

# Nanoelec at a glance

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Hughes Metras

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# IRT Nanoelec

**Consortium** headed by CEA/LETI

Focused on **semiconductor technologies & their applications**

End of 2019 :

- **22 members** in the consortium
- Annual Budget : **60 M€**
- Workforce : **265 FTE**

..... And a total (cumulated) of more than **238 associated industrial partners** engaged in R&D projects with IRT Nanoelec (among them more than 180 SME's)



# French Institutes of Technology



## OUR MISSION

Accelerate technology transfer  
to industry

## ONE TOOL

Collaborative Research

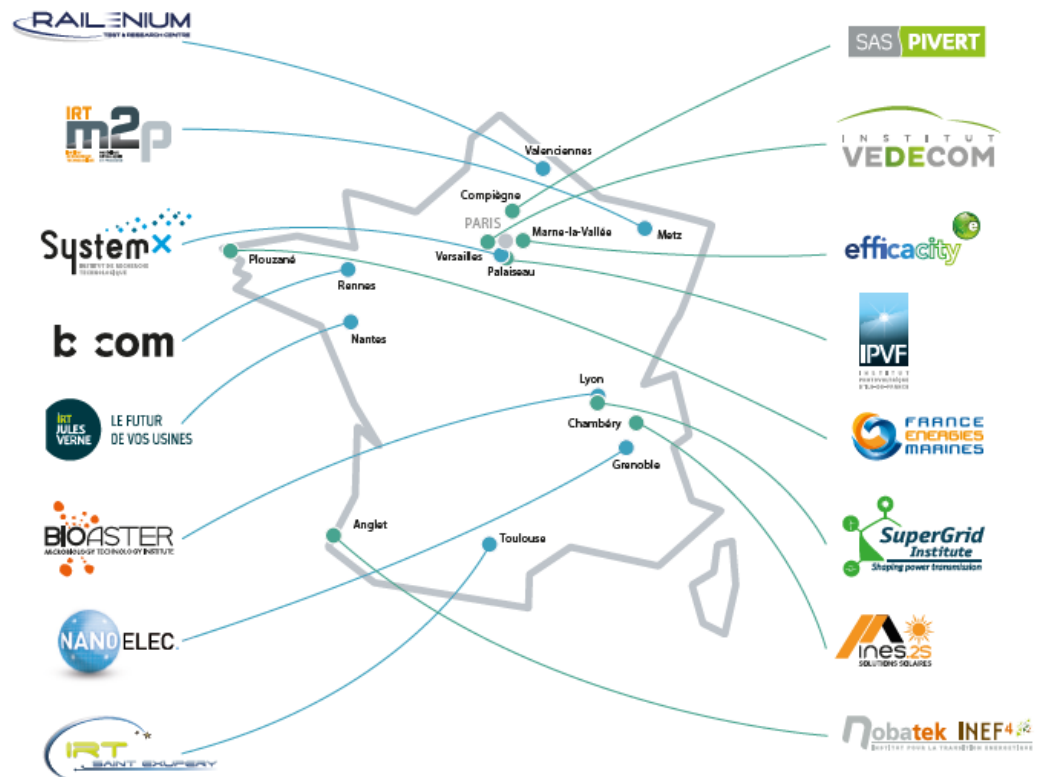
## A SPECIFIC FUNDING SCHEME

Co-Investment Industry – French  
Public Authorities

8 Technological  
Research  
Institute

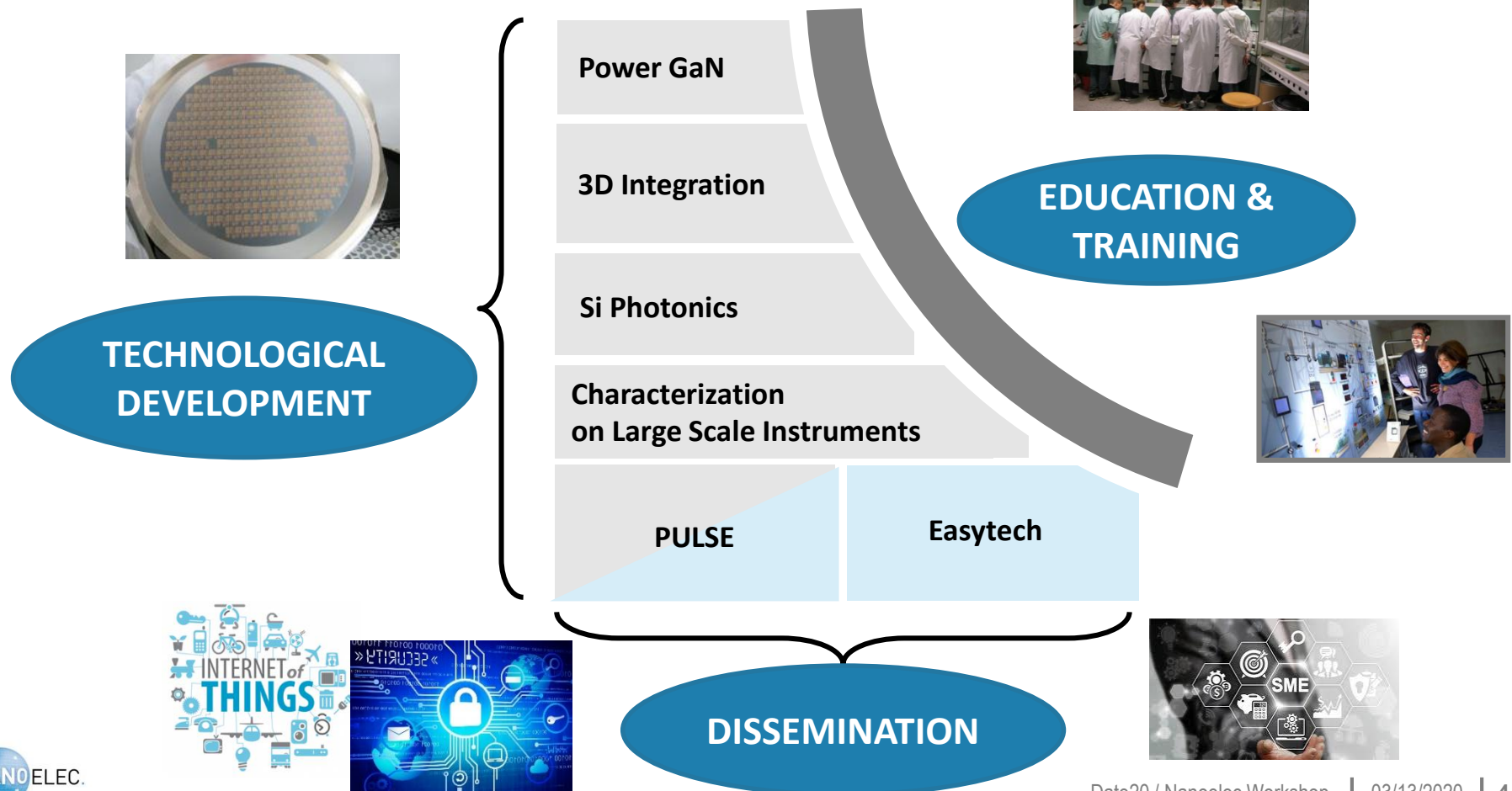


8 Energy  
Transition  
Institute



## value creation for the industry

Three development axes :



# IRT Nanoelec Platforms



## Technological Platforms

3D Integration, Silicon photonic and Power GaN



## Technical platforms

IoT & Cybersecurity



## Large-scale Instruments

Advanced Characterizations Platforms



