





PhD student position in plasma science and technology: measurements of neutral hydrogen species

National Centre for Plasma Science and Technology (NCPST), Dublin City University, Ireland

Plasma science is critical in key future technological applications for energy production and storage. The hydrogen economy is rapidly expanding with a focus on technologies for hydrogen production and distribution. In parallel, fusion energy, based on hydrogen plasmas is a promising route towards sustainable clean energy. In both areas, neutral hydrogen species play a key role. However, reliable measurements of neutral hydrogen species in plasma environments are extremely challenging. In this project we will develop new advanced optical measurement techniques, mainly based on multi-photon laser induced fluorescence spectroscopy.

A fully funded PhD student position is available at Dublin City University, jointly funded through Eurofusion and Dublin City University. The project is in close collaboration with the Université Sorbonne Paris Nord and the successful candidate will spend time in both institutions.

Students, with or expecting to gain, at least an upper second-class honours degree in a relevant subject area, or equivalent, are invited to apply. Shortlisted applicants will be invited for an interview. The candidate will be enrolled at Dublin City University and for EU candidates fees are covered through the project.

Location:Dublin City University (Ireland) and Université Sorbonne Paris Nord (France)Supervisors:Prof Timo Gans (Dublin) and Dr Claudia Lazzaroni (Paris)Duration:3-4 yearsStipend:€25,000 p/a (tax free)Start date:available immediatelyClosing date:24/01/2024Contact:timo.gans@dcu.ie, claudia.lazzaroni@lspm.cnrs.fr

Further details and links are available at: <u>https://ncpst.ie</u> <u>https://www.dcu.ie/physics/people/timo-gans</u> <u>https://www.lspm.cnrs.fr/en/research/ppanam/interaction-plasma-surface-et-microplasmas/</u>

Funding: The PhD scholarship is fully funded for three to four years and covers (i) a tax-free stipend and (ii) tuition fees at the EU rate.

The School of Physical Sciences holds an Athena SWAN Bronze Award and is committed to supporting equality and diversity for all staff and students.