Leartiker

MEMBER OF BASQUE RESEARCH
& TECHNOLOGY ALLIANCE

2022 ANNUAL REPORT

HUMANITY AT WORK MONDRAGON

A joint message from the Chairman and the Chief Executive Officer

2022 was the year in which we put the COVID-19 crisis behind us, the first year after the set of milestones that transformed what Leartiker had been up until 2021: the signing of the new partnership agreement with Lea Artibai Ikastetxea, re-accreditation by the RVCTI as a Multifocalised Technology Centre and membership in the BRTA (Basque Research and Technology Alliance). **Although this was a year of major internal reorganisation, we managed to keep up the pace of business growth, reaching a turnover of close to €4 million for the first time, the workforce growing to more than 50 people as a result**.

The number of female PhD researchers on the staff has been increased, accounting for 31% of the R&D staff. Ten new scientific articles have been published, six of them in Q1 journals, and research results have been produced that allowed us to apply for two new patents, meeting the scientific and technological production targets we set. Our strategic commitment to a customer-centric approach has once again paid off, and **the impact of R&D projects on the turnover of customer companies has once again been well above what is established in the scorecard for technology centres**, which is a key factor for continuing to believe in our strategy and ethos.

Leartiker's Board of Directors (from left to right):

Xaber Ozerinjauregi, Iosu Ogiza, **Mikel Larrea, Naia Andonegi** and **Imanol Pérez,** together with **Jon Anakabe**, **Leartiker CEO,** at the General Shareholders' Meeting in June 2023..

> "We're consolidating our growth by relying on people, the foundation of our project.

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Mensaje conjunto del Presidente y el Director General

This is made possible because **we are still committed to projects that generate in-house knowledge**, such as those we are currently running under funding frameworks like the PERTE for Electric and Connected Vehicles, Innovative Business Grouping, Elkartek and Berriker. All are strategic projects that further **strengthen and hone our lines of research** into modelling polymeric materials, the development of sustainable polymers, microfluidic medical devices and the optimisation of food production processes, among others.

We continue to strongly pursue the objectives defined in the Leartiker2025 Strategic Plan, which we launched in 2021. We have continued to support the work/life balance and well-being of the people in our Leartiker family with a flexible calendar and timetable, as well as reinforcing the option of remote work. We have also consolidated the team and commitment with three new members of the cooperative. Furthermore, we have defined and implemented a two-fold process that includes, on the one hand, professional development plans, and on the other, the new assessment manual, incorporating a tool that we believe is key to managing current and future talent at Leartiker. We have also developed our first Equality Plan, with its multi-annual action plan, which will help us to continue advancing in our clear commitment to ensuring that everyone feels comfortable working with us and for us.

We would like to close by thanking each and every one of the people and organisations that belong to our cooperative, as well as those that form part of our network of relationships (and which we want to continue to maintain), because we believe that **together, Leartiker will continue to fulfil the mission for which it was created**:

- to add value to businesses' competitiveness by generating knowledge and developing technology, while doing our part to contribute to the social environment to build a future for all.

Iozu Ogiza, President of Leartiker,
and Jon Anakabe, CEO of Leartiker.

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Leartiker

MEMBER OF BASQUE RESEARCH
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About LEARTIKER

About us...

We are a Technological Centre specialized in

- **FOOD TECHNOLOGY**
- **POLYMERS TECHNOLOGY**

We add value to the business sector through our R&D+i activity suitably transferred

OPEN INNOVATION

We are building the Leartiker project with a collaborative approach, turning knowledge into an added value, thus facilitating diversification processes and creating new jobs, mainly locally.

MARKINA-XEMEIN

Mission, vision and values

MISSION

To add value to the business sector through its R&D+i activity suitably transferred in Food Technology and Polymers Technology.

With a global approach, based on a collaborative relationship model; implemented by People who are committed to generating knowledge, value and sustainable work, primarily at a local level.

