

RAIZ



Forest and Paper Research Institute

TECHNOLOGICAL
SCOUTING NEWSLETTER

November 2020

Highlights

- The biorefinery area has been addressed by, for instance, new biobased films for packaging, bioproducts such as tail oil and biomethanol, and granulated lignin, by Danimer Scientific, Södra and UPM
- Flexible packaging new solutions are reported by Holmen and BillerudKorsnäs and BASF
- A new kraft paper range is also introduced by UPM



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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)

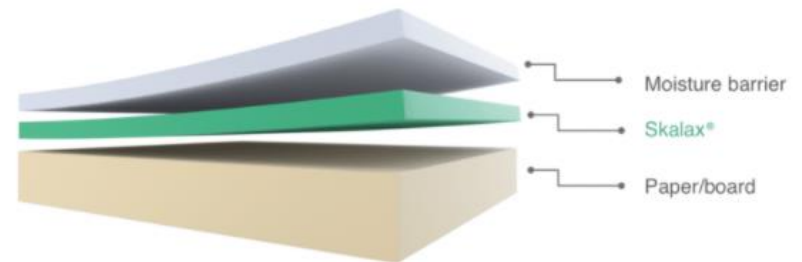
For further information please contact: mariana.oliveira@thenavigatorcompany.com

START-UP OF THE MONTH

seelution

Swedish startup Seelution has developed Skalax, a bio-based barrier material consisting of natural polysaccharides and additives in water, applied via dispersion coating for multi-layer food packaging. Skalax provides an efficient barrier against oxygen, grease, and aroma, that can prolong shelf life of sensitive food stuffs in multi-layer packaging. Seelution's barriers are recyclable and contain no fluorocarbons.

Read more > [Seelution](#)



BIOREFINERY



photo: Paper Advance

Södra: recycling process OnceMore®'s new milestone

Södra has 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. The process implementation started in 2019 with 3% recycled textile content being included. Södra has now announced that has successfully added 20% of used textiles to its OnceMore® dissolving pulp. The target is said to be 50 %, corresponding to an increase of capacity to 25,000 tonnes of textile waste added to pulp production by 2024.

Read more > [PaperAdvance](#)

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photo: BioPlasticsMagazine

Danimer Scientific and PSI-Sidaplast: new biobased, home compostable film packaging

Danimer Scientific, a manufacturer of biodegradable resins, and Plastic Suppliers, Inc. (PSI) parent company of Sidaplast Belgium, a manufacturer of the biopolymer EarthFirst® PLA barrier and non-barrier sealant films, announced they will work on the development of bio-based and home compostable films. These films will contain Danimer Scientific's proprietary biopolymer, the Nodax polyhydroxyalkanoate (PHA). The inclusion of this component will allow tailored resins, that will offer additional end-of-life options to PSI's already existing line of industrial compostable films. The new PHA containing films will include home compostable, as well as soil and marine degradable alternatives. Several applications are expected, such as in the food, beverage, grocery retailer, quick service restaurant, stadium foodservice, and other consumer packaged goods and industrial segments.

Read more > [BioPlasticsMagazine](#)

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BIOREFINERY



photo: Södra

Södra: new Liquid Forest range of sustainable bioproducts

Södra has launched its Liquid Forest™ brand, a pioneering range of bioproducts: biomethanol, tall oil and turpentine. Viktor Odenbrink, Sales Manager for Södra Cell Bioproducts, says that this brand intends to transmit to the consumer that it is “a piece of the Swedish forest in liquid form for a fossil-free and sustainable future”. Södra’s turpentine, can be used in perfume and detergent, tall oil in paint, as an adhesive on various types of labels or as a biofuel, and the biomethanol can be used as a green chemical in the production of biodiesel, and as a base chemical in both petrochemicals and the flavour and fragrance industry. The company’s biomethanol plant at the Mönsterås pulp mill is the first commercial plant of its kind in the world.

