



## **MASTER IN PHOTONICS – “PHOTONICS BCN” ERASMUS+ “EUROPHOTONICS-POESII”**

### **MASTER THESIS PROPOSAL**

**Dates: April - September 2018**

**Laboratory : CommSensLab  
Institution: Dpt. TSC, UPC  
City, Country : Barcelona, Spain.**

**Title of the master thesis: Photoconductive antennas for terahertz radiation**

**Name of the master thesis supervisor: Jordi Romeu Robert/ Maria Concepción Santos**  
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**Keywords :**

**Summary of the subject (maximum 1 page) :**

Photoconductive materials are currently used to design antennas that radiate in the terahertz band. In this master thesis is proposed to study the design of different types of antennas and feeding mechanisms to increase the radiation efficiency. The scope of the thesis will include the effect of using different antenna geometries and feeding electrodes. It is planned to manufacture and test at least one prototype.

**Additional information :**

- \* Required skills :
- \* Miscellaneous :