A PhD student will be recruited by the Department of Physics, Politecnico di Milano (Italy), in the framework of the MSCA ITN project LightDyNAmics (https://www.lightdynamics.eu/). The task of the student is to perform experimental work on time-resolved spectroscopy of DNA systems. The student will develop ultrafast spectroscopy setups in the UV with unprecedented sub-20-fs time resolution: transient absorption and two-dimensional ultraviolet (2DUV) spectroscopy. These systems will then be used for studies of the primary photoinduced processes in nucleic acids of growing complexity, from isolated nucleobases, nucleosides and nucleotides to stacked/paired dimers, single and double strand models and G-quadruplexes. Experimental results will be compared with advanced numerical simulations performed by the group of Prof. Marco Garavelli (Bologna University, Italy).

Requirements

The ideal candidate should have a background in optics and photonics and preferentially an expertise in spectroscopic techniques and a basic knowledge of physical chemistry and photochemistry.

Additional requirements: M.Sc. (or equivalent graduation) in relevant area (e.g. Engineering, Physics or Physical Chemistry). Previous experience in optical spectroscopy techniques is preferred. Proof of English proficiency as communication and teaching language throughout LightDyNAmics is English.

We offer

- A dynamic and well-equipped research environment.
- Intensive training in scientific and transferable skills, participation in schools, conferences and workshops.
- Gross salary about 3000 € per month plus 600 € monthly relocation allowance and 500 € monthly family allowance (if applicable).
- Contract start date (planned): 01. November 2018

Application submission

The recruitment will be based on the CV and motivation letter (recommendation letters are also welcome), followed by an interview for the shortlisted candidates.

Interested candidates must send all the documents to Prof. Giulio Cerullo (giulio.cerullo@polimi.it) before July, 15.

Contact

Prof. Giulio Cerullo
Department of Physics, Politecnico Milano

https://www.fisi.polimi.it/en/people/cerullo