VISION

A team of People who are proud to be part of the Leartiker project, a leader in our areas of technology with a global outlook, adding value to the business sector and the sustainable transformation of the environment.

VALUES

- INVOLVEMENT
- CONFIDENCE
- SERVICE ORIENTATION
- POSITIVISM
- SCIENTIFIC RIGOR

We base our work on three main pillars

KNOWLEDGE

International research

Leaders in Food Technology and Polymers Technology.

PEOPLE

Value & Values

A team of People who are committed to sustainable value creation.

CUSTOMER FIRST

Result oriented R&D+I

We are agile transferring technology to meet our Customers' needs.

Our trajectory

R&D&I
Polymers Technology and Food Technology
2000

REGIONAL DEVELOPMENT MODEL
Training, R&D&I and business promotion
2002

RVCTI ACCREDITATION
Basque Network for Science Technology and Innovation
Intermediate Innovation Organisation
2005

RVCTI REACCREDITATION
Industry Technology Centre
2015

LTK 2020
Definition of the Strategic Plan
2016

LTK 2020 Y LTK 2025
Objectives achieved and new Strategic Plan
2020

esneki zentroa Leartiker

ESNEKI ZENTROA DAIRY CENTRE
The first dairy centre in the Basque Country is created

RVCTI REACCREDITATION
Multifocalised Technology Centre
2021

BRTA
Basque Research and Technology Alliance

Leartiker
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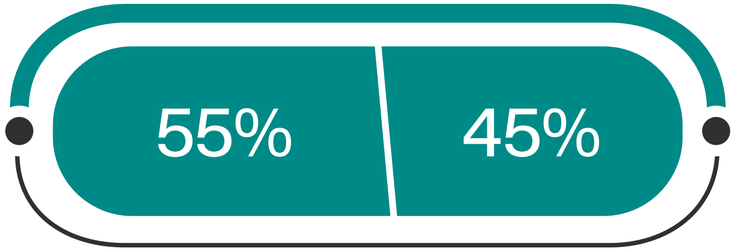
The Leartiker Team

51 People

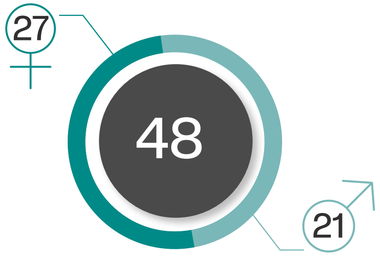


28

23

PhDs

Doctoral students



Graduates

Other

Average age of the team:

38 years old

Age range of staff:

58-25 years old

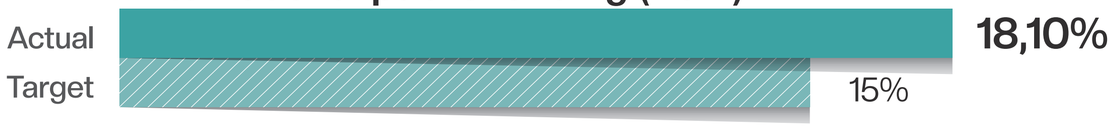
2022 Figures

Turnover (M€)

Turnover (R&D) (M€)

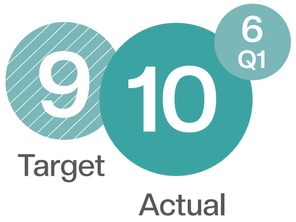
International turnover (R&D)

International public funding (R&D)



