



PhD-Student position in Infrared Photodetectors and Sensors based on Quantum Dot and 2D Materials

The **Functional Optoelectronic NanoMaterials** group at ICFO, led by ICREA Prof. Gerasimos Konstantatos, is looking to hire highly motivated, and talented Ph.D. students within the context of his National Plan of Research project, funded by the Spanish Ministry of Economy, Industry, and Competitiveness (MINECO), on **"Infrared Photodetectors and Sensors based on Quantum Dot and 2D Materials"**.

The mission of this project, which is also related to the Graphene Flagship activities, is to **develop the next generation of photo-detectors or thermal detectors with very high sensitivity, low-cost and small footprint that can sense light beyond 2 μm** . The vision is to revolutionize the markets of thermal imaging, infrared spectroscopy (for food and process monitoring) as well as multi-spectral imaging and sensing.

By means of this opening, we are looking for highly motivated candidates who wish to enhance their scientific career in the field of Functional Optoelectronic Nanomaterials, and obtain a doctoral degree in the field of **Infrared Optoelectronics**.

For further information about the Functional Optoelectronic NanoMaterials research group, please see https://icfo.eu/research/groups-details?group_id=30, or contact Prof. Dr. Gerasimos Konstantatos (gerasimos.konstantatos@icfo.eu).

Requirements and conditions

Candidates must hold an **internationally-recognized Master-equivalent degree** (or evidence of its completion in the nearest future), preferably in **Applied Physics**, or **Electrical Engineering**.

The candidate should have a proven record of accomplishment of academic excellence, ideally with backgrounds in optoelectronics and physics of semiconductor devices.

Demonstrable experience in optoelectronic characterization and device fabrication is highly desired. In particular, skills related to setting-up optical and optoelectronic setups (including Labview) and/or micro/nanofabrication skills (including photolithography, laser writing, e-beam lithography) will be positively evaluated.

Selection is based on merit and potential, measured in terms of the academic record and personal achievements. Academic excellence is a must. Pro-activity, participation in community activities, and capacity for teamwork are also taken into account.

No restrictions of citizenship apply to the ICFO positions. Female graduate students are encouraged to apply.

PhD fellowships are given for periods of one year, renewable for a total of up to four years. The renewal is subject to satisfactory performance in the PhD studies and related research activities, evaluated annually by the Thesis Director and the ICFO PhD Committee.

Application procedure

To formally apply, suitable candidates are requested to submit (in English) the following material via our General PhD-Call, for the ICFO International PhD Program (Spring 2018), available at <http://jobs.icfo.eu/index.php?detail=349>.

Suitable candidates are requested to submit:

- A Cover Letter with declaration of research interests, emphasizing the interest in this specific project under supervision of Prof. Dr. Gerasimos Konstantatos (Ref. FPI-Infrared Photodetectors)
- A Curriculum Vitae, including contact details.
- Scanned copies of the complete (Bachelor and Master equivalent) and official academic transcripts in English or Spanish.
- Scanned copies of the degree certificates, if available at the time of application.
- Via the online application form, the candidate should indicate two referees, who we will contact for their reference letters if necessary.
- If available, scanned copy of standardized test results (GRE, TOEFL, etc.). Note that submission of test results is optional, but they can be particularly helpful for evaluating candidates with degrees obtained outside the European Higher Education Area.

Candidates are invited to additionally submit a copy of the application material (in one single pdf-file) to Prof. Gerasimos Konstantatos at gerasimos.konstantatos@icfo.eu.

All required application material must be complete and **submitted by February 25, 2018**, in order for the application to be considered.

Please, see our General Call for further details on the selection process, and timelines.

Candidates may contact jobs@icfo.eu for informal enquiries regarding the application, as well as address scientific enquiries to gerasimos.konstantatos@icfo.eu.