# Forest and Paper Research Institute

TECHNOLOGICAL SCOUTING NEWSLETTER

January 2021



## Highlights

- Solutions in paper based packaging were in high demand at this first month of 2021, from snack boxes to biodegradable cups.
- To highlight Mondi's new paper machine to produce paper-based shopping bags in Europe.
- Associated with packaging solutions, comes the development of biobased plastics from Kemira, DuPont, Woodly and VTT.



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- Kemira and DuPont: development and commercialization of new breakthrough biomaterials
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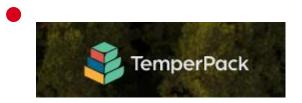
#### Services Provided by RAIZ Technological Scouting:

Technological Scouting Newsletter (monthly) Technological Scouting On Demand (specific technological issues, upon request) Industrial Property (IP) Survey (quarterly)

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## **START-UP OF THE MONTH**



USA based TemperPack has developed the patented ClimaCell®, a flagship packing product for home deliveries, made from renewable plant-based components and paper. It provides thermal properties along with a competitive cost, coming as the ideal replacement for insulators such as Styrofoam®. The start-up has recently raised \$31.3 million in a financing series.

Read more ≻ <u>TemperPack</u>







photo: Cision

AR Packaging: smartly constructed snack boxes

Due to the pandemic crisis, there is an increasing need of tailored packaging to be used in take away and home delivery. To meet this new demand, AR Packaging has developed two different snack boxes, based on carton-based packaging, tailored for these applications while reducing the use of plastic packaging. Additional and similar solutions by AR Packaging are expected in the near future.

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photo: Packaging Europe

## Kotkamills: biodegradable and recyclable cup for vending machines

In collaboration with Lavazza, Kotkamills introduces a new recyclable and biodegradable product, the KLIX Eco Cup. Contrary to standard paper cups, which are difficult to recycle and are usually sent to landfills due to its polyethylene lining, the new cup has a patented water-based dispersion barrier board that enables the cups to be recycled with normal paper waste, just like office paper.

Read more ➤ Packaging Europe







photo: Paper Advance

### Metsä: innovative and recyclable beverage cooler

Metsä has created an innovative and recyclable beverage packaging that comes with a cooling tray to contain crushed ice or cold water. The main body of the packaging, including the bottom and cover, is made of MetsäBoard Classic FBB 340 g/m<sup>2</sup>, while the special cooling tray, as well as the compartment separator for easy fill up, is made of Metsä Boards eco-barrier paperboard MetsäBoard Prime FBB EB 265 g/m<sup>2</sup>. This eco-barrier paperboard was used with Weilburger Graphics' new Senolith® water-based barrier coating for keeping the water inside the cooler.

Read more ➤ Paper Advance

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photo: Paper Advance

## Mondi: to revolutionize European paper-based shopping bag market with start-up of new specialty kraft paper machine

Mondi has started-up its new speciality kraft paper machine at its Štětí mill in the Czech Republic, Europe's first dedicated paper machine for speciality kraft paper grades, made of fresh and recycled fibre, for retail and online shopping bags. The paper machine is expected to produce up to 130,000 tonnes of Mondi's EcoVantage two-ply paper per year, making Mondi the largest producer of consumer shopping bags in Europe.

Read more ≻ PaperAdvance





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## Kemira and DuPont: development and commercialization of new breakthrough biomaterials

DuPont and Kemira are partnering for the development and commercialization of DuPont's enzymatic biomaterial platform technology, already at an advanced pilot scale and ready to be scaled up to a global level, for the production of a variety of biomaterials with applications in several areas, such as in packaging and board applications to improve strength and barrier properties.

Read more ≻ Kemira

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photo: hkscan

## HKScan and Woodly: new wood-based plastic product

Finnish food manufacturer HKScan will have the exclusive rights to use the wood-based Woodly® plastics in the meat product category in Finland. The company will use Woodly's proprietary plastic based on softwood cellulose, composed of 40-60% bio-based materials, on select grilling sausage packages during the coming summer.

Read more ≻ <u>hkscan</u>

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photo: Packaging Europe

### VTT: cellulose-based thermoplastic film

Along with the Wipak packaging company and the Finnish food and drink company Paulig, VTT is testing if its Thermocell plastic material, made of cellulose and fatty acids, can be produced on an industrial scale using the same equipment that is used for traditional plastic films, and with features that meet the needs of the food industry. VTT is then testing if the material is suitable for industrial production processes, such as injection molding, coating of paper and paperboard and 3D printing. Thermocell had already shown to provide good barrier protection against water vapour and none of its components migrate into the food product.

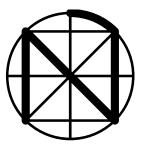
Read more ➤ <u>Packaging Europe</u>

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