International projects

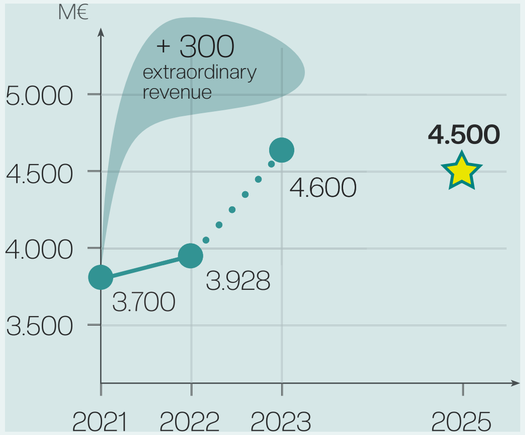
Scientific articles



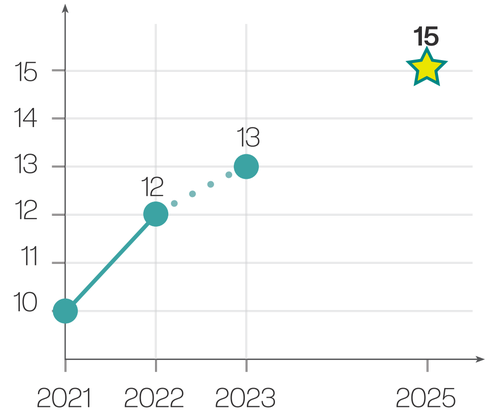
Patents applied for

2021-2025 Forecast

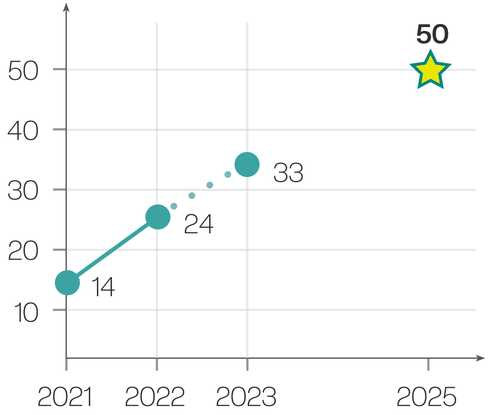
Turnover



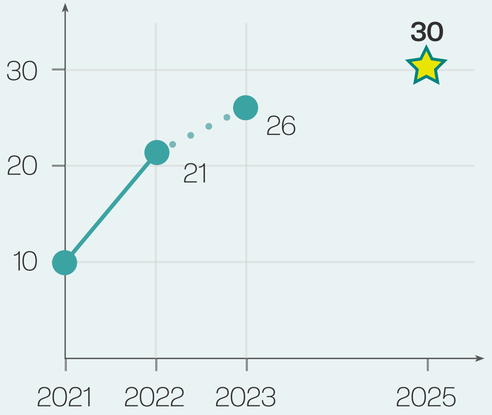
PhDs



Scientific articles



International projects



Partnerships

Collaborating partners

Hospitals

Public institutions

Universities and technological and research centres

Associations and companies

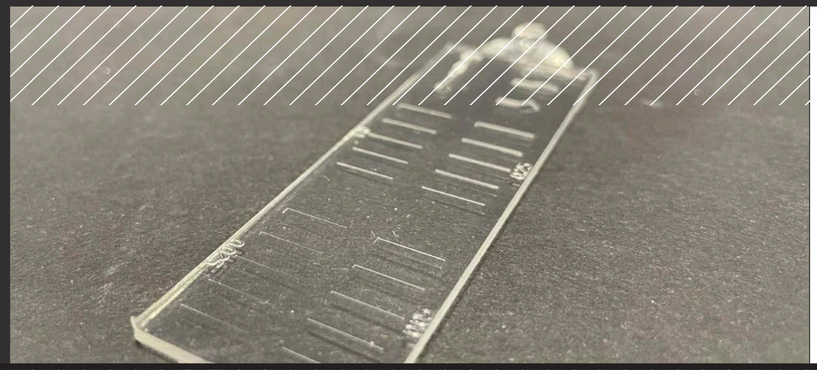
Areas of Technological Specialization

FOOD TECHNOLOGY

Dairy Centre

Food Design

POLYMERS TECHNOLOGY



Health

Sustainable Transport

Food Technology

At Leartiker Food Technology, we are committed to innovation as our core strategy for helping to enhance the competitiveness of the food industry through product diversification and process optimisation.

