

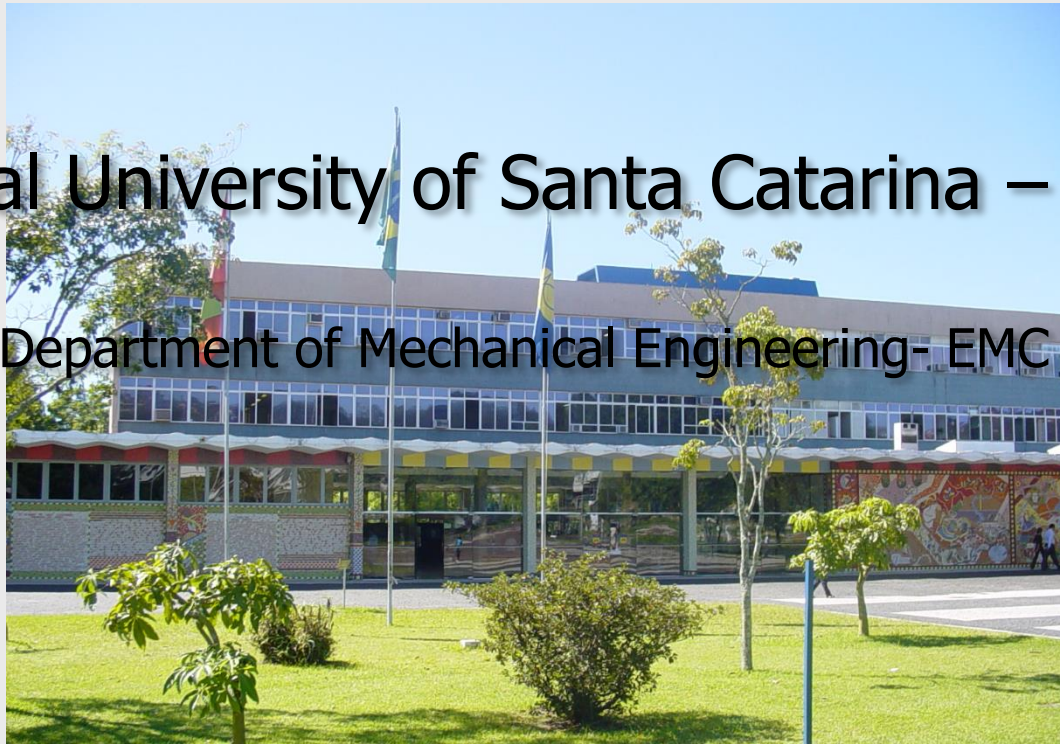


# Graduate Program in Materials Science and Engineering

PGMAT UFSC  
Programa de Pós-Graduação em  
Ciência e Engenharia de Materiais

Federal University of Santa Catarina – UFSC

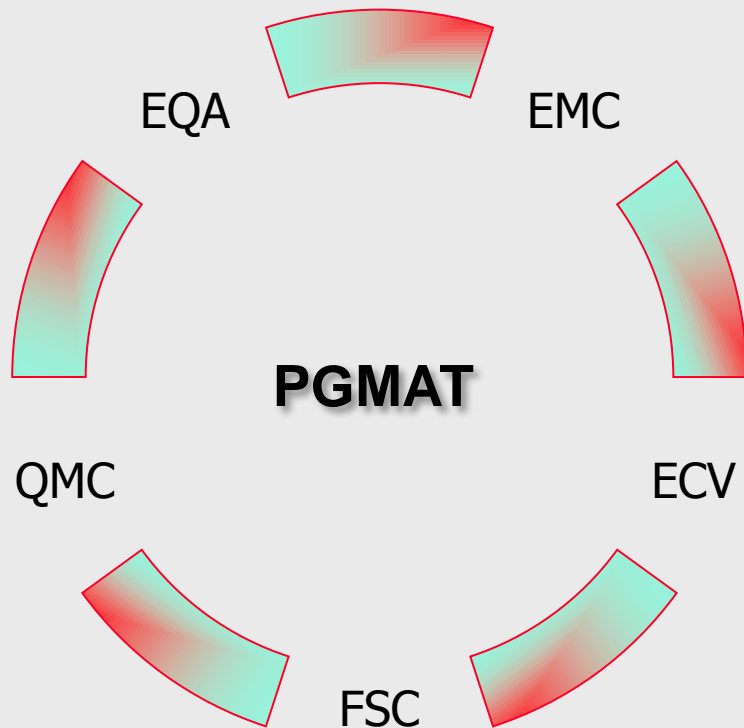
Department of Mechanical Engineering- EMC



