



Member Profile

AIDIMME
TECHNOLOGY INSTITUTE

Spain's AIDIMME: know-how and applied research

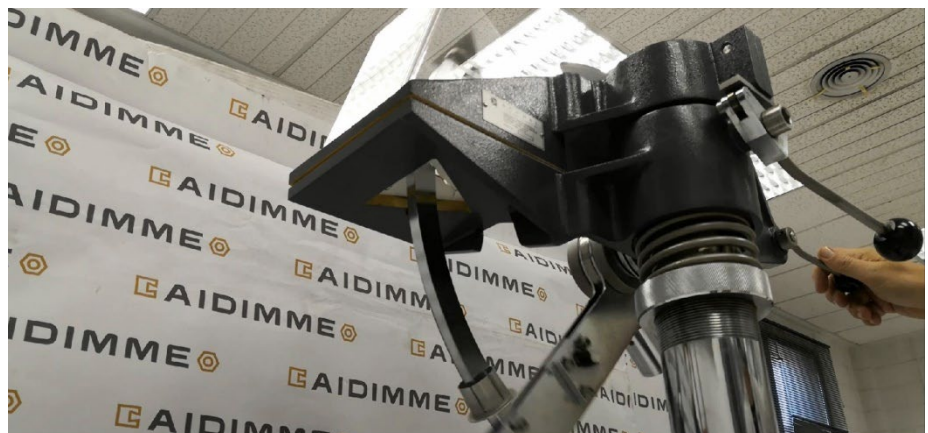
The Packaging and Goods Transport Department of AIDIMME (formerly AIDIMA) has been helping companies increase their competitiveness through packaging and logistics technology services for almost 30 years, currently having more than 700 supporting companies.

The department is divided into three sections that work together to offer engineered packaging solutions and execute R&D and innovation projects. It is located in Paterna, outside Valencia, Spain. Francisco Sánchez was appointed head of department in 2019.

Fibre-based packaging materials

The Fibre-based Packaging Materials Section commonly works for both manufacturers and end-users of packaging. It has modern facilities for testing paper, board and corrugated board, and carries out a wide variety of tasks. These include the development of technical data sheets for physical-mechanical properties, and customized tests for problem-solving or food-contact assessment. This section of the department is managed by Dr Eva Martínez.

This section's current project **CARTONSAFE** - *Research to provide paper and corrugated cardboard with fungicidal and viricidal capacity through external treatments* is focused on the development of biocide products. These are based on natural active ingredients, and are for application on to the surface of corrugated cardboard.



Board Perforation

Another highlighted project was **PACKBEST** - *Investigation of the influence of wave profiles on the behaviour of corrugated cardboard packages during transport operations*. "This aimed to optimize packaging, as well as making it safer, by understanding the influence of the raw materials used," says Sánchez. "The objective was also to improve packaging sustainability"

Transport simulation

The Transport Simulation Section can simulate any risk (shocks, vibrations, impacts, compression forces and environments) that may occur during transport and logistics operations. Its laboratory is certified by ISTA (International Safe Transit Association) and is included in the Amazon Packaging Support and Supplier Network (APASS) list within the Amazon Frustration Free Packaging Program. Francisco Sánchez is also the manager of this section.



Transportation Simulation

Packaging manufacturers and companies from the automotive, food-and-drink, furniture, chemical and pharmaceutical sectors are among this section's clients. As an example of projects carried out here, *TRANSVAC - Development of protocols for packaging, transport and storage of pharmaceutical products* - aimed to study the influence of changing environmental conditions on pharmaceutical packaging, and any impacts that might affect the products.

Dangerous goods

The Dangerous Goods section of the department regularly collaborates with Spanish government ministries on issues related to security, safety and regulations for dangerous goods packaging. Raúl Moreno is the leader of this section. Research projects here have included *COQUIMA - Study of the chemical compatibility properties of packaging and their influence on mechanical strength*. This looked into the compatibility of some typologies of HDPE packaging with different chemicals. This section of the department also participated in the project *LIFE-EXTRUCLEAN Removal of hazardous substances in polyethylene using supercritical carbon dioxide (sc-CO₂) in the recycling process*.

“Additionally, the Dangerous Goods Section helps companies to apply for and obtain the UN marks for their packaging, granted by the competent authorities according to ADR, RID, IMDG, ICAO, IATA and ADN regulations in force,” says Sánchez. “Of course, this is a mandatory requirement for all packaging placed on the market intended to be used for the transport of any dangerous goods.”

Industry standards

It should be noted the most relevant tests performed by the Packaging and Goods Transport Department of AIDIMME are under our ISO 17025 accreditation system, ensuring their quality, reproducibility and reliability.

In addition to their other activities, all three department sections carry out work on industry standards at national and international level, considering them an essential part of AIDIMME's work. “We hold the

secretariat of two national working groups, 'Evaluation of packaging for transport' and 'Packaging for dangerous goods' within the technical committee for packaging-related standards."

Sánchez concludes: "Finally, we develop technology transfer and training activities for companies, the latter mainly in the form of tailor-made courses. In this way, we contribute to a greater awareness of the latest developments in packaging and help companies to recognize the importance of making an appropriate choice of materials."