Job Offers at IMSE-CNM

We are seeking highly motivated candidates to contribute to our Research Team that is participating in several European projects, such as SPIRS (https://www.spirs-project.eu), QUBIP (https://qubip.eu), and SQPRIM. Three different scientific-technical profiles are required:

Profile 1 (supervised by Dr. Eros Camacho and Dr. Piedad Brox):
- Design of hardware solutions for post-quantum cryptography (PQC) on programable devices Systems on Chips (SoCs).
- Conduct security evaluations of PQC implementations, including side-channel analysis and fault injection attacks, and develop countermeasures for PQC implementations.

Profile 2 (supervised by Dr. David Martín and Dr. Piedad Brox):
- Design of Photonic Integrated Circuits (PICs) for security applications.
- Conduct security evaluations of integrated optical PUFs.

Profile 3 (supervised by Dr. Macarena C. Martínez and Dr. Piedad Brox):
- Design of CMOS digital Integrated Circuits (ICs) using open design flows.
- VLSI integration of RISC-V microprocessors.

Requirements:
- Profile 1: Bachelor Degree in Mathematics, Physics, Telecommunication Eng., Electronics Eng. or similar.
- Profile 2: Bachelor Degree in Telecommunication Eng., Physics, Materials Eng. or similar.
- Profile 3: Bachelor Degree in Physics, Computer Science, Telecommunication Eng., Electronics Eng. or similar.
- Strong written and verbal English communication skills.

Preferred Qualifications (not mandatory):
- Master's or Ph.D. in Microelectronics, Computer Sciences or related fields with the above profile descriptions will be positively evaluated.
- Knowledge of programming languages like Python, C/C++, or MATLAB.
- Experience on digital design, *Hardware Design Languages* (HDL) like VHDL or Verilog.
- Experience with FPGA, ASIC and PIC design as well as verification tools.

All positions offer the possibility for candidates interested in pursuing a Ph.D. program or continuing their professional as postdoctoral researcher.

Depending on candidate experience, background, and proficiency level, **salary can range from 29000€ up to and 40000€**, gross annual.

The incorporation date relies on the CSIC's Labour Exchange but it is expected next **March 2024**.

To apply to any of these job offers, please send a detailed CV **(before February 7, 2025)** to:
Piedad Brox (brox@imse-cnm.csic.es)