Coordinator: Prof. Antonio *Pedro* Novaes de Oliveira, Dr. Ing.

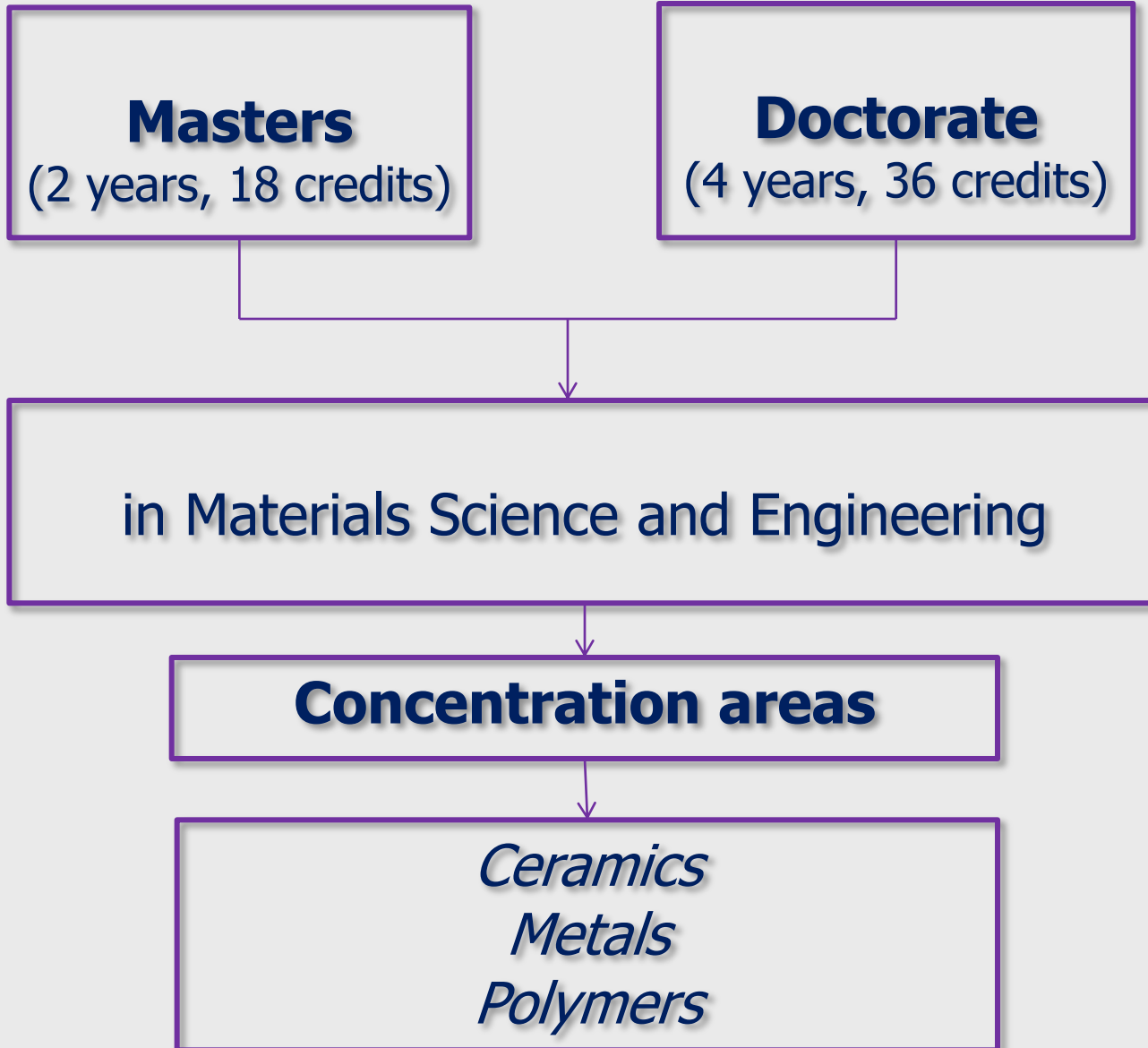
November 16<sup>th</sup>, 2015 – Florianópolis, SC - Brazil

