



UNIVERSIDAD TÉCNICA  
FEDERICO SANTA MARÍA



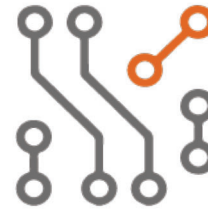
# Advanced Center for Electrical and Electronic Engineering

30 de Marzo, 2019



## CHILEAN ECONOMY

Strongly based on  
the exploitation of  
natural resources



## CHILEAN TECHNOLOGY INDUSTRY

Few success stories  
(not widespread)



## MISSING LINK

Between university  
and industry

# OUR MISSION



To contribute to the technological development and competitiveness of the Chilean economy by achieving excellence in RESEARCH, forming advanced human resources, and fostering INNOVATION and TECHNOLOGY TRANSFER in areas of societal and industrial impact through the field of ELECTRICAL AND ELECTRONIC engineering



# AREAS OF IMPACT





# PRINCIPAL INVESTIGATORS



**MATIAS ZAÑARTU**  
DIRECTOR



**SAMIR KOURO**  
DEPUTY-DIRECTOR



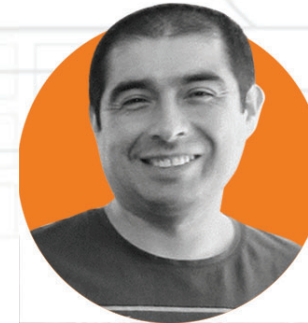
