

Forest and Paper Research Institute

TECHNOLOGICAL SCOUTING NEWSLETTER

December 2021



Highlights

- The packaging segment continues to be the main subject of development by different companies, from cereal boxes, packaging for frozen foods to paper bottles for prestige beauty products.
- The biorefinery and forest segments also appear with solutions for biochemicals production and new eucalyptus varieties development.



Contents

- Kellogg's: new paper liners in cereal boxes
- Mondi: new packaging for frozen foods
- Estée Lauder: joins Pulpex consortium for new paper bottle
- Anellotech: technology for biochemicals is ready for commercialization
- Suzano: new eucalyptus varieties

Services Provided by RAIZ Technological Scouting:

Technological Scouting Newsletter (monthly)

Technological Scouting On Demand (specific technological issues, upon request)

For further information please contact: mariana.oliveira@thenavigatorcompany.com



START-UP OF THE MONTH

UniCup

UniCup is a Swedish start-up which has developed Liplid, a paper lid for coffee cups aiming to replace the current plastic solutions. Current plastic lids are poor in functionality and sustainability, with plastic lids being difficult to put on properly, spills being common and recyclability not always being guaranteed.

UniCup has developed a paper lid that sits inside the cup, improving the cup's stability and the overall drinking experience, as the lid allows drinking from the rim of the cup instead of the lid, so burns are less probable and it doesn't taste like plastic or paper.

The lids are manufactured through PulPac's Dry Molded Fiber process.

Read more ≻ liplid



Technological Product Development



PACKAGING



Two Sides

Kellogg's: new paper liners in cereal boxes

The Kellogg's cereal boxes outer card packaging is already made of paper and therefore recyclable, but the plastic inner liner containing the cereal is still not possible to be recycled together with the outer card. To change that, Kellogg's is introducing a paper liner for containing the cereal within the box, making the entire packaging material paper-based and fully recyclable. The new paper packaging will be suitable for the filling and sealing process, just like the plastic liner, and for keeping the food goods safe for transport to retailers.

Read more ➤ <u>Two Sides</u>

CENTRE REST CENTRE CENT

Mondi

Mondi: new packaging for frozen foods

Mondi has collaborated with UK's frozen food retailer Iceland for developing a renewable and recyclable paper based packaging. For that, the two companies have used Mondi's functional barrier paper to reduce the amount of plastic used by 80% when comparing with Iceland's previous packaging. The first newly packaged product of this kind to be commercially available was Iceland's frozen chicken dippers. Mondi additionally states that Mondi's functional barrier paper offers complete product protection, ensuring the product has the same shelf life as it did with its previous packaging.

Read more ≻ Mondi



4



PACKAGING



Packaging Europe

Estée Lauder: joins Pulpex consortium for new paper bottle

Pulpex, already stated in previous TS Newsletters, is a new sustainable packaging technology company, which has developed a patented, "first of its kind" pulp packaging solution and process involving moldable pulp. Now the Estée Lauder Companies have announced joining the Pulpex partner consortium, becoming the consortium's first prestige beauty company partnering for the development of a recyclable paper bottle and for scaling the Pulpex paper bottling technology across its brand portfolio. Its brands include Estée Lauder, Clinique, DKNY and Michael Kors.

Read more ≻ Estée Lauder

TechnologicalProduct Development

BIOREFINERY



Anellotech

Anellotech: technology for biochemicals Is ready for commercialization

Anellotech, a sustainable technology company from USA, has developed a patented Bio-TCat[™] technology which is an efficient thermal catalytic process for converting wood biomass into benzene, toluene and xylene, chemically identicals to their petroleum-based counterparts. Anellotech has now announced the production of 100% biobased and polymer-grade p-Xylene at its pilot plant which has been used by Suntory, a global consumer beverage company, to make 100% bio-PET resin and successfully produce prototype PET beverage bottles.

Read more ➤ ifpenergiesnouvelles

Technological
Product Development



FOREST



Tissue Online

Suzano: new eucalyptus varieties

FuturaGene, Suzano's biotechnology company, will use proprietary genetic editing technology from Corteva Agriscience, an agricultural company, and the Broad Institute, a non-profit organization of MIT (Massachusetts Institute of Technology) and Harvard, for the development of new eucalyptus varieties with improved characteristics. These characteristics include higher productivity, higher resistance to diseases and pests, to climate change and better quality fibres.

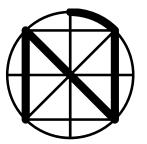
Read more ➤ <u>Tissue Online</u>

Forest

RAIZ – Forest and Paper Research Institute

Quinta de S. Francisco, Apartado 15, 3801-501 Eixo Tel: +351 234 920 130, Fax: +351 234 931 359

mariana.oliveira@thenavigatorcompany.com



PART OF THE NAVIGATOR COMPANY