# History



- The Graduate Program in Materials Science and Engineering (PGMAT) started in March 1994 (Res. 024 / ECE / 93).
- PGMAT was awarded a “Level 6” score in the last two evaluations from CAPES, corresponding to the 2007-2009 and 2010-2012 triennials.
- Program of Academic Excellence – PROEX.

# Courses

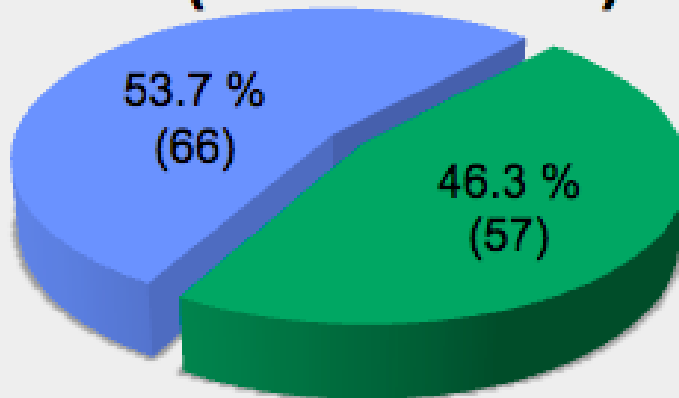


# Professors and Students

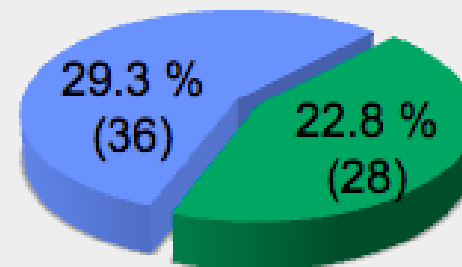
- Permanent professors: 21 (6 std/prof)
- Collaborating professors: 03
- Visiting professors: 02

Since its creation until now the PGMAT/UFSC has already graduated ***292 Masters and 141 Doctors.***

