

THERMLAB

ThermLab represents a qualitative and differential leap, integrating technologies related to thermal storage, thermal management, and energy efficiency in industry that are of interest to companies seeking new business opportunities.

The ThermLab initiative arises to offer advanced thermal management solutions to the industry by developing more compact and powerful products, where conventional cooling systems are excessively expensive and can be optimized. Sometimes, cooling is not enough, causing irreparable reductions in service life or technical performance. At the same time, ThermLab opens the door to the use of surplus waste heat, which can be managed as an essential energy source for on-demand use, aligning with the energy efficiency goals of companies.

ThermLab is an analysis, development, and testing infrastructure located in CIC energiGUNE, which allows combining disruptive knowledge with high technology tools. In this way, it is possible to develop and validate advanced technologies for thermal management, in products and subsystems of the companies, through tests at an industrially relevant scale before being definitively integrated with the commercial developments.

WHAT CAN WE DO?



- Improvement and optimization of thermal management of products and processes through precise modeling techniques, reducing trial-and-error costs.
- Detection of thermal anomalies in products and industrial processes.
- Development of ad-hoc thermal management technologies for products and processes with high energy consumption.



WE OFFER



MEASUREMENT AND CHARACTERIZATION OF THERMAL BEHAVIOR



TESTING AND VALIDATION OF THERMAL MANAGEMENT SYSTEMS



TURNKEY DEVELOPMENT
OF THERMAL
MANAGEMENT
SOLUTIONS

HOW?

Calorimetry (DSC, TGA, STA, PVT)	Laser Flash, Hot disk	Termography	Rheometer, densimeter	Microfluidics bank	Climatic chamber
Obtaining specific heat measurements under different conditions	Obtaining diffusivity and thermal conductivity	Obtaining precise temperature patterns	Obtaining viscosity and density measurements	Equipment for the development of thermal management systems based on microfluidics	Equipment to reproduce external operating conditions

EQUIPMENT & TECHNIQUES

CIC **energi** GUNE

MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE Parque Tecnológico de Álava c/Albert Einstein 48 01510 Vitoria-Gasteiz · (Álava) SPAIN

(34) 945 29 71 08

cicenergigune.com







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