

**GRITA**

# **Advanced Telecommunications**



**UCAM**  
UNIVERSIDAD CATÓLICA  
DE MURCIA

Polytechnical High School



## GENERAL DESCRIPTION



*The Research Group in Advanced Telecommunications (GRITA) is formed by doctors in telecommunication, physics and engineering. It is oriented towards the application of telecommunications to improve the quality of life of people in today's society through the use of sensors and wireless technologies. Specifically, it proposes collaboration with the line of Internet of Things and Smart Cities.*

*GRITA's expertise in IoT devices, wireless communication networks, and cloud based platforms allows them to collaborate in projects where the developing of devices, algorithms, interfaces, tests, and prototypes for enhanced information technology in which features like low cost, low energy consumption of the devices and long range of the communication protocol, are of relevance.*

Partners:

Telefonica

cellmex  
driving telecom connectivity

CitizenM  
The Gateway to Innovation

sigfox

vodafone

LoRa Alliance™  
Wide Area Networks for IoT





## PRINCIPAL MEMBERS



Telecommunications Department Professor,  
Catholic University of Murcia.  
PhD in Telecommunications, Polytechnic University of Valencia.  
Master in Information Technologies and Communications,  
Polytechnic University of Cartagena.  
Degree in Telecommunications Engineering,  
Polytechnic University of Cartagena.

**Dr. Juan Miguel Navarro Ruíz**  
*Research Head*



Telecommunications Department Professor,  
Catholic University of Murcia.  
PhD in Information Technologies and Communications,  
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Degree in Telecommunications Engineering,  
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**Dr. Concepción Sanchis Borrás**  
*Researcher*



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Polytechnic University of Valencia.

**Dr. Francisco Alberto Rodríguez Mayol**  
*Researcher*



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PhD in Telecommunications Engineering,  
Polytechnic University of Cartagena.  
Degree in Telecommunications Engineering,  
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**Dr. Teodoro García Egea**  
*Researcher*



## SELECTED RESEARCH PROJECTS



**2016-2019**

### Holistic Development of Emergent Applications in Heterogeneous Systems

*Call: Ministry of Economy and Competitiveness  
Leader: Catholic University of Murcia*



**2013-2016**

### Sound processing for human-machine interaction: Analysis, simulation and synthesis

*Call: Ministry of Economy and Competitiveness  
Leader: Polytechnic University of Valencia*



**2013 - 2016**

### Theoretical and experimental channel modeling of millimeter and submillimeter wave systems for communication and imaging

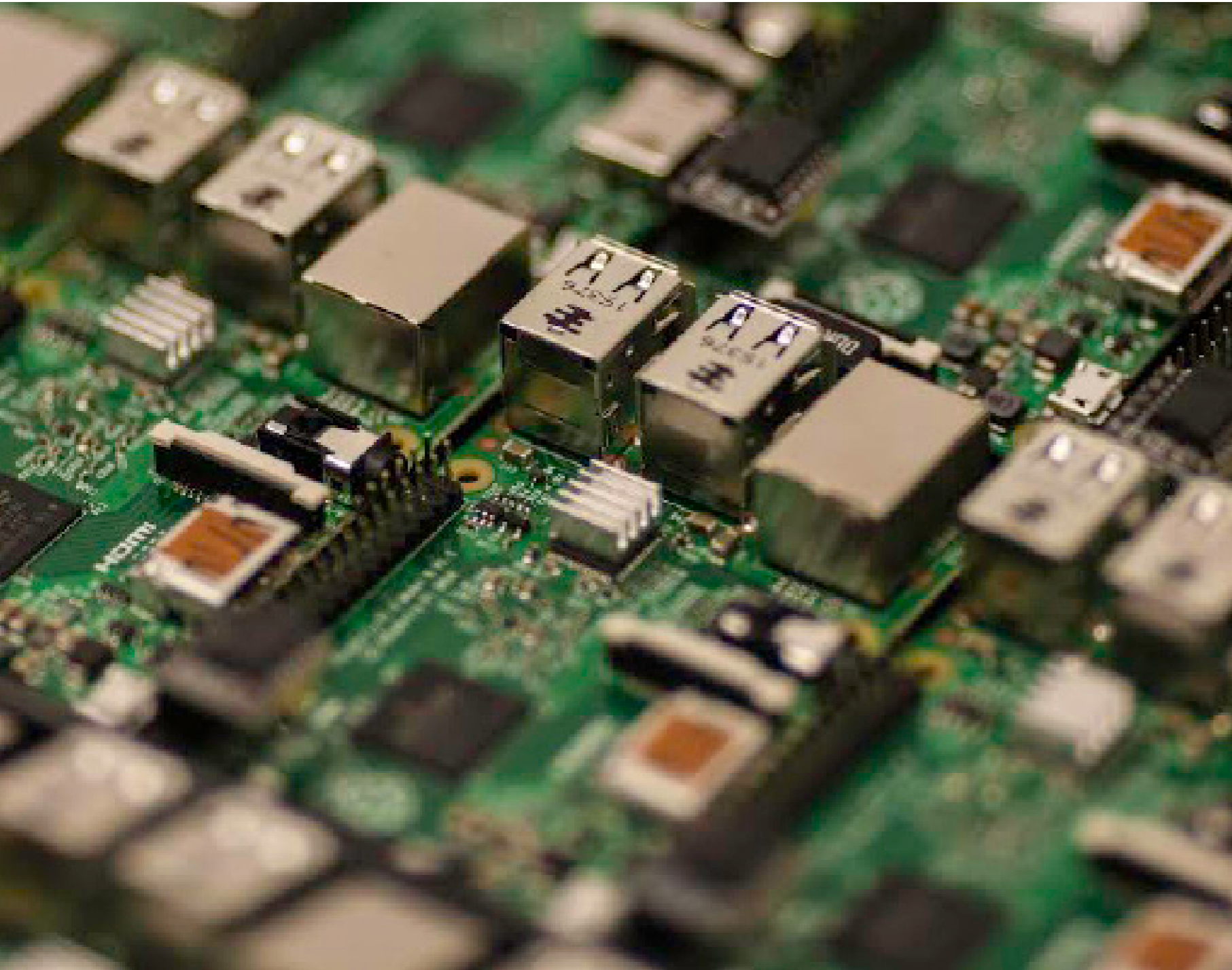
*Call: Ministry of Economy and Competitiveness  
Leader: Polytechnic University of Cartagena*



**2014**

### Exchange and Training In Renewable Energy Sector li - Extrares-li

*Call: Erasmus +  
Leader: Catholic University of Murcia*



## SELECTED RESEARCH LINES



*Classification of radio-electric systems*

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*IoT and Smart City*

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*Acoustics and sound processing*

## WHAT IS THE OPRI

The International Project Office (OPRI) is an office linked to the Vice-rectorate of Research, and is responsible for the management of international research projects at UCAM.

The OPRI was founded to strengthen the collaboration between our partners all around the world in the field of research. The unit was established in 2012 and has built strong alliances in 36 countries in which the university has to date participated in 41 projects.

The internationalization of the Catholic University of Saint Anthony, through the OPRI, is directed towards all of the university community, researchers as well as students. A total of 160 students have participated already in projects in a variety of countries all over the continent.

### PRINCIPAL CALLS:





# UCAM

**OPRI** International  
Project Office



**OPRI**

International Project Office UCAM  
Vice-rectorate of Research

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