To this end, we collaborate with our clients, the food companies, addressing their technological and know-how needs to bring new products to the market, from technological surveillance, consumer trend detection, knowledge management and company creativity to the creation of product prototypes and pilot tests at our pilot plant facilities, identifying industrialisation needs while always focusing on customer support and service.

Objectives

The objectives of Leartiker Food Technology are to develop innovative and/or healthy products for clients in the meat and prepared food sectors and to become a benchmark in the Basque Autonomous Community in the artisan dairy sector.

Food Technology

DAIRY CENTRE

OUR MILK, OUR FARMERS, OUR HEALTH.

The Dairy Centre offers a range of services including the development of new cheeses and dairy products, research into raw materials and production technologies, advanced technical consulting, specialised training and much more, promoting the diversification and competitiveness of small farmers and passing along our passion for innovation.

- Development of innovative products
- Technological consulting
- Specialised training

dairy centre Leartiker

Our challenge is to promote the diversification and competitiveness of small farmers, and to pass along our passion for innovation.

DAIRY CENTRE

Projects 2022

FOOD DESIGN

FROM IDEA TO MARKET.

We develop new healthy and sustainable products produced using local raw plant- or animal-based materials with added value.

Areas of research:

NEW PRODUCTS New product ideas, product definition and design, product and process development.

PROTEIN SOURCES Identification of new sustainable protein sources, incorporating proteins into food, study of health benefits.

FERMENTED PRODUCTS Research into fermentation processes, research into healthy compounds generated during fermentation and development and diversification of fermented products.

We understand, design, develop and test.

