Sustainable Lightweighting

The Swiss company Bcomp has developed proprietary light-weighting solutions for high performance applications by applying the latest composites knowledge to natural fibres. Thanks to powerRibs™ technology, a reinforcing grid inspired by the thin veins in leaves that provides maximum stiffness at minimum weight, natural fibres can achieve the performance of carbon fibres in a motorsport body and thus replace them. The result is a 75% lower CO₂ footprint, 30% lower costs and improved safety without toxic dust and sharp shattering, as well as viable end-of-life options. The powerRibs™ are also used to make automotive interior panels up to 40% lighter.

More information: www.bcomp.ch

Golden Compound (DE): HOMEcap – Home Compostable Coffee Capsules

HOMEcap is the world's first and only home compostable capsule successfully introduced in the market that is 'OK compost HOME' certified. Biodegradation in home compost avoids considerable waste streams. The capsule was successfully launched on the market in the spring of this year. It is made from a unique compound comprising PTTMCCs PBS and PBSA mixed with sunflower seed shells and inorganic fillers. It comes with a paper and cellulose based lid, sealable to the capsule without additional glue, home compostable as well. The material composition results in low oxygen transmission rates, which allows to avoid additional barrier packaging and is therefore saving waste. A VDI 4605 sustainability assessment showed that this capsule outperforms current state of the art capsules, like deep-drawn PP EVOH multilayer capsules, in terms of sustainability.

More information: www.golden-compound.com

KNN Cellulose (NL): Recell® Biocomposite – The Competitive Alternative

Recell® biocomposite is a granulate at competitive pricing and with low environmental impact. The biocomposite is made from recovered toilet paper (a tertiary cellulose source) mixed with a variety of polymers like bio-resins, PLA or PHA. So, the cellulose-based product therefore fits ideally in the circular economy. The granulate is suitable for standard injection moulding and extrusion operations. Current applications are e.g. flowerpots, cladding, fencing, decking and crates. The product taking part in the competition is a picnic table produced by EcoDeck. The Recell® cellulose fibres are efficiently produced from Sewage Treatment Plants (STPs) with Cellvation® technology. STPs thereby benefit from lower operational cost, an increase in processing capacity and the fibres are reused instead of incinerated, benefiting their environmental impact dramatically.

More information: www.recell.eu

Lingrove (US): Lingrove Ekoa® Veneer

Lingrove builds high-performance veneers for composites - such as the Ekoa® product line with flax fibres and vegetable resins. The veneer has a higher stiffness/weight ratio than steel, is lighter than carbon fibre and has the look of vintage wood. Accordingly, Luttwak guitars made of Ekoa® look like wood, but are not made of wood – they are even better than wood. Lingrove is currently scaling veneer and panel production to meet demand from commercial and residential real estate markets.

More information: www.lingrove.com

OrganoClick (SE): A Burial Coffin Made with OrganoComp® and 3D Fibre Moulding

A burial coffin Saga made of Swedish company OrganoClick's biocomposite, was launched in May 2019. OrganoComp® is a patented, 100% bio-based material made of Swedish wood fibres. The binder is based on biopolymers from side streams in the food and pulp industry, such as orange peels and shrimp shells. OrganoComp® is produced with a patented production technology for 3D fibre moulding and is replacing particle boards used in burial coffins that contain synthetic glues. The strength of OrganoComp® enables 50% raw material reduction of the coffin while maintaining the appearance of traditional coffins.

OrganoComp® is also used to replace fossil-based plastics and other applications include containers, acoustic panels, and furniture.

More information: www.organoclick.com

Trifilon (SE) –Trifilon BioLite - Market-tested biocomposites made with Hemp Fibres

With BioLite, Trifilon offers a green alternative to plastics. BioLite is a polypropylene reinforced up to 30% hemp fibres. Trifilon BioLite is a hemp fibre, polypropylene composite that is delivered in granulates for injection moulding machines. Hemp is one of the strongest natural fibres in the world, which makes BioLite products strong, light and durable. The use of hemp fibres in BioLite optimises the material properties for many applications – The DOMETIC COOLFUN SC 30B thermoelectric cooler is just one example. This technology gives manufacturers the opportunity to make sensible use of renewable raw materials, and an excellent one is hemp. The cooler housing is the world's first to be manufactured with biocomposite material.

More information: www.trifilon.com

The pioneers of the bio-based industry meet in Cologne

From 14 to 15 November 2019, the pioneers of the biocomposite industry will meet at the "8th Biocomposites Conference Cologne". New technologies and applications of biocomposites cover a broad and exciting range of topics. The final program is available online:

www.biocompositesc.com/programme/

The day before and parallel to the conference, EU project-related workshops will take place. In these workshops, international experts from the bio-based industry will present and discuss case studies, market figures and strategies for a circular wood value chain. Further information on the workshops can be found here: www.biocompositesc.com/side-events/

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food and feedstock, technology, economy, markets, sustainability, dissemination, B2B and B2C communication and policy. Every year nova organises several leading conferences on these topics. nova has 35 employees and an annual turnover of more than 3 million €.

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