



## Cutting-Edge Laboratories, research in seven key areas

The Aragon Institute of Engineering Research promotes its activity with the creation of laboratories in virtual reality, circular economy, appliance technologies, photonics, artificial intelligence, industry 4.0 and personalized medicine

**Zaragoza, February 23, 2021.-** The Aragon Institute of Engineering Research (I3A) launches a new initiative to reinforce, bring together and make visible the lines of work of its 33 research groups. To do this, it has launched the development of laboratories in areas considered **key for the generation of knowledge and transfer to society**. In this initial phase, it will promote virtual reality, circular economy, appliance technologies, photonics, artificial intelligence, industry 4.0 and personalized medicine.

Seven areas, grouped together as "Cutting-Edge Laboratories" that will integrate the I3A research lines in which the institute stands out. "We want **to coordinate and enhance** the efforts of our groups, also creating a one-stop shop that facilitates the identification of our researchers, their cutting-edge research and the work done at the Institute," explains Elías Cueto, deputy director of Planning, Strategy, Quality and Evaluation of the I3A.

The new project, which begins to be launched this year, wants to structure **all the innovative activity** that is generated from an institute that has more than 400 researchers and 600 active projects. "The coordination of the work that I3A researchers carry out at the first international level will allow the impact of our research on these issues of special social relevance", said the director of I3A, Pablo Laguna.

In each laboratory there are tangible realities of recognized success, such as the development of **induction cooktop technology**, where the Institute is an international leader; pioneer systems for **recycling urban waste**; trajectory planning systems for widely used robots; **voice recognition systems**, reference in recognizers in Spanish; **virtual reality** systems; advanced reproduction systems of **biomimetic environments for tissue engineering**, in cancer applications; kidney or precision measurement systems based in light, among others.

Ahead, they have the challenge of creating "an environment that reinforces our position and for this we have to structure our activity. Coordinate and **be more efficient** to have a greater projection, so that society and the scientific and technological fabric know that we have these lines of research and that **we have people who are working on these cutting-edge issues**", highlights Pablo Laguna, at the time recalls the potential and the specialization of research groups.



The **seven selected areas**, virtual reality, circular economy, appliance technologies, photonics, artificial intelligence, industry 4.0 and personalized medicine, “**respond to frontier challenges in today's world, with great potential for societal impact and with great potential for development and transfer to the company and society**”, adds Elías Cueto. Around them, the I3A has more than 40 lines of research underway and brings together a significant number of scientists.