FOOD DESIGN Projects 2022

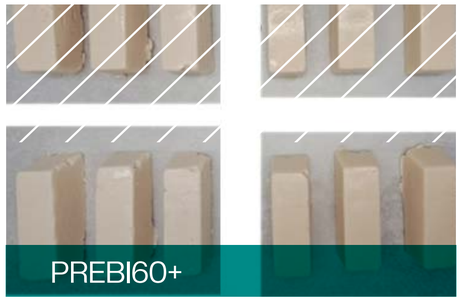

INSEKNIOR

LANDETXO


MAGORAINN

MASKVEG


SAGEZTIARDOA


PREBI60+


HEZUR EZ GEZUR


LEKALEAK

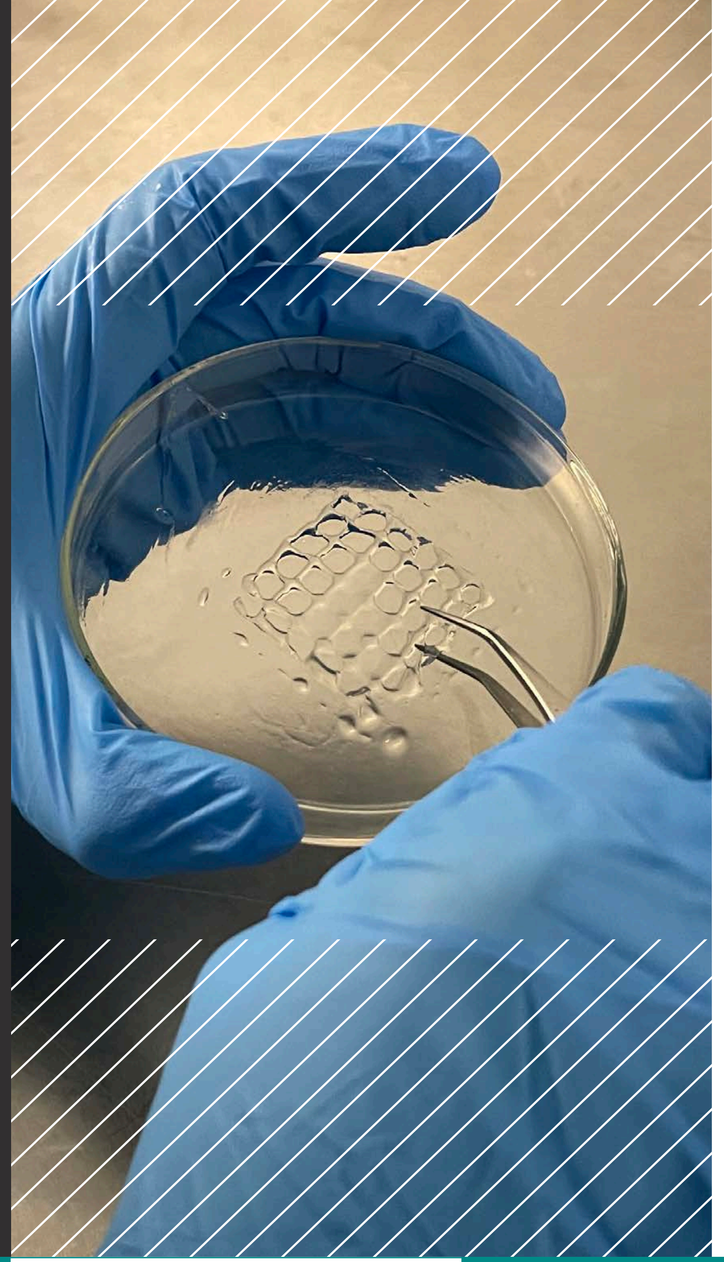
Polymers
Technology

Leartiker Polymer Technology focuses on design concepts for manufacturing with polymeric materials, from the development of different materials to their manufacturing processes, including material and product characterisation and their static and dynamic simulation.

Leartiker Polymer Technology offers the following specializations:

HEALTH and SUSTAINABLE TRANSPORT

Leartiker transfers value to its customers through its expertise in these areas of specialization. To this end, it works with a wide range of national and international partners, harnessing the power of highly qualified professionals, facilities and machinery to take on R&D&I projects with a view to scaling up the results to industrialisation.



Polymers Technology

SUSTAINABLE TRANSPORT

TURNING CHALLENGES INTO OPPORTUNITIES FOR MOBILITY.

Polymeric transport products: from the design of the material to the end of life of the part.

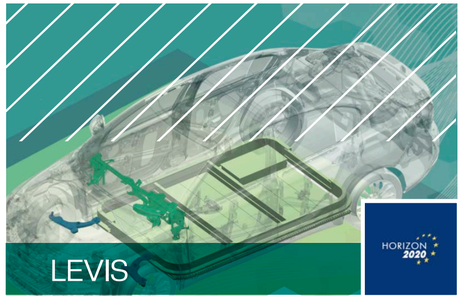
We do research in three main fields of application:

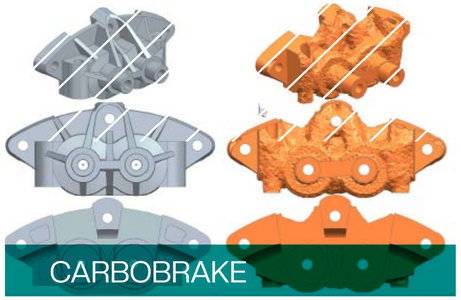
THERMOPLASTICS - THERMOSETS - ELASTOMERS

- Design and development of new sustainable polymeric materials (compounding)
- Product and process development (injection moulding, compression moulding, mould and part design)
- Thermo-mechanical performance assessment and prediction (static, dynamic, impact)
- Durability assessment and prediction (fatigue, creep)

END-TO-END coverage of the value chain.

SUSTAINABLE TRANSPORT Projects 2022





HEALTH

FROM IDEA TO PATIENT.

New biocompatible polymeric materials designed for the bio-health sector.