**JUAN YUZ**  
CONTROL &  
AUTOMATION



**PABLO LEZANA**  
ELECTRICAL  
SYSTEMS



**FERNANDO  
AUAT CHEEIN**  
ROBOTICS

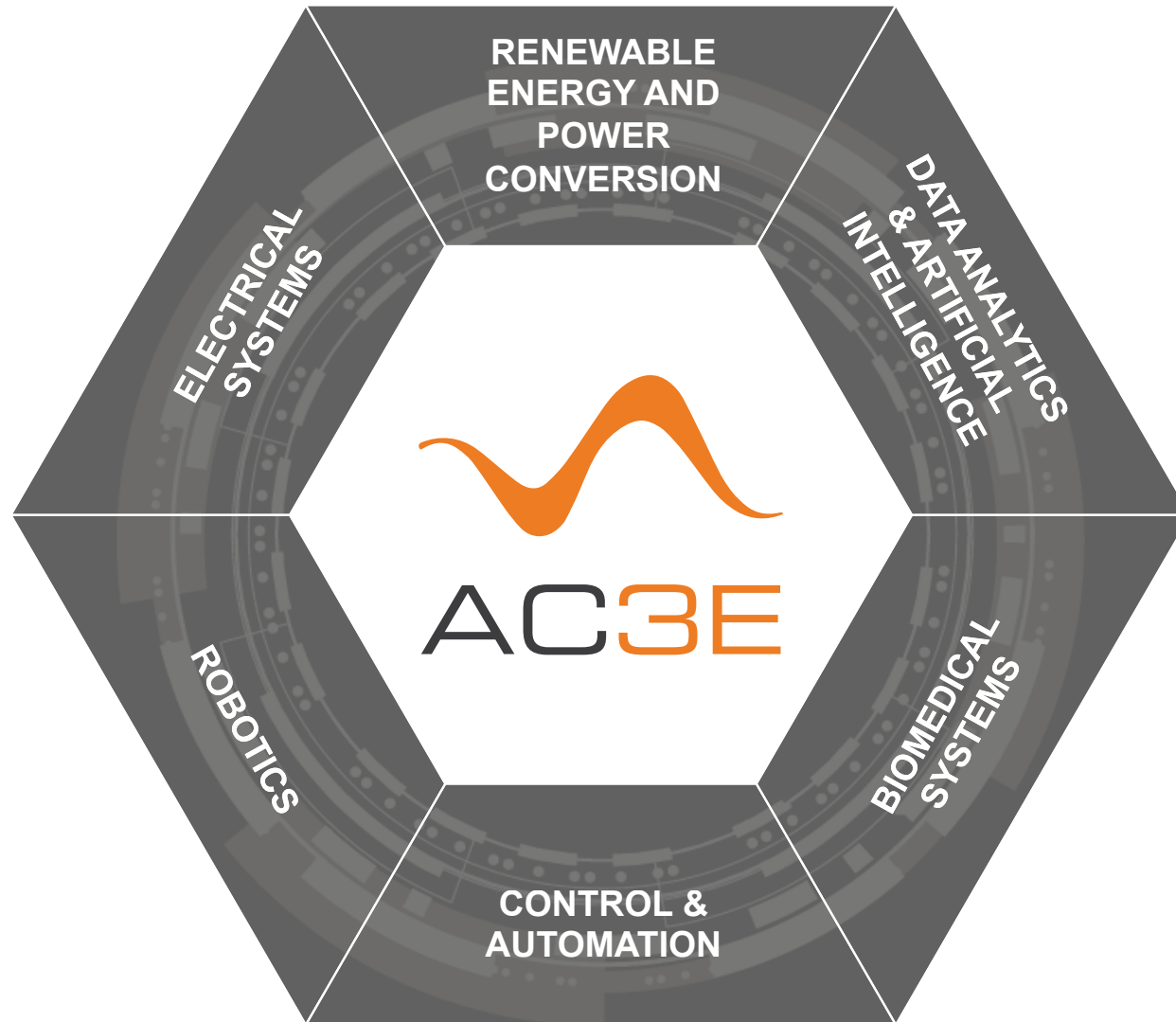


**MARCELO PEREZ**  
RENEWABLE  
ENERGY &  
POWER  
CONVERSION



**MARIA JOSE  
ESCOBAR**  
DATA ANALYTICS  
& ARTIFICIAL  
INTELLIGENCE

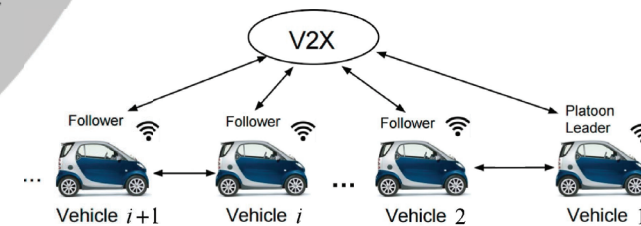
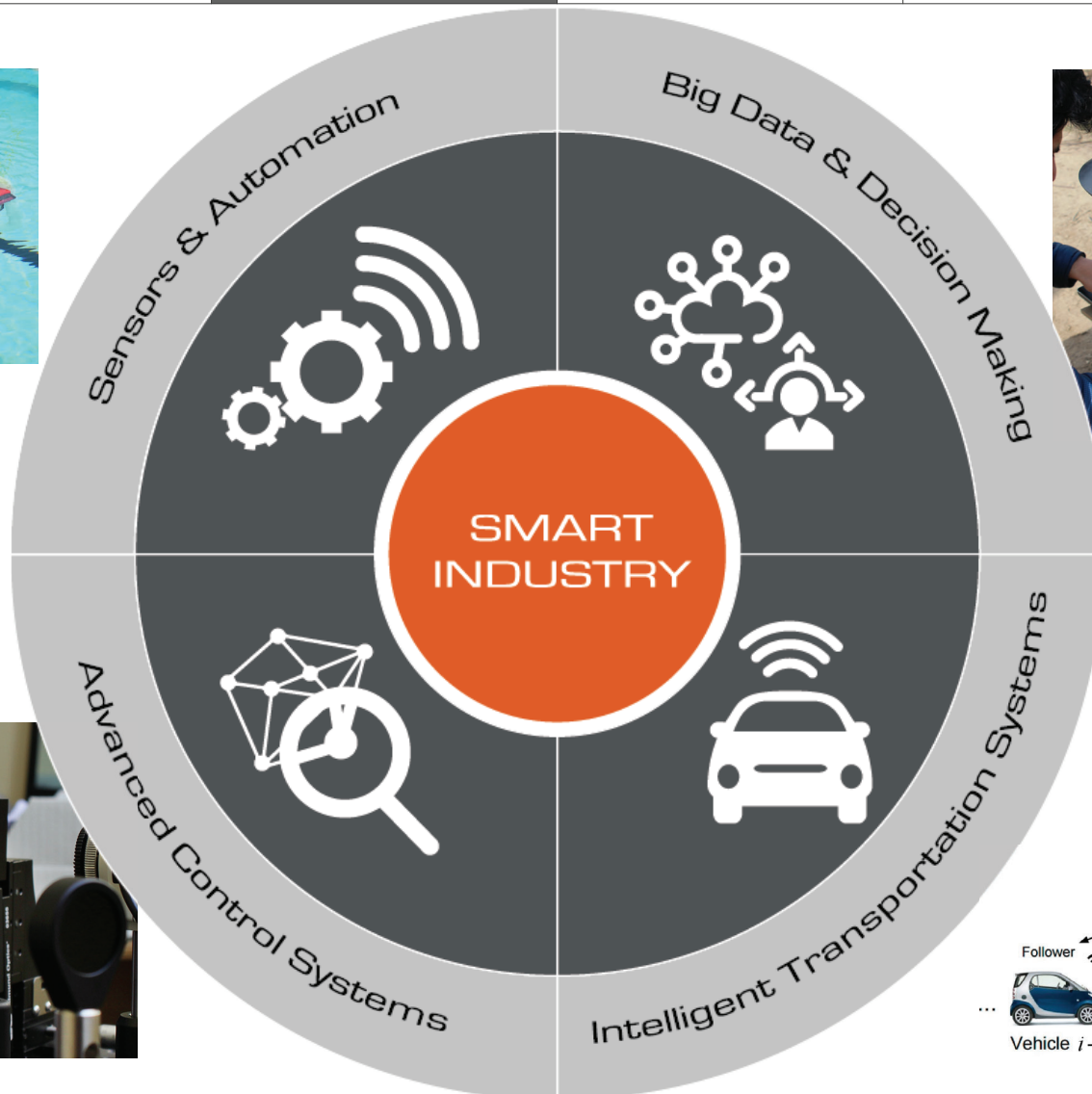
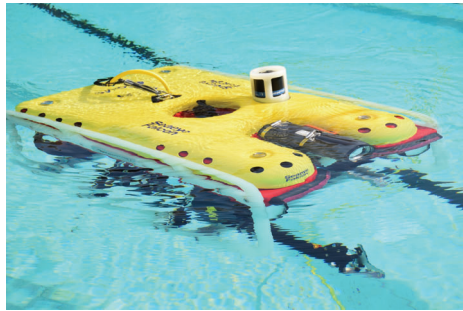
# LINES OF RESEARCH



