

Madrid, 17<sup>th</sup> January 2017

## Profile for a research position in computational nanomedicine focused on magnetic hyperthermia

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IMDEA Nanoscience ([www.nanoscience.imdea.org](http://www.nanoscience.imdea.org)) is a non-profit foundation created by initiative of the regional Government of the Community of Madrid in November 2006 in order to shorten the distance between research and society and to provide new capacity for research, technological development and innovation in the field of Nanoscience, Nanotechnology and Molecular Design.

Under its Nanomedicine program, IMDEA Nanoscience coordinates a recently funded H2020 project (NoCanTher) focused on: (i) scaling up the GMP production of a novel nanomedicine for clinical magnetic hyperthermia of cancer, (ii) developing the relevant instrumentation for clinical settings, and (iii) conducting clinical trials in humans. The NoCanTher team consists in a pan-European consortium of top research centres, companies, hospitals and universities.

We invite applications for a post in the development of a treatment planning software for advanced magnetic hyperthermia using a combination of a purpose developed nanomedicine and a dedicated magnetic applicator for generating alternating magnetic fields. The software will be an essential tool in the design and execution of different clinical trials in humans within the project.

The successful candidate must hold an engineering degree, or an MSc/PhD in a relevant discipline (Physics, Engineering, Chemistry, etc.), and must have:

- Good Python programming skills. Knowledge of other additional programming languages will be positively considered, including graphical programming.
- Demonstrable experience with electromagnetics simulations.

Other desirable skills are:

- Medical image computing and processing, including segmentation.
- Experience with the simulation platform Sim4Life.
- Experience in CAD/CAM.
- Knowledge of nanomagnetism/micromagnetism simulations.

The position is funded for one year (a two-month probationary period applies at the beginning) with the possibility for renewal up to one additional year. Gross salary, including social security and health insurance benefits, will be according to standard regulation in Spain at the Madrid Institute for Advanced Studies in Nanoscience (IMDEA Nanociencia).

Applications, including a CV and a letter of reference, should be addressed to: Dr Daniel Ortega ([daniel.ortega@imdea.org](mailto:daniel.ortega@imdea.org))