PRESS RELEASE

NEW INNOVATION ECOSYSTEM LAUNCHED TO SUPPORT MARKET ACCESS FOR BIO-BASED CONSUMER PRODUCTS

The packaging, automotive, and other consumer goods industries have received EUR 14.5 million funding from the European Union's Horizon 2020 programme for a project aiming to replace petroleum-based goods with bio-based products. The INN-PRESSME project will function as an ecosystem, involving the development of recyclable and/or biodegradable packaging, energy, and vehicle solutions and other consumer goods.

Coordinated by VTT Technical Research Centre of Finland, the project involves 26 other European organisations from nine European countries.

The core of the new INN-PRESSME ecosystem (Full name, "Open innovation ecosystem for sustainable plant-based nano-enabled biomaterials deployment for packaging, energy/transport, and consumer goods") is comprised of pilot devices owned by ten European partners. VTT´s own pilot facilities at VTT Bioruukki Pilot Centre can be used to produce bionanomaterials, process biomaterials by chemical means and apply them. The services of the ecosystem make it possible to develop new products with a high value added that are recyclable and biodegradable, or solutions that replace oil-based products.

"The project supports the development of new bio-based solutions and scaling them toward industrial production by taking into use a model of cooperation to speed up bioeconomy and circular economy solutions, and to support the emergence of the new products on the market", says Ulla Forsström, Principal Scientist at VTT, and coordinator of INN-PRESSME.

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The role of Fraunhofer ICT in the realization of this project is the establishment of a pilot line for the development of nanofunctionalized biopolymer particle foams. The pilot line will enable technical development services as well as rapid and reliable characterization of biofoams. In addition, the market-oriented services will promote innovation management and market implementation of the nanofunctionalized biopolymers.

A goal of the project, which operates on the principle of open innovation, is to expand into a Europe-wide ecosystem offering research and pilot services for enterprises of different sizes. The ecosystem offers companies the possibility to reduce risks linked with developing new products and to accelerate market access.

The INN-PRESSME website (www.inn-pressme.eu) will be available soon. More information is available via the European Commission's CORDIS service.

INN-PRESSME (''Open innovation ecosystem for sustainable plant-based nano-enabled biomaterials deployment for packaging, transport and consumer goods") has received funding under the European Union's Horizon 2020 research and innovation programme (Grant Agreement N° 952972).

The project, providing product solutions that are based on biomaterials, was launched on 1 January 2021 and runs until 31 January 2025.

Co-ordinated by VTT, the INN-PRESSME project also involves the following partners:

- **Belgium**: Innovation in Research & Engineering Solutions (IRES), Greenovate! Europe EEIG
- **Finland**: Keskuslaboratorio Oy - Centrallaboratorium Ab (KCL), Walki Plastiroll Oy
- **France**: Centre Technique Industriel de la Plasturgie et des Composites (IPC), Commissariat à l´Énergie Atomique et aux Énergies Alternatives (CEA), Polymaris Biotechnology SAS, Arjowiggins France
- **Germany**: Fraunhofer Institute for Chemical Technology ICT, WSVK OEDERAN GmbH, Skeleton Technologies GmbH
- **Italy**: Stam srl, Centro Ricerche Fiat SCPA
- **Poland**: Instytut Włókien Naturalnych i Roślin Zielarskich
- **Spain**: Fundación CIDETEC, Fundación AITIIP, Asociación de Investigación de Materiales Plásticos y Conexas (AIMPLAS), Gnanomat SL, Global Equity & Corporate Consulting SL,
  Asociación Española de Normalización (UNE), MAIER S. Coop, Albéa Services, Podoactiva SL
- **Sweden**: RISE Processum AB, Skanem Skurup AB
- **United Kingdom**: Granta Design Ltd.

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About the Polymer Engineering Department at Fraunhofer ICT

Applied research on technical polymers for practical application is the core competence of the **Polymer Engineering Department at Fraunhofer ICT** in Pfinztal. Close thematic networking within Fraunhofer alliances, excellent international contacts and a collaboration with the Karlsruhe Institute of Technology KIT enables us to offer our partners system solutions from a single source: from polymer synthesis through to material technology, plastics processing, component development and manufacture, and recycling. The aim is holistic materials and process development for robust, automated and flexible technologies in the light of increasing digitalization and resource-saving material efficiency. We see ourselves as a link between research and industry, developing innovative solutions for future products. In the field of fiber composites, thermoplastic and thermoset material systems combined with glass, carbon or other fibers and their processing technologies are further developed.

Description: Bio-based particle foam and extrusion components made of Polylactide (PLA)
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