



This project is co-financed by the European Union
and the Republic of Türkiye



ICTürkiye2025
10 April, İstanbul

PRESENTER FULL NAME: Mercedes Cobo

ORGANIZATION: AIMPLAS Plastic Technology Centre

WORKSHOP NAME: #3 DIGITAL, CHIPS and 6G

E-MAIL: mcobo@aimplas.es



Description of the Organisation



AIMPLAS Valencia (Spain)

+35 years' experience in the industry
Building a better world by fostering sustainable innovation to help businesses create wealth and jobs, and contribute to social challenges

+12.000 m² cutting edge facilities
+260 highly qualified professionals
+860 member companies
+3.500 clients

Expertise across entire Plastics Value Chain

Market oriented



Electronics



Auto



Aeronautics&Aerospace



Navigation



Energy

Your Teams' Expertise



R & D & I

Project Management

Technological Services

Training & Events



Innovative Advanced Materials
TRL 3 to TRL 7

Processing and Prototyping
Analysis and Testing

Track Record +160 funded projects
FP5, FP6, FP7, LIFE, H2020, HE



Your Research Fields

Advanced Smart Manufacturing

Digitalization & Industry 4.0

Sustainable materials enabling recyclability in a **Circular Economy**



Additive Manufacturing

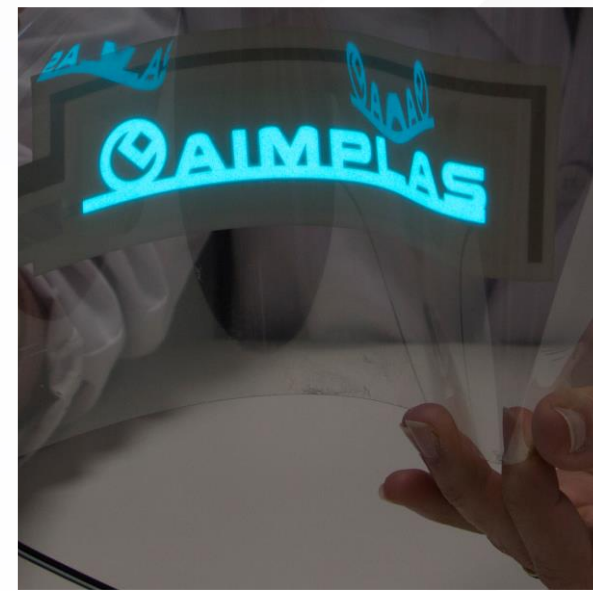
3D Printing, FDM , SML, LFAM

Tailor made compounds: highly conductive, encapsulated nanomaterials, biobased

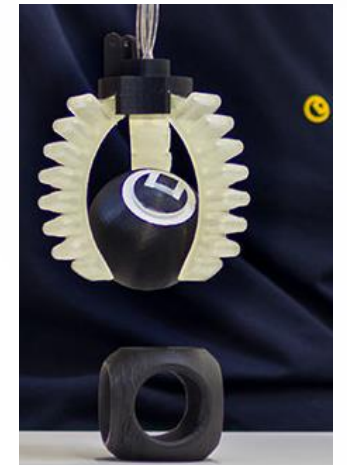
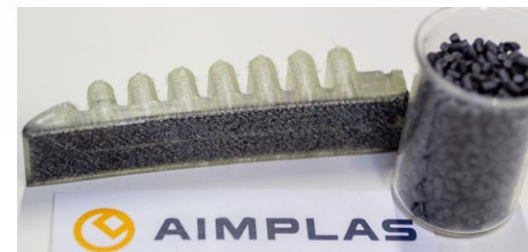


Printed electronics

Sensors, actuators, electroluminescence, bioactive...
High resolution screen printing, in-mould electronics and stretchable thermoforming



Soft Robotics



Your On-going Projects



Printed Electronics for the Circular Economy

Goal: Development of green functional electronics using eco-design principles and sustainable materials to allow end-of-life circularity

Topic: Digital and emerging technologies for competitiveness and fit for the green deal

HORIZON-CL4-2021-DIGITAL-EMERGING-01-31

www.reform-project.eu



AI-driven multiscale methodology to develop Transparent Wood as sustainable functional material

Goal: New functional wood-based composites allowing virtual screening for bio-sourced materials

Topic: Computational models for the development of safe and sustainable by design chemicals and materials

HORIZON-CL4-2023-RESILIENCE-01-23

www.ai-transpwood-project.eu



Remote Weapon condition-based Monitoring System

Goal: Predictive maintenance, increased safety and reliability of weapon systems

Topic: EDF research actions focused on SMEs and Research Organizations

EDF-2023-LS-RA-SMERO-NT

Project Idea

Call Topic: HORIZON-CL4-2025-04-DIGITAL-EMERGING-05: Soft Robotics for Advanced physical capabilities (AI/Data/Robotics Partnership)
(IA)

Deadline Dates: Sep 2025

- ☐ **Objectives:** Develop and integrate embedded flexible sensors in soft robotics to enhance perception, adaptability and interaction for industrial and medical applications

Leverage advanced and smart soft materials to improve robot functionality in dynamic environments

Start TRL 4 to TRL 7

- ☐ **Expected Results:**

- Innovative soft material-based sensors embedded in robotic structures
- Demonstration of advanced soft robotic systems in industry and healthcare
- AI-enhanced sensor data processing for real-time adaptability

Consortium – required partners

No	Expertise	Type	Country	Role
01	Robotics Manufacturer: design and assembling soft robots, ensuring functional integration of materials, sensors, and control mechanisms	Company		Coordinator
02	AIMPLAS Soft materials and smart manufacturing of prototypes and components for soft robotics	RTO	SPAIN	WP leader
03	Sensor Developer: Embedded flexible, high-performance sensors to enhance robotic perception	Company/RTO		WP leader
04	AI & Data Analytics: AI-driven sensor data processing, enabling real-time decision-making and robotic adaptability	Company/RTO		Task leader
05	End Users (Industry & Healthcare): Companies from industrial automation (e.g., manufacturing, logistics) and healthcare (e.g., rehabilitation, assistive devices) to validate the robotic solutions in real-world applications	Company		WP leader



PRESENTER CONTACT

mcobo@aimplas.es
vmartinez@aimplas.es
AIMPLAS
(SPAIN)