AIMPLAS
We have over 25 years of experience helping companies in the sector, including manufacturers of raw material, processors and end users. AIMPLAS has the most comprehensive resources, with over 8,500 m², to address technical analysis and testing as well as R&D projects related to plastics. We also have more than 20 pilot plants with different processes for plastic processing and our laboratories are internationally accredited according to ISO/IEC 17025.

R&D
Every year more than 250 enterprises trust in us to manage their R&D projects. These companies find in AIMPLAS a partner for the necessary technological support in the development of new products, the improvement of the properties of a new material, the optimization of their transformation processes or the assessment of waste materials. Insecticide-treated materials with barrier properties, flame retardants, biodegradable plastics, odour elimination technologies, decontamination, etc.

Working lines
Biodegradable and bio-based materials with a higher thermal-resistance by reactive extrusion for companies that demand high temperature-resistance for their products, for instance sterilization products, pasteurization, etc.
Development of PVOH grades more cost-effective than EVOH, interesting for applications that need high barrier and require the replacement of high-barrier materials, such as EVOH.
Elimination of volatiles and other contaminants by vacuum extraction and CO₂ for products needing to eliminate odours and other contaminants.
Starch film with a higher native starch quantity than commercial grades for manufacturing companies of blown film extrusion for any application.
Compostable nets and staking twines for the agricultural sector.
Wood Plastic Composites (WPC), composites with natural fibres with advanced properties (foaming, flame retardant, biodegradable, antimicrobial...) for companies that require these kind of products in sectors such as construction, furniture, agriculture, packaging, etc.
Polypropylene (PP) with natural fibre reinforcement for manufacturing companies of PP parts in general.
Compounding technologies to obtain biodegradable materials (starch for injection, improvement of PLA mechanical and thermal properties, PLA-starch combinations, PVOH processing, use of natural fibres, plasticisers, plastic modifiers, foaming, etc.) to manufacture products from biodegradable materials.
Biocomposites made of glass fibres and resins from sources with a higher renewable carbon content for companies from the construction, urban furniture, marine, automotive, sports and leisure sectors, among others.
Some of our European projects with biopolymers

**BREAD4PLA:** Bread and pastries packaging made from bread waste. OBJECTIVE: To obtain a 100% PLA biodegradable thermoplastic film for bread and pastries, recovering waste from the bakery industry. The packaging consists of a minimum of 95% materials from renewable sources. [www.bread4pla-life.eu](http://www.bread4pla-life.eu)

**PHBOTTLE:** Biodegradable packaging for juices with antioxidant properties, elaborated with sugars present in waste water. OBJECTIVE: To add value to the waste from the juice industry benefitting from the sugars and other waste rich in carbon, nitrogen and oxygen present in the waste water from this industry to elaborate new juice packaging, biodegradable and with antioxidant properties. [http://www.phbottle.eu](http://www.phbottle.eu)

**BIO4MAP:** Transparent and high-barrier biodegradable film and sheet for customized modified atmosphere food packaging. Developing an innovative fully biodegradable and recyclable, multilayer, barrier and transparent structure for fresh pasta and different types of cheese that requires customized Modified Atmosphere Packaging (MAP). At least polylactic acid (PLA) and polyvinyl alcohol (PVOH) will be combined. A biodegradable coating based on natural waxes will cover the outer layer to increase the package barrier against water vapour. [www.bio4map.eu](http://www.bio4map.eu)

**DRIUS:** Industrial implementation of a biodegradable and compostable flat micro-irrigation system for agricultural applications. OBJECTIVE: To industrialize the process and technologies related to the fabrication of biodegradable-compostable micro-irrigation systems (pipes and drippers) obtained through extrusion and injection technology, for agriculture crops. The main applications of the system to be developed in DRIUS will be crops of small plants such as strawberries and tomatoes with short farming periods, less than a year. [www.drius.eu](http://www.drius.eu)