# SMART INDUSTRY



Control & Automation	Renewable Energy & Power Conversion	Robotics	Biomedical Systems	Electrical Systems	Data Analytics & Artificial Intelligence
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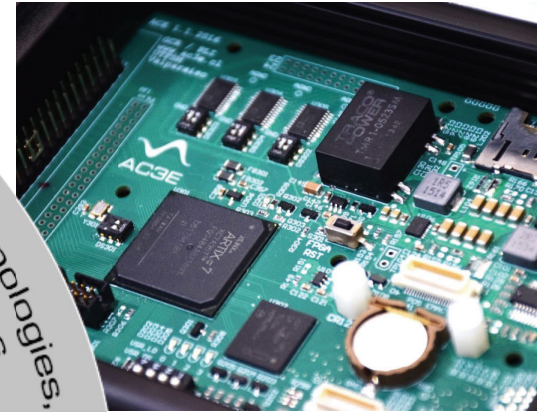
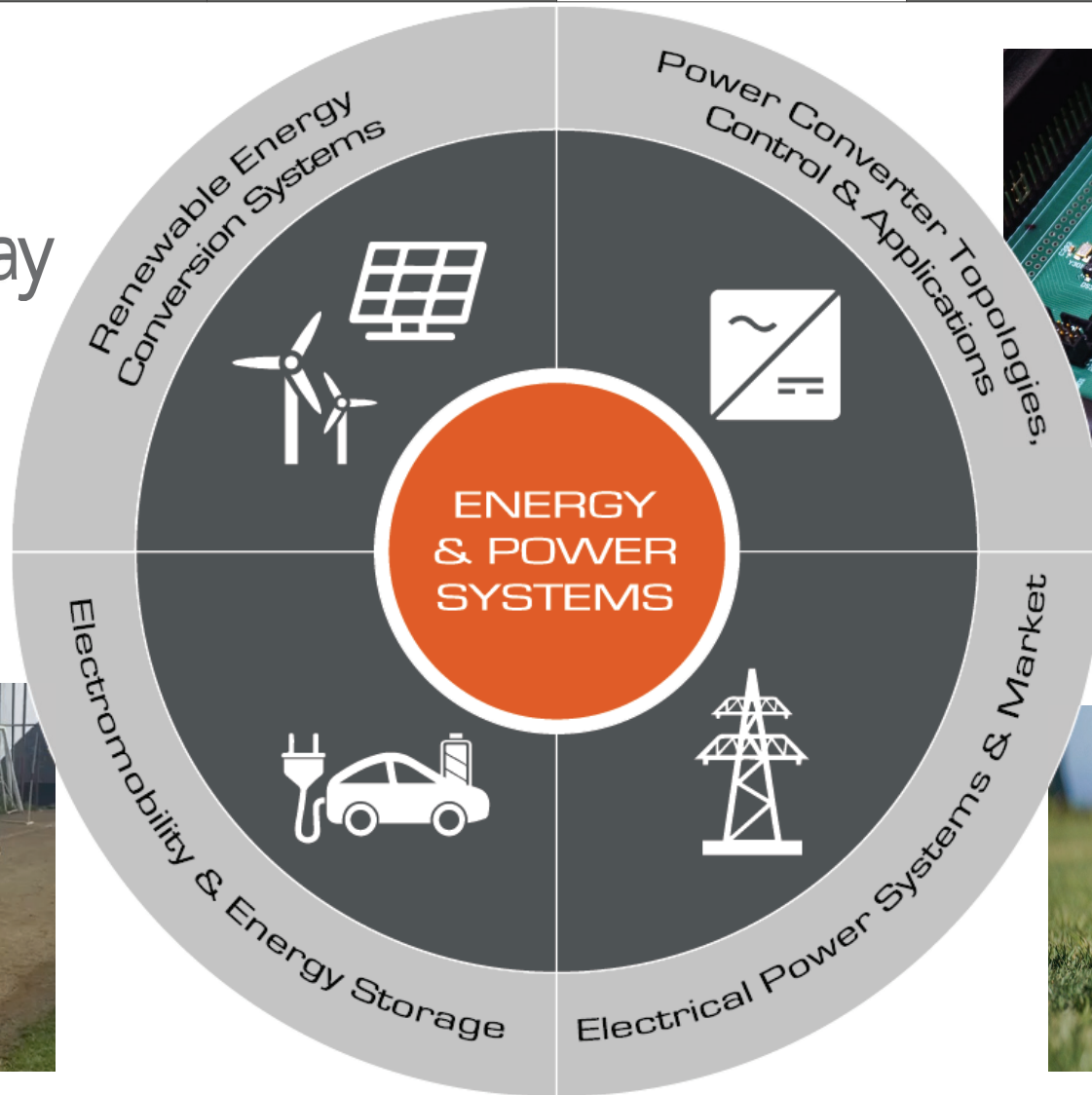




