

RAIZ



Forest and Paper Research Institute

TECHNOLOGICAL
SCOUTING NEWSLETTER

June 2022

Highlights

- Following the latest months trend, the packaging segment continues to appear with new solutions, from paperboards to cellulose films



Contents

- BillerudKorsnäs: 3D formable FibreForm® paper range expanded
- PulPac: Dry Molded Fiber patent portfolio expanded
- P&G: shampoo and conditioner bars in paper boxes
- UPM: new recyclable and compostable kraft paper
- Carlsberg & Paboco: new trial of a new bio-based fibre bottle
- Klabin: new paperboard with microfibrillated pulp
- VTT: new transparent cellulose film
- Södra: one million garments based on OnceMore®

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



Biotransformation: advanced by science enabled through nature

A UK based start-up, has developed an innovative “biotransformation” technology for altering the properties of plastic to make it biodegradable in nature. The technology enables plastic packaging waste such as takeaway containers, disposable cups and packaging to be digested naturally by microbes and decompose. The start-up says manufacturers can add their ‘drop-in’ Polymateria additive, in a pellet form, to their plastic resin during the manufacturing process. After a specified period, the dormancy period ends and the additive breaks down the hard crystalline and amorphous structure into a wax-like substance through multiple chemical reactions, achieving carbon-carbon bond scission and ensuring no microplastics are created. Polymateria’s proprietary use of ‘synthetic’ prebiotics attract natural agents of decay like microbes, fungi and bacteria to fully consume the wax-like substance.

Read more > [Polymateria](#)



PACKAGING



BillerudKorsnäs

BillerudKorsnäs: 3D formable FibreForm® paper range expanded

BillerudKorsnäs's 3D formable FibreForm® paper has already been applied into different products, such as in packaging, as trays, cartons and stand up pouches. The range has now been supplemented with unbleached, brown paper for applications such as in reusable carrier bags, paper cup sleeves and paper plates, aligning BillerudKorsnäs's packaging range with the current environmental values.

Read more > [BillerudKorsnäs](#)

● Technological

● Product Development



PulPac

PulPac: Dry Molded Fiber patent portfolio expanded

Up to now, PulPac holds 28 patent families with 85 granted national patents and plus 50 pending patent applications. Two new patent applications were recently filed, directed to ejection elements in connection to the forming mold, with the purpose of an easy removal of the products from the mold parts. The ejection elements can also be used for imprinting a pattern in the product, to be read or scanned for information purposes.

Read more > [PulPac](#)

● Technological

● Product Development

PACKAGING



Packaging Europe



P&G: shampoo and conditioner bars in paper boxes

P&G brands Head & Shoulders, Pantene, Herbal Essences and Aussie will now present shampoo and conditioner bars, in a volume equivalent to two 250ml liquid bottles, packaged in recyclable paper boxes. This initiative is placed within P&G goal of reducing the use of virgin plastic by 10,000 tonnes per year, matching around 300 million bottles annually.

Read more ➤ [Packaging Europe](#)

● Technological
● Product Development



UPM



UPM: new recyclable and compostable kraft paper

UPM has developed the paper Solide Lucent™, a recyclable and compostable kraft paper to be used as a coating base for high barrier packaging applications, such as single packs, bags and wraps. It is smooth, dense, strong and with folding properties for enabling lightweight and uniform coatings. Additionally, the paper is natural white, as it does not contain optical brighteners, while providing an excellent printing quality.

Read more ➤ [UPM](#)

● Technological
● Product Development

PACKAGING



Carlsberg

Carlsberg & Paboco: new trial of a new bio-based fibre bottle

Carlsberg has announced a consumer trial of its new bio-based and fully recyclable Fibre Bottle, with about 8,000 Fibre Bottles being sampled in Denmark, Sweden, Norway, Finland, United Kingdom, Poland, Germany and France, through select festivals and flagship events, as well as targeted product samplings. The bottle novelty is its plant-based PEF polymer lining, which has been developed by Avantium. PEF functions as a highly effective barrier between the beer and the fibre outer shell, protecting the taste and fizziness of the beer better than conventional fossil-fuel-based PET plastic. For now, the bottle is 100% bio-based apart from the cap, which is currently needed to ensure the quality of the product.

Read more ➤ [Carlsberg](#)

● Technological
● Product Development



Klabin

Klabin: new paperboard with microfibrillated pulp

Klabin has developed a new version of its paperboard Klamulti, designed for beverage packaging (multipack), which now has microfibrillated pulp (MFC), produced at Klabin's MFC plant, in its composition. The addition of MFC in the paperboard composition significantly improved the product's properties and performance while also reducing grammage. The new solution is capable of creating lighter and more resistant packaging, enhancing the material efficiency.

Read more ➤ [Klabin](#)

● Technological
● Product Development

PACKAGING



VTT

VTT: new transparent cellulose film

VTT has developed a transparent cellulose film for replacing traditional plastic in food packaging, based on regenerated or recrystallised cellulose. The developed cellulose film is transparent and flexible, and the consumer cannot distinguish between the crystal-clear material and traditional oil-based plastic. The production of packaging material is in the pilot phase, and it could be in extensive industrial use in 5–7 years.

Read more > [VTT](#)

● Technological
● Product Development

BIOREFINING



Södra

Södra: one million garments based on OnceMore®

Södra has previously developed a new process, the OnceMore®, to separate cotton and polyester in polycotton blends, being the pure cotton fibres then added to Södra wood-derived textile pulp, which can then be used to make new textiles. Södra is now entering into a collaboration with the Scandinavian fashion company Lindex with the goal of producing one million garments from textile waste and forest raw materials. The garments will be in the Lindex range from the beginning of 2023.

Read more > [Södra](#)

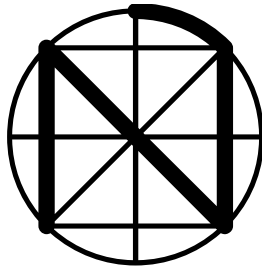
● Technological
● Product Development

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**