The **FiCMA-FiCNA (Physics and Crystallography of materials & nanomaterials) Research Group** of the EMaS Research Center in the Rovira i Virgili University in Tarragona (Spain) announces master scholarships in program “**MASTER IN NANOSCIENCE, MATERIALS AND PROCESSES: Chemical Technology at the Frontier”.**

**Scholarships:**

The Master programme provides scholarships to pre-inscribed candidates.

The scholarships amount a quantity that covers the expenses of the enrolment and a travel help for non-national students.

Duration: the duration of the Master programme is one year (60 ECTS, two semesters) from the beginning of October till mid September in the following year. There is no possibility to start the programme in the second semester (February) at the URV.

**Research projects proposed:**

1. [**Development of new photonic biosensors**](http://argo.urv.es/quimio/nanotec/wrk_prop/X_Development_of_new_photonic_biosensors.pdf)

Brief description**:** The proposed research project aims at the study and the final development of a microfluidic device for the efficient on-chip integration of probes for optically sensing physical parameters.

1. [**Dielectric photonic devices**](http://argo.urv.es/quimio/nanotec/wrk_prop/Y_Surface_structuration_for_photonic_applications.pdf)Brief description**:** The aim of the proposed research project is to explore different techniques for integration of unconventional dielectric materials in photonic integrated platforms based on Si, SiO2 or SiN.
2. [**Pr:KGd(PO3)4 nanoparticles as a new scintillator material**](http://argo.urv.es/quimio/nanotec/wrk_prop/Z_PrKGd_PO3_4_nanoparticles_as_a_new_scintillator_material.pdf)

Brief description**:** The proposed research project aims to study the synthesis of Pr:KGd(PO3)4 nanoparticles which can be used as a new scintillator material.

1. **Nanothermometry:**

Brief description: The proposed research project aims to develop novel dielectric nanoparticles to be used as nanothermometers. Different applications are envisaged such as biomedical sensors and/or thermochromics paints.

**Required:**A Bachelor degree in all branches of experimental sciences and technologies.

Good knowledge of the English language.

**Applying**: to apply for this fellowship you have to send to [mariacinta.pujol@urv.cat](mailto:mariacinta.pujol@urv.cat) the following documentation:

* detailed CV;
* bachelor degree certificates;
* bachelor marks certificate (only those certificates with a average mark ≥ 3 will be considered).

**Deadline**: 31 May 2017

More information: <http://www.urv.cat/masters_oficials/enginyeria_arquitectura/nanociencia/en_master_nanociencia.html>