**Regular students 2015  
(123 students)**



**Students with  
Scholarship**

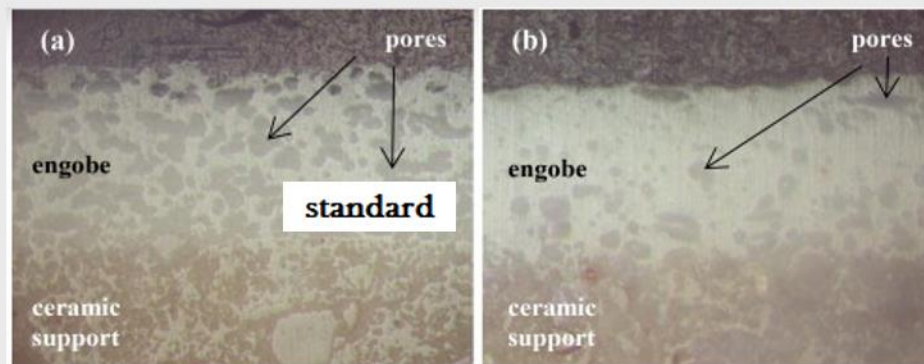
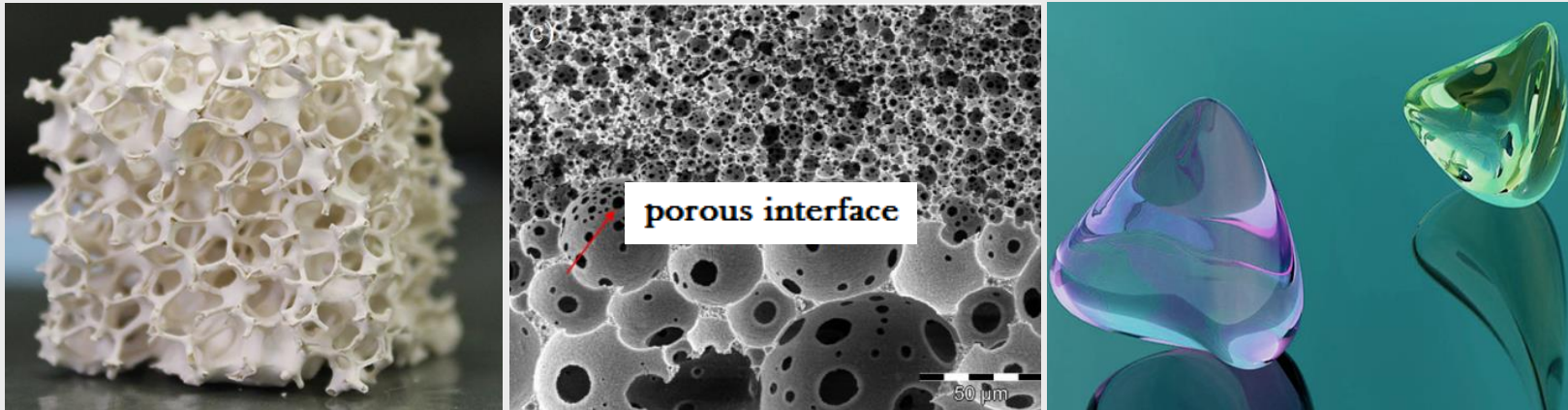


■ Master ■ Doctorate



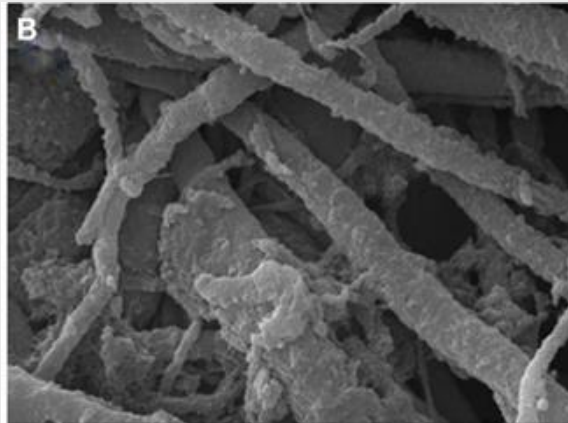
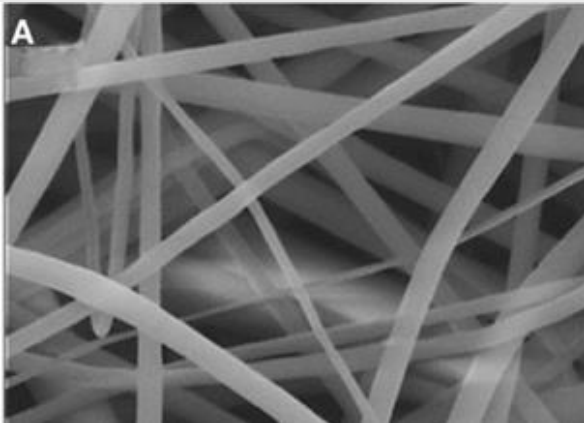
# Main Research Lines

- ◆ **Ceramics:** processing and characterization of ceramics and glasses (traditional and advanced ceramics) for different applications: biomaterials, cellular ceramics, fuel cells, PZT, recycling of industrial waste and synthesis of nanomaterials.