We conduct research in three high-impact technological areas:

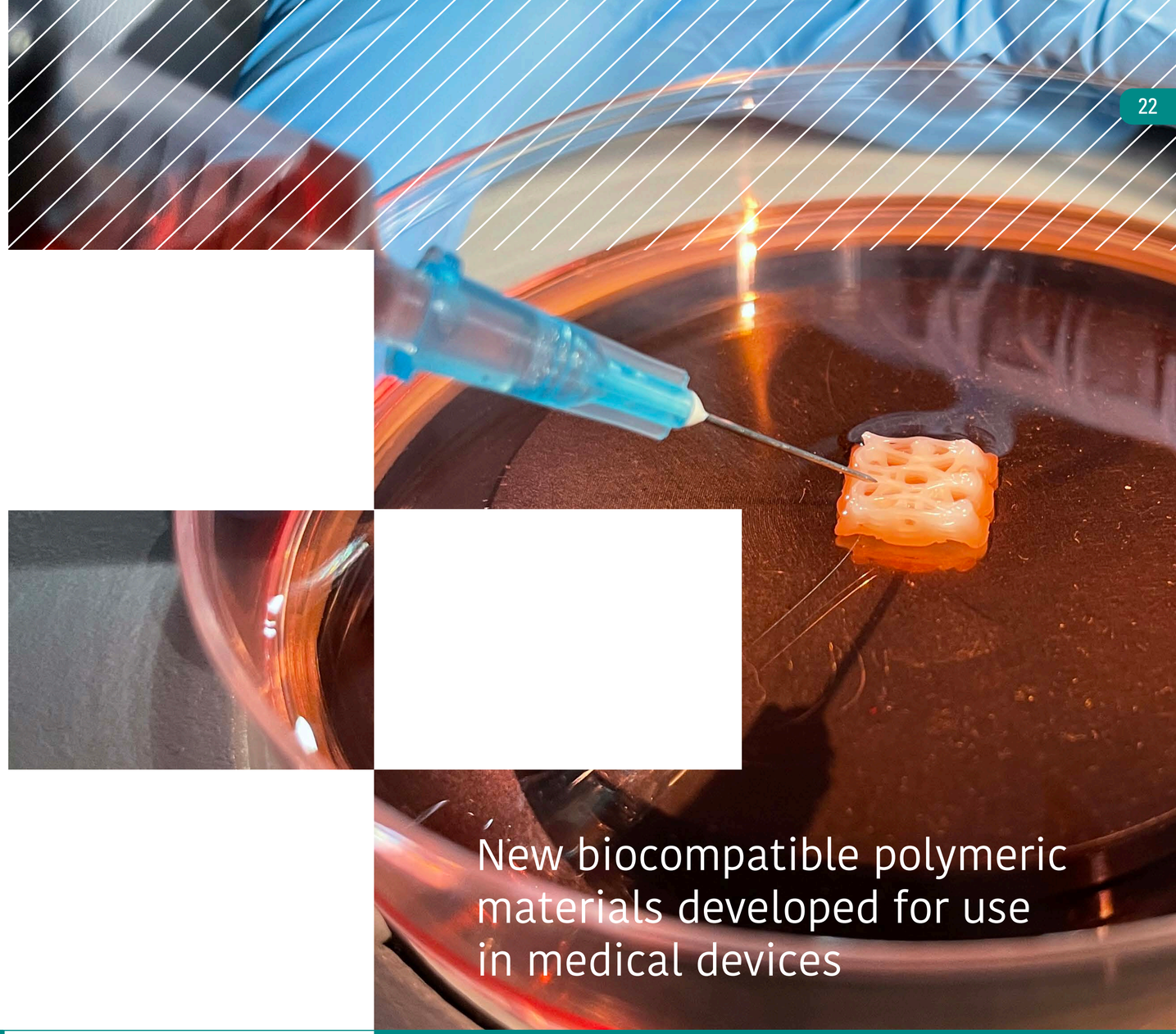
MICROFLUIDICS: PoC, LoC and OoC devices by injection technologies.

