PhD Student Offer

DEADLINE: June 30th, 2017

INCORPORATION: September-October 2017

Nanofabrication for Next Generation Nano-electronics

For a continuous improvement of electronics devices the semiconductor industry has been following Moore’s law for many decades. Currently, the dimensions are approaching the 10 nm limit, where the physical properties are different and reliability issues as degradation and variability are dramatic. Then, a modification of the traditional MOSFET structure has become mandatory. In this sense different device topologies will entail a major improvement on their reliability and performance.

The goal of the PhD work will be based on manufacturing nanometer scale transistors and circuits based on vertical topology. The PhD would aim to engage talented students to work on the development, characterization and physical properties investigation of novel concepts to obtain next generation nano-electronic devices. The work will take place in the framework of H2020-ICT-2015-688072 IONS4SET EU project “Ion-irradiation-induced Si Nano-dot Self-Assembly for Hybrid SET-CMOS Technology” (www.ions4set.eu).

REQUIREMENTS and VALUABLE MERITS

- Master in Physics, Electronic Engineering or Nanotechnology.
- High motivation to experimental research and clean room processing.
- Working aptitudes in a collaborative group.
- High level in written/spoken English.
- Academic grades and research experience will be considered in the evaluation.

Candidates which will not have yet the Master Degree will be also considered

Candidates should send their CV and academic grades certificate to: esteve.amat@imb-cnm.csic.es

Bellaterra, May 02 of 2017