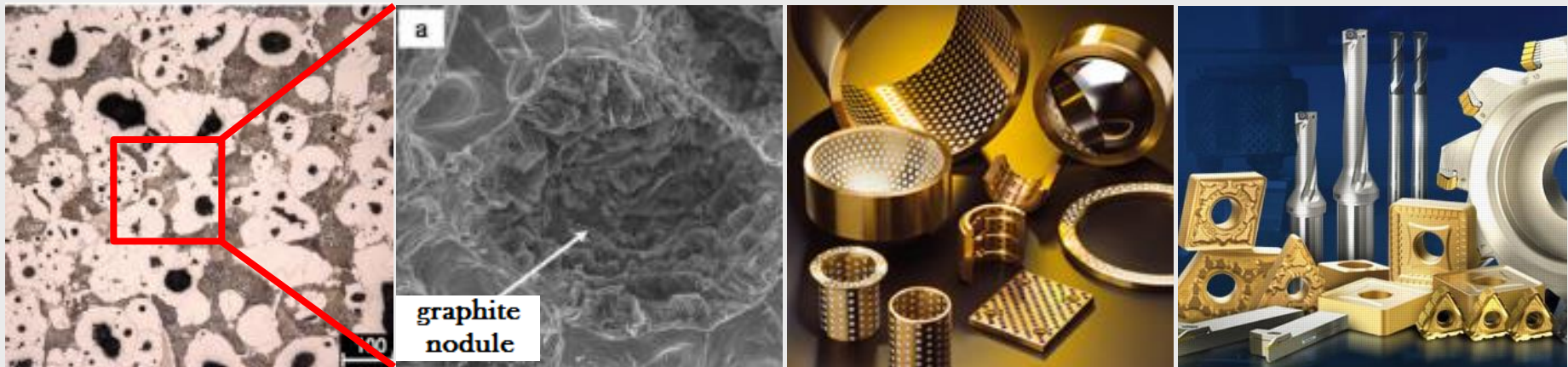
# Main Research Lines

- ◆ **Polymers:** synthesis, processing and characterization (physical-chemical and engineering) of polymers for different applications: conductive polymers, biopolymers, polymer composites, nanotechnology, rapid prototype.



