

Doctoral Thesis grant

“Photons transport models for Diffuse Optical Tomography”

We invite applications for a doctorate student having a BSc University title obtained outside Spain plus an MSc University title (either Spanish or non-Spanish) to make a Doctoral Thesis under the subject “Photons transport models for Diffuse Optical Tomography” in the research group SENUBIO at the University Research Institute for Industrial, Radiophysical and Environmental Safety (ISIRYM), in Spain. The grant is included in the “Santiago Grisolíá” doctoral grants program of the Regional Government of Valencia.

The student will incorporate in a highly active research group in the field of nuclear safety and bioengineering of the ionizing radiation. The subject of the thesis will involve the investigation of photons transport models for health prevention characterization studies without the use of ionizing radiation, in the framework of current projects in science and technology for health. The work will include the development of P_L (Spherical Harmonics) models for migration and transport of photons with finite elements applied to generalized geometries.

The student will improve his/her knowledge of optical imaging for medical applications, programming and parallel computing, and Monte Carlo codes (such MCNP6 y GEANT).

We are looking for a motivated and enthusiastic person who has a strong sense of responsibility, with organizational work capacity and commitment to continuous learning.

Interested applicants must submit the following documentation before **May 11, 2018**.

Characteristics of the grant:

- Duration: Three years, from the 1st July 2018 to the 30th June 2021.
- Gross monthly salary: €1400.
- Possibility to incorporate in the Doctorate Program in “Engineering and Industrial Production” at the Universitat Politècnica de València, with the supervision of Prof. Dr. Gumersindo Verdú Martín.

Requisites:

- Having a BSc (from a non-Spanish Universities) and, optionally, an MSc (either Spanish or non-Spanish) in the broad field of Engineering (e.g., Mechanical, Biomedical, Electrical, Energetic, etc.), Mathematics, or Computer science.
- The University titles must allow access to doctorate studies. For European Union students this typically requires having at least 300 ECTS credits.
- BSc University studies must have ended after January 1, 2014.
- For non-EU citizens, the BSc title must have been homologated to a Spanish title.
- Have at least an intermediate level of knowledge of English or Spanish.
- Do not hold a previous title of Doctor (Ph.D.).
- Not having had a “Santiago Grisolí” grant previously.

Documents required (scanned copies or digital documents):

- National identity card and passport.
- Academic certificate, with a list of the subjects followed and the marks obtained.
- BSc and MSc University titles (or provisional documents).
- Curriculum vitae.
- Documentation or certificates that prove knowledge of English or Spanish.
- Two letters of reference (if available).

Please submit the documentation before **May 11, 2018**, to the following e-mail address: gverdu@iqn.upv.es (Prof. Dr. Gumersindo Verdú).

For inquiries or request for further information, please write to: alabarile@iqn.upv.es (Ms. Antonella Labarile).