

RAIZ



Forest and Paper Research Institute

TECHNOLOGICAL
SCOUTING NEWSLETTER

October 2020

Highlights

Paper based packaging, particularly for food applications, continues to be in high demand considering the interests of different Pulp and Paper companies. Solutions found involved a biodegradable high barrier packaging paper, formed and paper board trays, paper bottles, reusable paper bags and paper freezer packs.



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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



eniferBio is a Finnish start-up that, with the help of VTT LaunchPad, has developed a method for producing Pekilo mycoprotein, a form of single cell protein derived from fungi that can be used as raw material for fish feed. The process involves the use of biorefineries underutilized and renewable organic raw material streams. The Pekilo mycoprotein can replace soy, which is commonly used in fish feed. The start-up has now received funding for its solution from two funds, from the Nordic FoodTech VC and Voima Ventures.

Read more > [VTI](#)

PACKAGING



Arctic Paper: high-barrier biodegradable packaging paper

Arctic Paper is partnering with Poland's National Centre for Research and Development (NCBiR) for a new project targeting the development and implementation of technology for the production of high-barrier biodegradable packaging paper. The paper is expected to be high-barrier, biodegradable, antibacterial and antifungal. Mentioned applications are in packaging for direct contact with foods, in bags for baked goods, sandwiches, and fast food, in packaging for the catering industry and in packaging and flyers for the pharmaceutical industry. The project will last from 2014 to 2020 with a maximum value of co-financing of about PLN 8.3 million (€1.8 million).

Read more > [Arctic Paper](#)

● Technological
● Product Development



photo: Stora Enso

Stora Enso: unique formed fiber food service bowls for replacing plastics

Along with Tingstad, a family-owned company and market-leading distributor of disposables and food service products to the HORECA sector in the Nordic countries, Stora Enso is bringing to the market its new eco-friendly take-away bowls for food service packaging, the PureFiber™. The products are free from plastic and PFAS (per- and polyfluoroalkyl substances), renewable, recyclable and biodegradable. Additionally to the expected development of further solutions to other food and consumer goods, other applications include non-food items for replacing plastic consumables in agriculture, electronics and consumer and industrial goods packaging.

Read more > [PaperAdvance](#)

● Product Development

PACKAGING

photo: Iggesund Paperboard

Iggesund Paperboard: a new paperboard alternative to plastic food trays

Iggesund Paperboard presents its new Inverform™ board for ready-made meal packaging. The developed Solid Bleached Board (SBB) is made of pure cellulose fibres and has been developed for applications as pressed and folded trays used in food packaging. A polymer barrier is added making the board ideal for tray forming and heat sealing. Iggesund additionally says that is developing the next generation of barriers to match the current increasing demand for sustainable packaging solutions.

Read more > [Iggesund Paperboard](#)

● Technological
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photo: Coca - Cola

Coca-Cola: its first paper bottle prototype

Last month, the TS Newsletter has shown the first paper bottle prototype from the joint venture Paboco for the Absolut Company (TAC). Now, it is the time for Coca-Cola to introduce its first paper bottle prototype. The prototype consists of a paper shell encasing a plastic liner and a closure. The plastic is said to be made from 100% recycled plastic that can be recycled again after use, but the ultimate goal is to have a bottle without the plastic liner, that can be recycled like any common paper.

Read more > [Coca - Cola](#)

● Technological
● Product Development

PACKAGING



photo: Cision

BillerudKorsnäs: the reusable paper bag

BillerudKorsnäs's 3D formable FibreForm® paper has already been applied into different products, such as in packaging, as trays, cartons and stand up pouches. Now, along with AB Group Packaging, BillerudKorsnäs has developed a reusable paper bag using FibreForm®. The bag can last 43 cycles, which is equivalent with 860 lifts, with a high weight of 16 kg. BillerudKorsnäs additionally says that the bag is suitable for reuse in all types of weather. AB Group Packaging is already offering the ultra-strong paper bag to several major supermarkets in the United Kingdom.

Read more ➤ [Cision](#)

● Technological
● Product Development



photo: Domtar

Domtar: new paper freezer pack

Domtar has developed a patent pending paper freezer pack technology, which can, in the future, replace plastic freezer packs for use in the shipping of refrigerated products. The developed package is constituted of forest derived fiber, including paper, tissue and fluff pulp, along with a small amount of superabsorbent polymer, to absorb and retain the water that, once frozen, provides the desired cooling properties. Results of a preliminary in-house testing show that Domtar's paper freezer pack can hold its temperature similarly to conventional options but at a lighter weight, demonstrate no leakage, and exhibit minimal condensation versus conventional packs.

Domtar is now in conversations with parties interested in bringing this innovative paper freezer pack technology to the market.

Read more ➤ [Domtar](#)

● Technological
● Product Development

BIOREFINERY



photo: Stora Enso

Stora Enso: Lineo™ tested in asphalt on Swedish roads

Along with the Swedish road and infrastructure operator Svevia, Stora Enso is testing a new application for its Lineo lignin: in asphalt on Swedish roads. On a couple of hundred meters of a road to be paved, Svevia will test Lineo™ for replacing the commonly used bitumen. A first test was carried out in September 2020, with promising results, as the surface road looked good and homogeneous. The new test will evaluate the behavior of the asphalt containing Lineo during winter, after snow removal and thawing brought on by spring.

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● Technological



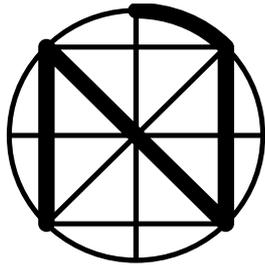
photo: Paper Advance

CelluForce: 10 years commercial agreement in the cosmetics sector

CelluForce, a Canadian producer of Cellulose NanoCrystals (CNC), having as current shareholders Domtar, Schlumberger, Suzano, FPIInnovations, and Investissement Quebec, has announced the signature of a commercial agreement with a multinational company in the cosmetics sector, for the worldwide exclusivity of the commercialization of CNC-based cosmetics products. The agreement is expected to generate multi-million-dollar sales over 10 years and will require the construction of a new, larger-capacity plant in the near future.

Read more ➤ [Paper Advance](#)

● Technological
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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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