Read more > [PulpPaperNews](#)

● Product Development



photo: Stora Enso

Stora Enso: new production line for granulated lignin

Stora Enso is investing 14 million € to build a granulation and packing plant for its Lineo™ lignin, for an easier packing and handling of lignin, compared to when it is in its powder and wet form, as is currently produced at Stora’s Sunila Mill. The investment will provide Stora’s costumers with a more efficient way of handling dry lignin and delivering it in bulk containers. Associated packaging and transportation costs will, as well, be reduced, as packing granulated lignin will be easier and faster compared to the dry powder form, which requires special equipment. The plant construction is expected to begin by the end of the second quarter of 2021, and to be completed in the second quarter of 2022.

Read more > [Cision](#)

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NEW PAPER BASED PRODUCTS



photo: UPM

UPM: new Solide kraft paper family - strong, translucent and visual

UPM Specialty Papers has launched UPM Solide™, a new family of kraft papers that offer a combination of strength with a diversity of converting properties. All available grades in the UPM Solide™ portfolio have excellent printability properties to maximize the shelf impact of packaging, and are recyclable in regular paper recycling stream. Within the new available products, the UPM Solide Lucent paper standout, being a new translucent paper that offers a great alternative to plastics even on fast packaging lines where runnability is necessary. The UPM Solide™ products are certified as safe for direct food contact. The product range also offers alternatives free from optical brighteners.

Read more > [UPM | youtube](#)

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photo: PulpPaperNews

Holmen Paper: new flexible packaging paper

Holmen Paper has released the Holmen PACK, characterized as being a fresh and smooth paper for flexible packaging solutions, and a new alternative to MG (machine-glazed) papers. The new paper combines the printing properties of a wood-containing paper with the required strength of a kraft paper. The paper has a smooth surface on both sides due to the double calendering in the production process, making it a great alternative to the traditional MG papers having only one side with a glossy surface. The Holmen PACK paper has adequate mechanical strength for industrial use, converting, and many areas within end consumer use. When used as a protective layer, it helps preserving the quality of wrapped or interleaved items throughout handling and storage. Due to its smooth surface and uniform quality, it is a natural industrial base paper, and it can also be used as an environmental-friendly substitute for poly-bagging (industrially sealed plastic bagging of anything from mounting accessories to magazines). Holmen PACK is approved for food contact, with applications in consumer bags and dry food packaging, supermarket bread, fruit and vegetable bags, as well as in fast-food take-away packaging.

Read more > [PulpPaperNews](#)

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NEW PAPER BASED PRODUCTS



photo: Paper Advance

BillerudKorsnäs and BASF: home-compostable paper laminate for flexible packaging

BillerudKorsnäs and BASF have developed a new home-compostable paper laminate for flexible packaging, that can be used to produce wraps with individually tailored barrier properties, for example for cookies, ice cream, cereal bars and dairy items, as well as for wrappers for fish, meat and cheese freshly sold in supermarkets. The developed multi-layer laminate consists of three basic components: BillerudKorsnäs' paper ConFlex® Silk, a sealing layer made of BASF's home compostable and partly bio-based biopolymer ecovio® and BASF's water-based adhesive Epotal® Eco 3675 X. The new paper laminate has the same performance as conventional multi-layer packaging: it is puncture resistant, shows a good printability, excellent heat-seal properties and can be processed on standard packaging machines.

Read more > [BillerudKorsnäs](#)

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FOREST



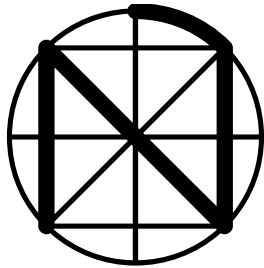
photo: PulpPaperNews

Södra: new Södra 360 Experience

Södra has developed the Södra 360 Experience, which uses virtual reality technology to provide its costumers, and anyone interested, with an increased knowledge about the role of forest in today's society and in the future, particularly on its positive climate effects. Of course, the platform also demonstrates Södra's forest management ways. Visitors of Södra 360 Experience can move from the forest into an interactive modern living space and a townscape, where the sustainable uses of wood, from paper products to textiles, energy and construction materials, are featured in detail.

Read more > [PulpPaperNews](#) | <https://www.sodraexperience.com/home.html>

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