**What is FIBFAB project about?**

FIBFAB will improve the performance of PLA based fibres (there are no commercial PLA grades with enough thermal and mechanical resistance with a competitive price to be used in textile applications) by adapting its processability and functionality, maintaining biodegradability properties, to reach the same process speed as the current materials (PES).

**FIBFAB - Progress so far and what’s next**

The project consortium has been working on the development of the PLA formulations, the processability evaluation and the fibre properties characterization at pilot plant level during the last 6 months. In addition, the preliminary production and evaluation of wool/PLA and cotton/PLA yarns and fabrics has also started. Once the optimization of the PLA formulation is defined, next steps will be focused on the compound and fibres obtaining processes at industrial level. Then, the production and evaluation of wool/PLA and cotton/PLA fabrics and garments will be carried out and they will be validated. Moreover, environmental and regulatory aspects will be also studied. In the second year of FIBFAB project will be determined the business, commercialization and communication plan of FIBFAB products.

**Objectives and advantages**

FIBFAB project aims to industrialize and successfully launch the production of biodegradable and sustainable polylactic acid (PLA) based fabrics (wool/PLA and cotton/PLA) for the applications in casual, protective and workwear clothing, and to overcome the current limitations of PLA fibres as a real alternative to current fabrics (wool and cotton combined with polyester fibres).

- **To obtain** a final clothing product 100% bio-based and biodegradable that meets the mechanical performance requirements of the textile sector.
- **To improve** the thermal resistance of PLA fibres (target > 100°C).
- **To improve** extrusion process for PLA fibres (fine fibres less than 3 dtex, friction control in ring spinning process) to be able to spin PLA blend fibres at high speeds.
Project Meetings

Since the official start of FIBFAB, the project partners have already met several times. Last meeting was hosted by DS FIBRES on the 28th November 2017 in Dendermonde (Belgium). During the meeting the latest developments of the project were presented, and the facilities of DS FIBRES were visited.

After the meeting, all partners got a complete overview of the project status and an action plan for the next 6-month period was defined. The next project meeting is foreseen for the first week of June 2018 and will take place in Czech Republic at SINTEX premises.

Project website and twitter

You can check our website and twitter to obtain regularly new information but if you would like to follow the project even closely, you can become a stakeholder and express your support through a letter or an email to fibfab@aimplas.e

Future Actions

In next months of the project, partners will be focused on finishing the industrial scale-up processes such as compounding and staple fibres extrusion by DS Fibres and ring spinning (yarns), weaving/circular knitting (fabrics) and dyeing and finishing by SINTEX and YUNSA. In addition, in the second year of FIBFAB project two lines of work will be carried out. On the one hand, the environmental and regulatory evaluation of FIBFAB products and, on the other hand, the business, commercialization and communication plans.

Upcoming events

- **YUNSA** has been invited to participate with an oral presentation at the 8th International Textile Conference in Istanbul next 14-16th April 2018.
- **AIMPLAS** is planning to attend the DORNBIRN Congress that will be held next 12-14th September 2018 in Austria.
- **CENTEXBEL** is organizing a conference on biobased textiles in October, 16th 2018 in Belgium. If you wish to attend, please contact us.
- **AIMPLAS** will give a presentation on the 4th Discussion Forum about Circular Economy and Plastics that will be held next October in Madrid. Definitive dates are not confirmed yet. This forum will be organised by AIMPLAS and CICLOPLAST.
- **SINTEX** is planning to organize a workshop about FIBFAB project intentions and results for members and partners of Cluster of technical textiles next 20-21st June 2018 in Czech Republic.
FIBFAB dissemination activities

The project partners have been doing different dissemination activities in the last months. FIBFAB has been presented in different events, being the most prominent the following:

• **AIMPLAS** presented the project at the 9th Central European Conference 2017 Fibred-Grade Polymers, Chemical Fibres and Special Textiles. This conference was held in Liberec, Czech Republic at the Faculty of Textile Engineering, Technical University of Liberec from 11th to 13th September 2017.

• **AIMPLAS** attended the 18th edition of Equiplast, which took place from 2 to 6 October at the Gran Via de Fira Barcelona, in Spain. They presented its latest innovations in sustainable and more efficient processes of recycling and decontamination, as well as new advanced materials respectful with the environment and plastic food packaging.

• **FIBFAB** project, was also present at the fair where advances were exhibited to obtain sustainable textile fibres that will replace polyester with advantages such as greater breathability, lower weight, better tinting and resistance to UV rays.

• **YUNSA** had a desk at the **LONDON TEXTILE FAIR 2017** (19-20 July 2017), Premier Vision 2017 (19–21 September 2017), Munich Fabric Start 2017 (5–7 September 2017) FIBFAB project was presented to current and potential customers.

• **SINTEX** presented the project to potential customers at its booth at trade fair TECHTEXTIL in Frankfurt am Main (from 9th to 12th May 2017).

• An article was published in the Industrial Biotechnology Journal about “Improved Biobased Fibers for Different Textile Applications: Clothing and Automotive Sectors”. For further information, check: http://online.liebertpub.com/doi/full/10.1089/ind.2017.29108.mpd

• **CENTEXBEL** was present at the DORNBIRN-MFC 2017 (from 13th till 15th September 2017). At the congress, the Centexbel researchers had various discussions with textile companies interested in the topic of biobased textiles, including companies active in the field of spun yarns. Specifically, a presentation was given related to PLA based composites produced via compression of PLA fabrics.
ABOUT HORIZON 2020 - Fast Track to Innovation Programme

This project has received funding from the European Union’s Horizon 2020 Fast Track Innovation Pilot programme (H2020-FTIPilot-2016-1) under grant agreement No 737882.

The FTI pilot is the only fully-bottom-up measure in Horizon 2020 promoting close-to-the-market innovation activities that is open to all types of participants. FIBFAB project is one of the 15 funded projects of a total of 280 projects proposals that were submitted in the fifth round of the scheme.

FIBFAB Partners

- **AIMPLAS’** fields of work are related to technological research and development on thermoplastic and thermosetting plastic materials & products, its transformation processes and their recyclability and sustainability. www.aimplas.es

- **Centexbel (CTB)** is the Belgian scientific and technical centre for the textile industry, located in the heart of the Belgian textile industry with strong links to the majority of the textile companies. CTB offers a complete range of standardized testing, it is a notified body for protective clothing and can deliver CE marking and testing. CTB is also involved in standardization committees and offers technological advice and training to companies in Belgium and abroad. www.centexbel.be

- **SINTEX** is equipped with a sampling warper and loom enabling to manufacture small amounts of standard or special materials into various kinds of woven fabrics. The major part of SINTEX product portfolio is dedicated to sport knits and functional clothing with specific properties. SINTEX also produce a broad range of protection textiles such as heat resistant, fireproof, antistatic, and antibacterial. It also produces ringspun yarns mainly based on aramid and POP. www.sintex.cz/en/


- **DS Fibres** is one of the subsidiaries of the DS Textile Platform Group. This family owned, vertically integrated international production group has its headquarters located in Belgium Dendermonde. Since long time “Sustainability” is one of the key issues in the company’s mission statements.

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Stay in Touch with FIBFAB
If you would like to request a presentation at your event, please get in touch at fibfab@aimplas.es
You can also stay up to date with the FIBFAB project or contact the consortium directly via:

- fibfab@aimplas.es
- @fibfabproject

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