TISSUE ENGINEERING:

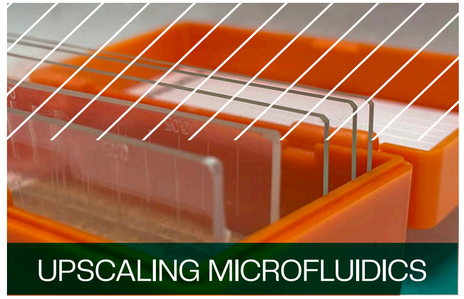
- Manufacture of 3D structures (hydrogels and thermoplastics) using (bio)printing technologies based on the target tissue
- Development of microgels for cell therapies

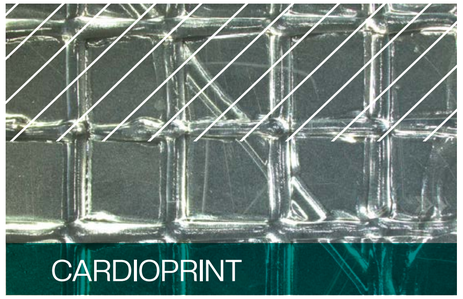
MEDICAL DEVICES:

- Devices for medical professionals
- Patient customisation, imaging
- Silicone and thermoplastics



HEALTH Projects 2022





STRATEGIC INNOVATION

Challenges

1

Explain the key competences of the specializations by creating a knowledge management system:

I. Creation of the explanatory tool.
II. Definition of how to make it clear.
III. Defining what needs to be made clear.
IV. Implementation.
V. Transferring it to cross-cutting services and skills.

2

Transfer innovation management know-how and practice to the rest of the organisation through daily activities and application methods to increase autonomy and an entrepreneurial and creative mindset, impact innovation, boost productivity and accelerate the achievement of results and indicators.

3

Create an innovation ecosystem of our own, one that adapts to our identity and idiosyncrasies in terms of employees, clients, entrepreneurs, financing, etc.
In addition to or alongside existing ones, identifying feasible and useful ways to efficiently be agile, obtain results and fill gaps.

4

To make Leartiker the best place in the world to work through innovation for both employees and the company's environment, attracting talent and staying true to what makes us unique and different (culture, identity and essence).

LEADING FACILITIES

Facilities - Food Technology

800 m²

Pilot plant

Pilot plant divided into different areas and fully equipped with all the equipment needed to process, package and preserve food and to meet the needs of different sectors.

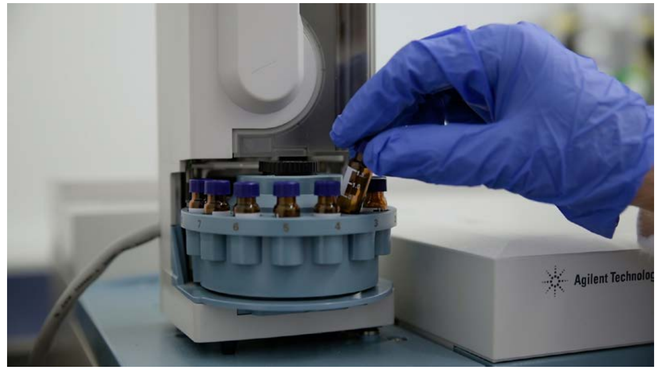
Microbiology lab

Top-of-the-line equipment and highly qualified staff to guarantee food and water safety and quality.

Molecular biology lab

Advanced DNA analysis techniques.

Facilities - Food Technology



Physical-chemical lab

It is equipped with a broad range of equipment for process control analysis and the detection of compounds in food products.

Tasting room

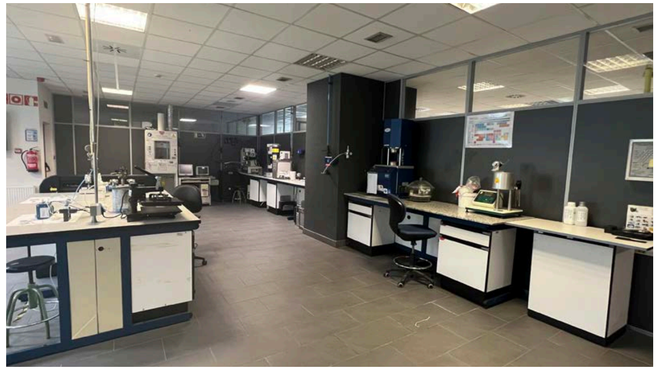
Eight individual booths for conducting consumer research.

