

### **NANOTECHNOLOGY INNOVATION CENTERS**

www.sibratecnano.com













### **CHALLENGES**

#### **COMPANIES**

- Mobilize companies and encourage their interest in developing innovative projects;
- Stimulate the development of **DISRUPTIVE** innovation projects.

INNOVATION CULTURE



#### **SISNANO LABORATORIES**

- Empower laboratories in articulation with companies;
- Integrate more groups/researchers to the network;
- Disseminate the network among research groups;
- Mobilize researchers for innovation projects with the productive sector;
- Guide researchers on project budgeting.

## **ADVANTAGES OF THE PROGRAM**



#### **RESEARCHER**

- Experience with the productive sector;
- Participation in strategic projects;
- Access to resources for maintenance, operation and development of laboratories;
- Human resources training;
- Establishing long-term partnerships with the productive sector;
- Possibility of leveraging resources through service provision;
- Opportunity to offer students a perspective of R, D & I activities outside of the academy.





#### **COMPANIES**

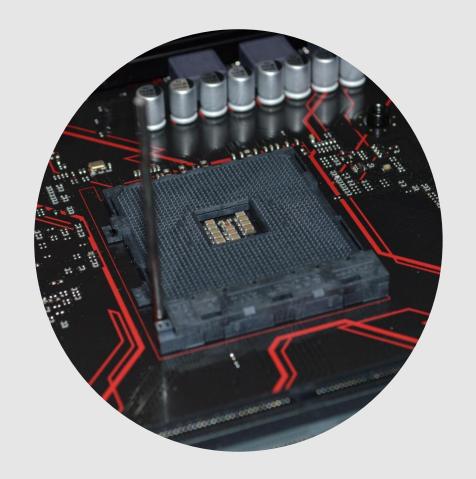
- Access to the cutting-edge infrastructure of SisNANO laboratories;
- Collaboration with highly qualified researchers;
- Human resources training;
- Financial contribution to suit the size of the companies;
- Possibility to solve complex technological problems and "get ahead" in the market.



# SIBRATECNANO NETWORKS

### **NANODEVICES AND NANOSENSORS**

Nanodevices and nanosensors are functional elements that
have macroscopic characteristics arising from the properties
of nanostructures and/or nanomaterials that compose them.
They not only have components on the nano scale, but their
physical/chemical characteristics give new properties to the
systems that incorporate them.





### SIBRATECNANO NETWORKS

#### NANOMATERIALS AND NANOCOMPOSITES

• Engineered nanomaterials or nanocomposites are materials that have at least one of their dimensions on the nanometric scale, although not exclusively between 1 to 100 nm, presenting optical, magnetic, electrical, dispersion, interaction, etc. unique properties that can be explored in the most diverse fields of applications such as electronics, health and medicine, energy, cosmetics, new materials, etc. Therefore, these materials must have a direct relationship of the properties derived from their size and the functionality of the application in question.



### **ACCREDITED NETWORK**

17 NANOTECHNOLOGY

**INNOVATION CENTERS** 





#### **Strategic Laboratories:**

- CENANO INT (Rio de Janeiro)
- LNNano CNPEM (Campinas)
- LANANO CETENE (Recife)
- CTI-NANO (Campinas)
- Laboratório Estratégico de Nanometrologia do Inmetro (Rio de Janeiro)
- LABNANO CBPF (Rio de Janeiro)
- NuclearNano CNEN (São Paulo)
- Laboratório Nacional de Nanotecnologia para o Agronegócio Embrapa (São Carlos)

#### **Associated Laboratories:**

- SisNANO USP (São Paulo)
- LINDEN- UFSC (Florianópolis)
- LSCN-IFAM (Manaus)
- Núcleo de Bionanomanufatura IPT (São Paulo)
- Laboratório de Nanobiotecnologia para Estudos Pré-clínicos Hospital Israelita Albert Einstein (São Paulo)
- LANANO UFMG (Belo Horizonte)
- LCNANO UFPR (Curitiba)
- Laboratório de Nanobiotecnologia UFU (Uberlândia)
- CCS Unicamp (Campinas)



### **HISTORIC**

Cycle  $1 - 1^{st}$  half of 2016  $\rightarrow$  10 hired projects

Cycle 2 –  $2^{nd}$  half of 2016  $\rightarrow$  10 hired projects

Cycle  $3 - 2^{nd}$  half of 2017  $\rightarrow$  07 hired projects

Cycle  $4 - 1^{st}$  half of 2018  $\rightarrow$  07 hired projects

Cycle 5 – 1st half of 2019  $\rightarrow$  01 hired project

Cycle  $6 - 2^{nd}$  half of 2019  $\rightarrow$  05 hired projects

Cycle 7 –  $2^{nd}$  half of 2020  $\rightarrow$  03 hired projects

Cycle  $8 - 2^{nd}$  half of  $2020 \rightarrow$  in progress



SUBMISSION CYCLES



154
RECEIVED
PROPOSALS



HIRED PROJECTS

24 19 NANOMAT NANODEV

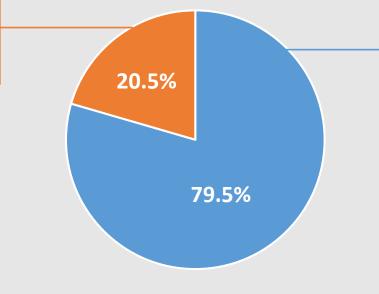
### **NETWORK RESULTS**



Companies' Financial Contribution

R\$ 2,113,623.95 U\$ 413,366.18

R\$ 49,000/hired project (about U\$ 9,600/hired project)



SibratecNano Financing

R\$ 10,314,791.64 U\$ 2,017,286.95

R\$ 240,000/hired project (about U\$ 47,000/hired project)

### **Size of the Companies**

**75%** 

25%

micro and small

medium and large

- 13 IN EXECUTION
- 27 CONCLUDED
- 3 APPROVED IN 2020
- 41 COMPANIES



### Industrial Sectors of the Projects

## Amount Invested by Industrial Sector

