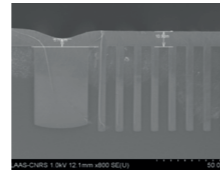


## OUR USERS ADVICE



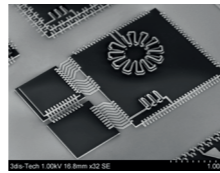
**M. Morancho, Professor at LAAS-CNRS**

We were able to design within the LAAS's cleanroom electronic power devices on two different materials: silicon Superjunction diodes (components with deep trenches) and gallium nitride HEMTs (High Electron Mobility Transistors) on Silicon substrates. All technological post-epitaxy steps were operated in LAAS and allowed us to get components displaying the desired features.



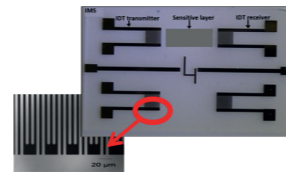
**M. Ghannam, Founder and CEO of 3DiS Technologies**

LAAS-CNRS micro and nano technologies platform welcomes and supports R & D activities of our startup since its inception. A well-equipped platform and a very competent staff, coupled with direct access to the machines, create a synergy that allows us to develop innovative technology for assembly and integration of 3D microsystems.



**Ms Dejours, Professor at the IMS**

Users of the platform, we always have attentive interactions about our need and its purpose, fruitful discussions during the processes developments. Oriented since a while to surface acoustic wave devices, new projects have emerged, Photonics devices on polymer, inkjet deposition of graphene oxide films. Renatech team became a must, both by its equipment and by the team itself, for its competency always at the forefront, and always friendly hospitality.



■ LAAS is a laboratory of the French National Center for Scientific Research (CNRS), within the INS2I and INSIS Institutes. It is associated to the French University Midi-Pyrénées of Toulouse.

It hosts more than 700 people (research scientists and faculty members, PhDs, postdocs and engineers, technicians and administrative staff).

The topics cover the following areas:

- Computer science;
- Robotics;
- Automatic control;
- Micro and nanosystems.

The platform activities are cofunded by:



The platform is referenced as a european technology center to help SMEs to innovate through Key Enabling Technologies: <https://ec.europa.eu/growth/tools-databases/kets-tools/kets-tc/map>

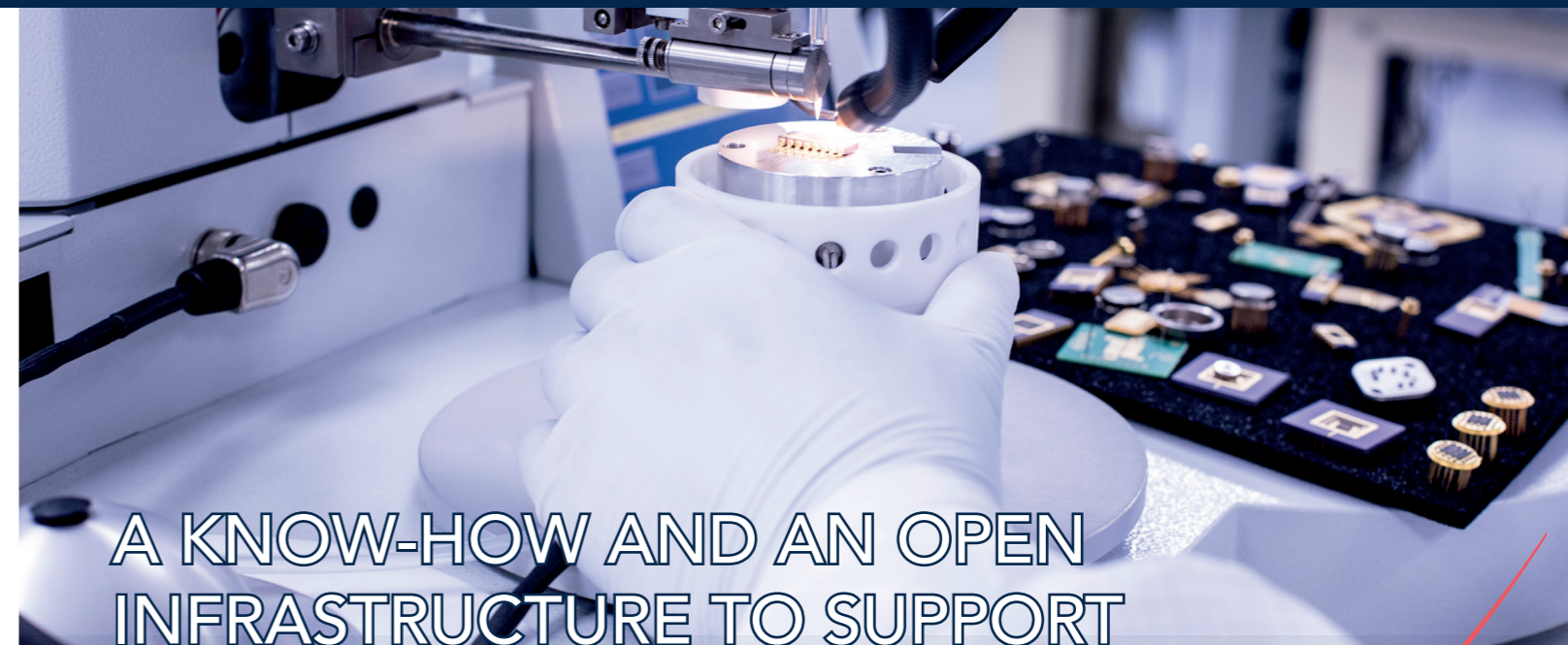
Website: <https://www.laas.fr/public/fr/Renatech>