# ENERGY & POWER SYSTEMS



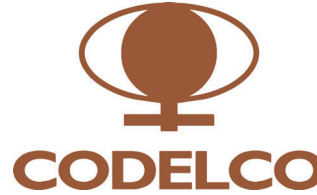
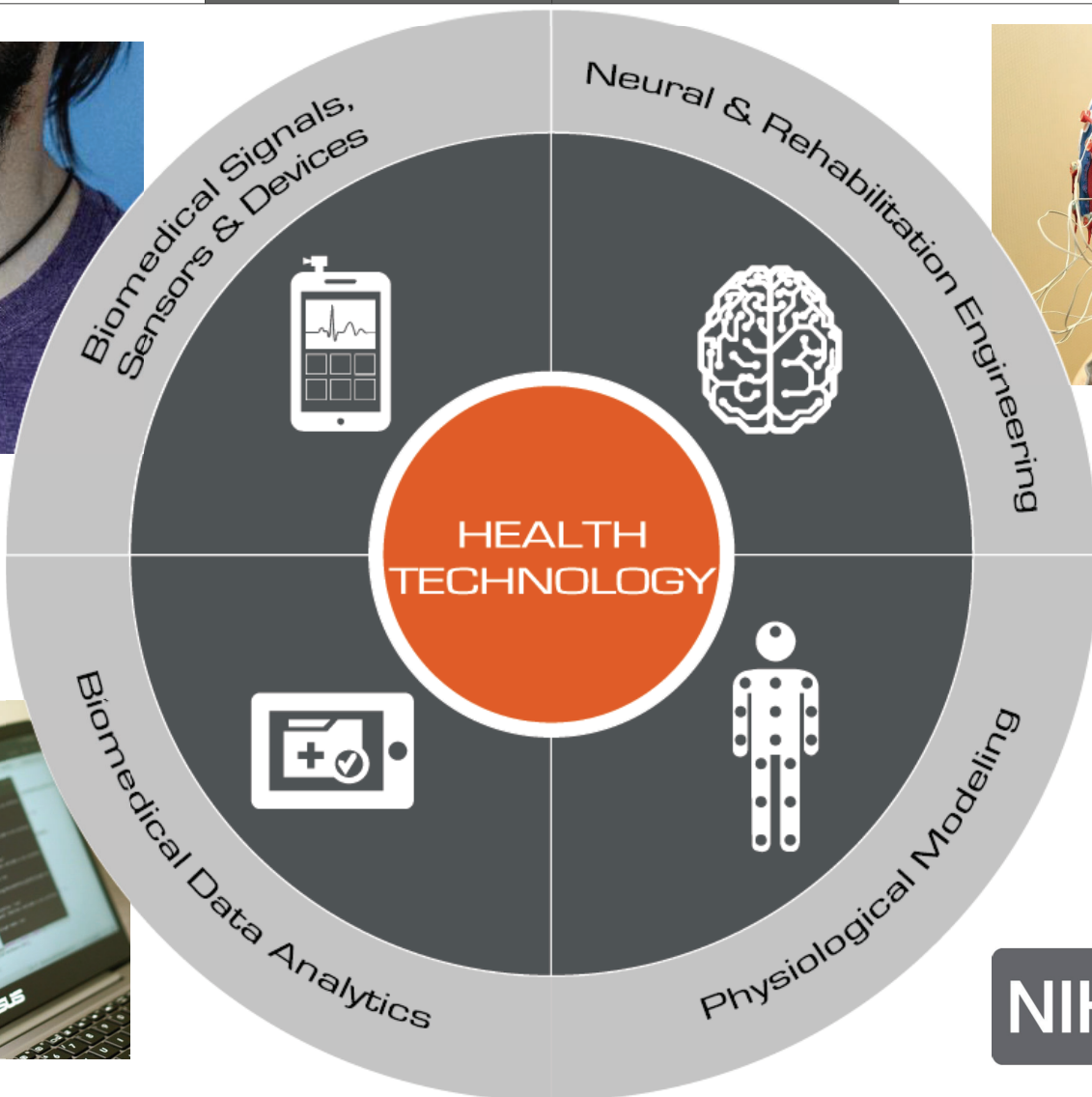
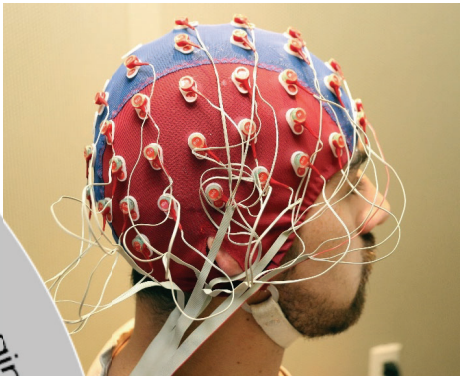
Control & Automation	Renewable Energy & Power Conversion	Robotics	Biomedical Systems	Electrical Systems	Data Analytics & Artificial Intelligence
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# HEALTH TECHNOLOGY



- Control & Automation
- Renewable Energy & Power Conversion
- Robotics
- Biomedical Systems
- Electrical Systems
- Data Analytics & Artificial Intelligence



U.S. AIR FORCE

## EXCELLENCE IN RESEARCH\*



**267**  
ISI papers  
(62% Q1)



**386**  
Conference  
papers



**3,056**  
Citations



**29** PhD  
**78** MS  
**238** BS



**14**  
Patent  
application

**12.37**  
Average  
citations  
per article

**194**  
Outreach  
Activities

Average IF  
**3,601**

**1**  
Spin-off  
company

**29**  
Activities  
public  
policies  
definitions



## EXCELLENCE IN RESEARCH\*



**24**  
H-index



**UTFSM #1**  
In LatAm In Automatic  
Control and EEE  
(Shanghai ranking 2018)



**6**  
Associate Editors  
in TOP journals  
(Automatica,  
IEEE Trans)



**3**  
Best  
PhD thesis  
awards



**7**  
best paper  
awards in  
IEEE journal



National Prize of  
Technology and  
Applied  
Sciences,  
Ministry of  
Education CHILE