## Education and Training

Learning and educational Platforms





# Nanoelec addresses major challenges.....

... & help bridge the gap between technologies and applications

**ARCHITECTURE &  
SYSTEM DESIGN**

**DATA PROCESSING  
AI**

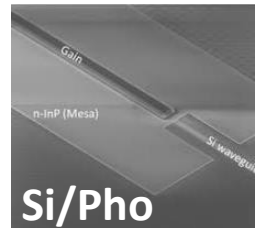
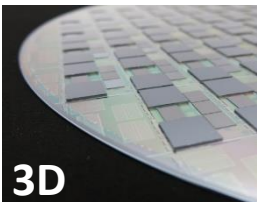
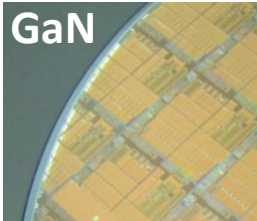
**ENERGY  
CONVERSION  
SYSTEMS**

**IMAGE  
SENSORS  
& DISPLAYS**

**IC DESIGN**

**EDA TOOLS**

**SECURE  
DEVICES &  
SYSTEMS**



# Nanoelec Workshop Objectives

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- Illustrate the value of multi-partner programs and projects
- Demonstrate the importance of EDA tools and IC Design expertise to help bridge the gap between emerging technologies and applications
- Highlight results that have been achieved in the recent past
- Demonstrate how some of our members plan to use the consortium to address future opportunities in a trusted environment and building on synergies between partners.

AGENDA	
8:30 am	Intro & Keynote
9:00 am	3D Integration
10:15 am	Silicon Photonics
11:00 am	Cybersecurity

# Thank You for your Attention



ft | FRENCH  
INSTITUTES OF  
TECHNOLOGY

ft | MEMBER