Access to platform equipments: <http://lims.laas.fr/default.aspx>

Conception - Dominique Daurat, LAAS-CNRS  
Crédits photos - Yannick Marrot

LAAS-CNRS - 7 avenue du colonel Roche, BP 54200, 31031 Toulouse cedex 4 - France

# LAAS-CNRS MICRO AND NANOTECHNOLOGIES PLATFORM



## A KNOW-HOW AND AN OPEN INFRASTRUCTURE TO SUPPORT YOUR PROJECTS

About	Aeronautics and Space	Agriculture
	Defense	Energy
	Micro and Nanosystems	Health and Silver Economy
	Telecommunications	Motor and Railway Transport
	Plant of the futur	

January 2019







# OUR KNOW-HOW

# TO INITIATE COLLABORATIONS & SUPPORT YOUR R&D PROJECTS

## TECHNOLOGY for micro and nano devices prototyping

1600 m<sup>2</sup> clean and grey room  
 200 users  
 Nearly 40 engineers and technicians  
 35 M€ equipment

- > micro-nano electronics
- > optics/photonics
- > micro/nano devices and micro/nano systems
- > bioelectronics, biosystems, biophysics

## TECHNIQUE: equipment at the highest international level

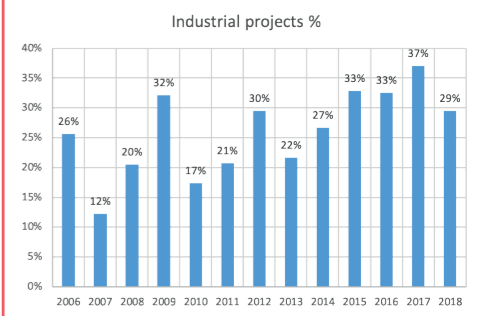
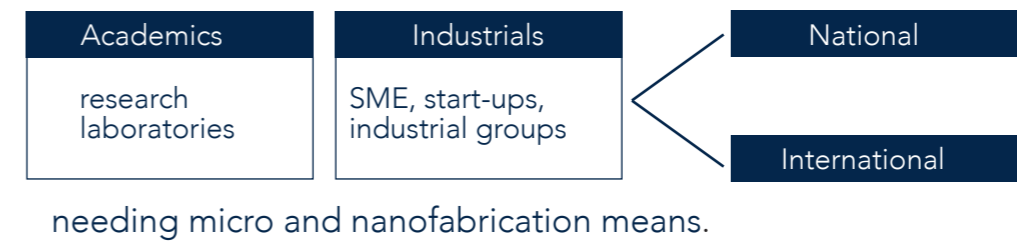


- > heat treatments
- > assemblies/integrations
- > ink jet
- > epitaxy
- > depositions (plasma, ALD, LPCVD)
- > lithographies (optical, laser, electronic)
- > vacuum metallization
- > electroplating
- > characterizations
- > surface treatment
- > etching (dry, wet)
- > nanoreplication
- > chemistry
- > ion implantation

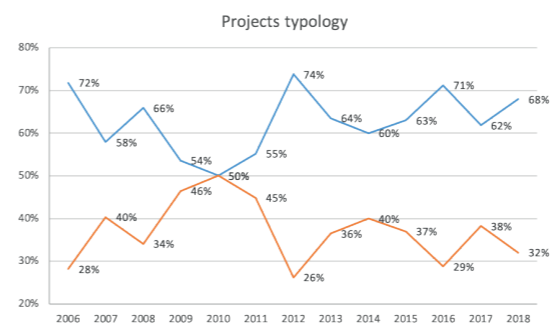
## EXPERTISE scientific and technical by direct interactions with

- > technical staff of nearly 40 engineers and technicians in charge of the platform and nearly 100 researchers and professors of the laboratory
- > LAAS's simulation and characterization platforms
- > Renatech network <https://www.renatech.org>

## WHO?



## WHICH PROJECTS? Collaborative or service



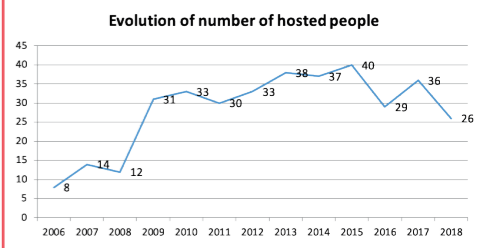
- > scientific and technical collaborations
- > prototyping
- > services
- > hosting equipment/people
- > training
- > expertise and advise

## HOW? to formalize various aspects

- > technical
- > human
- > financial (auditable billing procedure)
- > delay
- > privacy / IP
- > online tracking

## Every year

- 150 supported projects
- 40 external people hosted



[renatech@laas.fr](mailto:renatech@laas.fr)