Facilities - Polymers Technology

Polymer and composites transformation workshop

Fully equipped facilities for developing new materials:
- creation of new materials (compounding),
- designs for characterisation projects (ad hoc material digitisation)
- prototype part injection with design support (product development).

All this supported by a wide range of peripheral equipment (IR furnace, presses, etc.) for developing functional materials: bi-components, organosheets, etc.



Physico-chemical and rheological characterisation laboratory

Techniques for the physico-chemical characterisation of polymeric materials and composites.

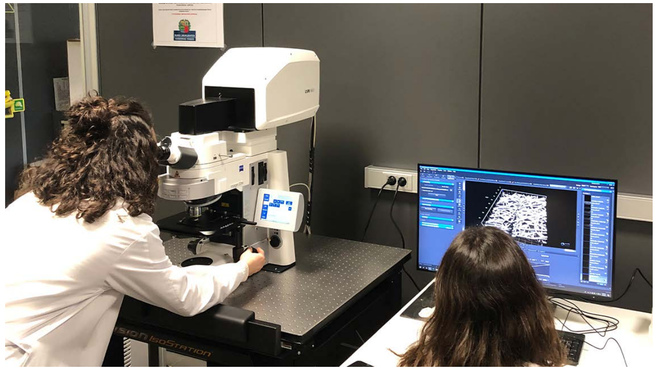
Vibration and mechanical durability lab

Advanced equipment for the dynamic characterisation, fatigue and creep of polymeric materials.

Facilities - Polymers Technology

Advanced mechanical characterisation laboratory

A wide range of equipment and technologies for comprehensive mechanical characterisation.



Materials microscopy lab

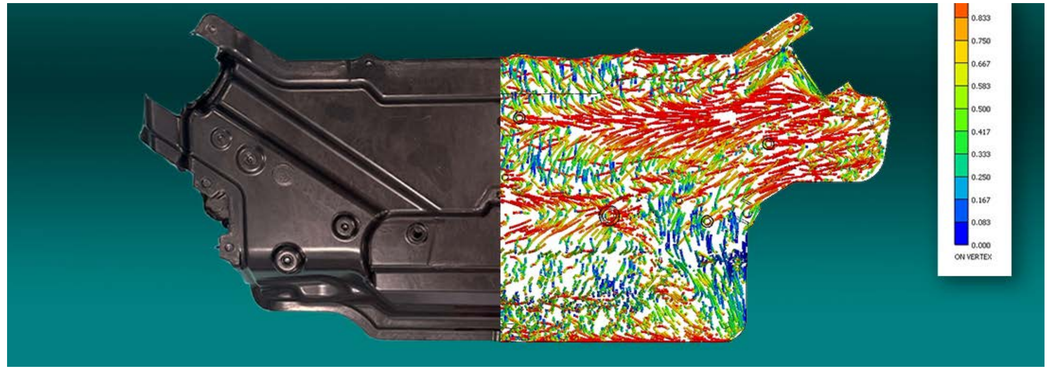
Microscopy laboratory with equipment for analysing polymeric materials, including the ZEISS LSM 900 confocal materials microscope and the NIKON i80 optical microscope.

70 m²

ISO7 Clean room

70 m2 designed for the development and manufacture of medical devices with a range of equipment for transforming polymeric medical devices in controlled environment conditions.

Facilities - Polymers Technology



Integrative digitisation tools

Licences for various commercial simulation programmes related to material modelling, process simulation, structural simulation and product design.

Scripting skills with Phyton programming language.

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#TechnologyforPeople

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HUMANITY AT WORK | MONDRAGON