IEEE-IES J.David  
Irwin Early  
Career Award

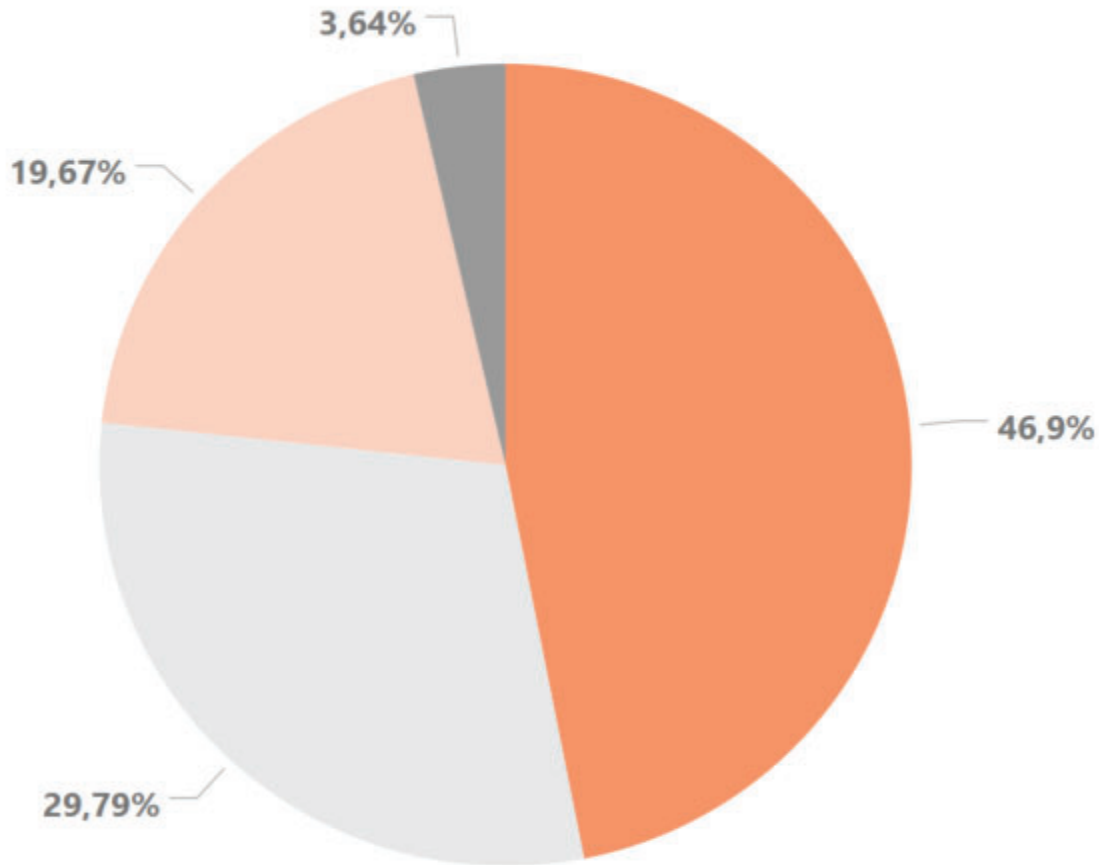


Clarivate  
Analytics Highly  
cited researches  
2017 & 2018



Best Innovation  
& Technological  
Development  
Award AIE 2015,  
2016 & 2018

## Funding sources



### Funding

- Main Public Funding - Significant and Sta...
- Private Sources - National or Internation...
- Less Important Public Competition Funds
- Contributions from the Sponsoring Entity

### Year 4 goal

25%

\$2.022.800.000

### Accomplished

29,79%

\$2.577.930.000

# CUSTOMERS & STAKEHOLDERS





# New Building: Bari II (2<sup>nd</sup> semester 2019)





# New Building: Bari II (2<sup>nd</sup> semester 2019)





Los invitamos a ser parte de esta nueva etapa del AC3E!!!



WORLD-CLASS RESEARCH FOR WORLD CHALLENGES





AC3E



◀ [www.ac3e.cl](http://www.ac3e.cl)