# Main Research Lines

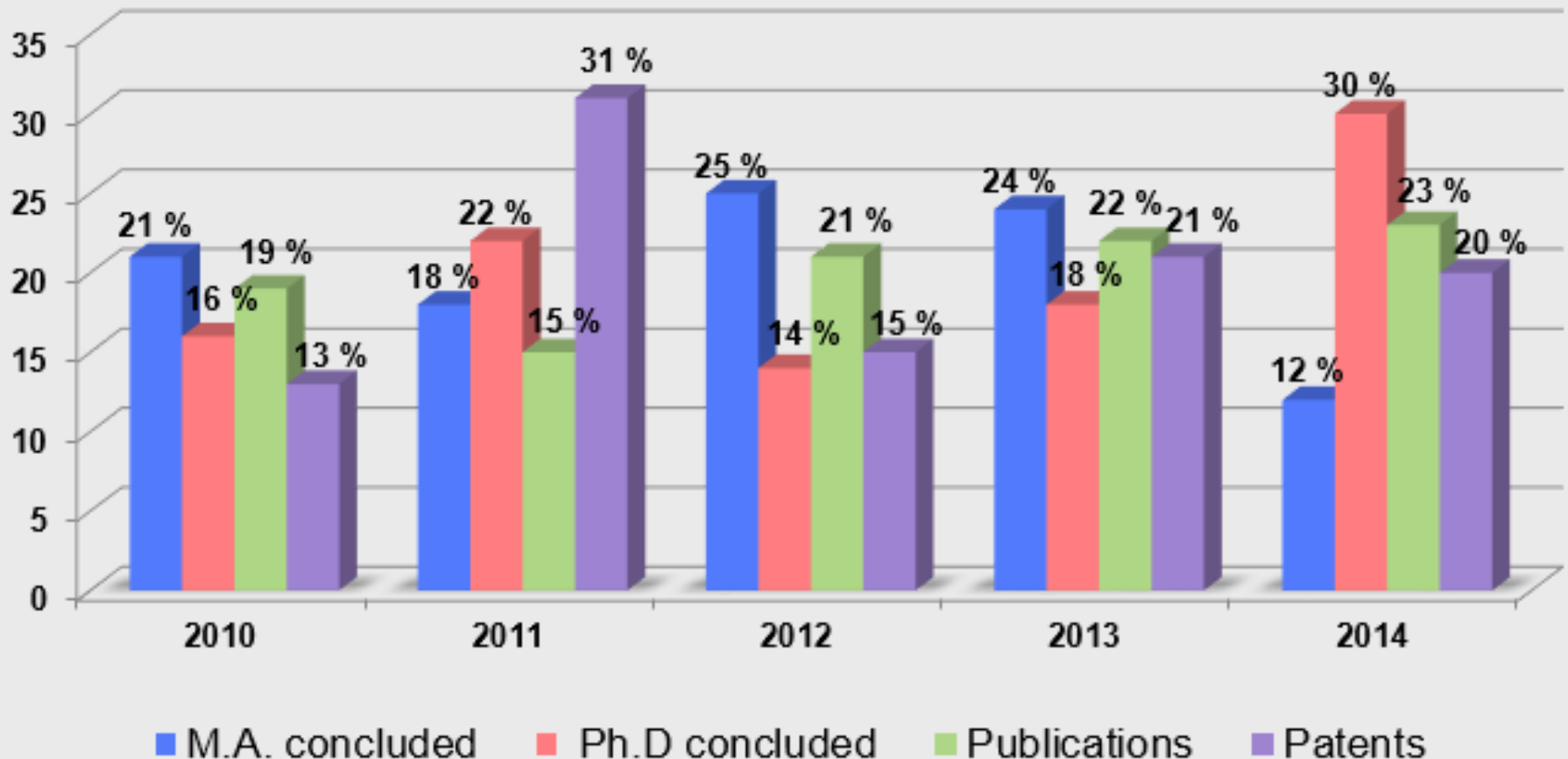
- ◆ **Metals:** physical and mechanical metallurgy (heat treatment, casting, forming and welding), powder metallurgy (powder compaction, injection moulding, magnetic materials, hard metals), plasma processing (nitriding, carbonitriding, surface enrichment), nanomaterials for special applications, tribology (studies on wear and friction of mechanical systems).



# Main Results and Trends

**\*Two national awards for best doctorate thesis (2010 and 2015)**

## Performance indicators and trends of PGMAT





# Main Brazilian Partners

## Universities and Research Institutes:

- Udesc, Sociesc, Unesc, IMG, CTCmat, UNIVILLE (SC)
- UFRGS (RS)
- UFMG (MG)
- UFSCar, USP, IPEN, UNAERP, CCB (SP)
- UFRN (RN)

## Companies:

- Embraco, Whirpool, Portobello, Cecrisa, Eliane, Germer, WEG, T-Cota, Jung

# Main International Partners

- Erlangen, TUHH/Hamburg, Bayreuth, Kaiserslautern, IKTS/Dresden, Karlsruhe/KIT, Bremen (Germany)
- University of California at Davis, UCD (USA)
- The University of Queensland (UQ)/Brisbane (Australia)
- University of Modena, ISTECH/Faenza (Italy)
- ICV/Madrid, UJI-ITC/Castellón (Spain)
- Aveiro (Portugal)
- Uniandes/Bogotá, Nacional/Bogotá, Medellín (Colombia)
- Habana (Cuba)

## Adress/Contact

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