

RAIZ



Forest and Paper Research Institute

TECHNOLOGICAL
SCOUTING NEWSLETTER

September 2022

Highlights

- The packaging, the biorefinery and the forest sectors were addressed in this TS Newsletter, with packaging solutions from UPM and Colpac, potassium sulfate from industrial waste by Klabin, and advances on eucalyptus tolerance to Eucalyptus Physiological Disorder by Suzano.



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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

SHELLWORKS

This London-based biotech startup is developing alternatives to plastic packaging, by creating truly compostable packaging solutions. It has first developed a compostable material using polymers taken from shellfish waste, before switching to a microbially-derived material in 2020. The result is vegan, petroleum-free packaging that behaves like plastic until it's thrown away. Once added to a personal or industrial compost bin, it will decompose naturally in around one year.

Read more ➤ [ShellWorks](#)



PACKAGING



UPM

UPM: new heat sealable and recyclable barrier papers

UPM has developed a new range of barrier papers, the Confidio Pro and UPM Confidio for the dry and frozen foods industries. The papers are suitable for a variety of end uses, combining heat sealability, moisture resistance, grease resistance, and mineral oil barrier. Additionally, superior printing results are possible through all printing methods available. The papers are suited for primary and secondary packaging as they are safe for direct food contact.

Read more > [UPM](#)

● Technological
● Product Development



Stora Enso

Huhtamaki & Stora Enso: industrial scale recycling programme for paper cups in Europe

Huhtamaki and Stora Enso have launched an industrial scale recycling programme for paper cups in Europe, The Cup Collective. The programme, which is the first of its kind in Europe, aims to recycle and capture the value of used paper cups on an industrial scale. Initially the programme will be implemented across the Benelux. With the aim of setting new standards for paper cup collection and recycling in Europe, The Cup Collective has issued an open invitation for partners from across the supply chain to get involved in working towards a systemic European solution.

Read more > [Huhtamaki](#)

● Technological
● Product Development

PACKAGING



PaperAge

Mondi: new R&D centre

Mondi is investing around EUR 5 million in a new research and development facility at Mondi Steinfeld in Germany. The R&D centre will focus on developing sustainable packaging solutions at Mondi, particularly on Flexible Packaging. Extrusion coating, aqueous coating and siliconisation means will be available, as well as various printing machines. Pilot-scale solutions on site will also be available for costumers. The R&D centre will open its doors at the end of 2023.

Read more > [PaperAge](#)

● Technological
● Product Development



Mondi

Mondi: new laboratory for paper product recyclability

Mondi has opened the Group's first recycling laboratory at its Frantschach mill in Austria to test the recyclability of paper and paper-based packaging using non-paper components such as coatings. The tests are carried out on various paper and paper-based packaging products developed by Mondi and can determine whether the packaging can be efficiently recycled. The laboratory works in a similar way than industrial recycling facilities, but on a smaller scale. Results generated provide concrete evidence that the material can be recycled.

Read more > [Mondi](#)

● Technological
● Product Development

PACKAGING



Colpac

Colpac: new range of kraft multi-food pots at UK factory

Colpac has launched a new range of multi-food pots, manufactured at its UK factory.

The new range offers printed kraft and natural kraft options, and the pot bases have a PE coating which provides a barrier to moisture and grease. The lids are made from rPET.

Read more > [Colpac](#)

● Technological
● Product Development

BIOREFINERY



Stora Enso

Stora Enso: new recyclable and fibre-based wood foam

Stora Enso has presented its new recyclable and fibre-based wood foam, Fibrease, for replacing polymer-based foams in packaging solutions. Developed in partnership with Nefab, the fibre-based material Fibrease is intended to replace polymer foams and offer brand owners more sustainable packaging solutions. Stora Enso worked with Nefab to scale up the production and for converting capabilities and for introducing Fibrease into the market. The new fiber-based wood foam performs similar to PU foam but is recyclable in the paper/board stream.

Read more > [Stora Enso](#)

● Technological
● Product Development

BIOREFINERY



PaperAdvance

Klabin: producing potassium sulfate by processing industrial waste

Klabin is said to be the first company in the sector to produce potassium sulfate through the processing of industrial waste through an innovative technology, which involves the recovery of potassium from the ashes generated in the Recovery Boiler, in the form of crystallized potassium.

The process will allow the company to directly use or sell potassium sulfate in bulk to the fertilizer production market.

Read more ➤ [PaperAdvance](#)

● Technological
● Product Development

FOREST



Suzano

Suzano: advances on eucalyptus tolerance to Eucalyptus Physiological Disorder (DFE)

FuturaGene, Suzano's biotechnology subsidiary, in partnership with the company's genetic improvement team, has identified molecular markers associated with eucalyptus tolerance to Eucalyptus Physiological Disorder (DFE). This disorder is an important abiotic disease that significantly reduces the productivity of eucalyptus plantations. Genomic regions strongly associated with resistance to DFE were identified, enabling the development of molecular markers to be used in the early selection of resistant clones still in the seedling phase, before being taken to the field, with anticipated phenotype accuracy greater than 90%.

Read more ➤ [PortalCelulose](#)

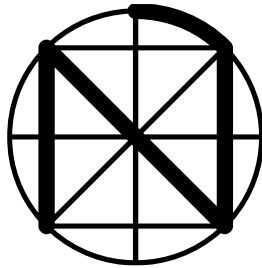
● Forest

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



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