

Senior Research Associate Position in Experimental Molecular Biophysics

Senior research associate position in experimental molecular biophysics is available in the group of Victor Muñoz at the National Biotechnology Center, Madrid, Spain, to work on a research project funded by the ERC Advanced Grant MOLRHEOSTAT (for more information about the group see <http://tmg.cnb.csic.es/>). This project aims at studying the biological roles of molecular rheostats (protein modules that fold-unfold following a downhill mechanism) in controlling protein-protein interaction networks and protein binding and sliding over DNA with a combination of protein engineering, solution NMR, laser spectroscopy, single-molecule methods (SM fluorescence spectroscopy and AFM) and high performance computer simulations.

Interested candidates must have a Ph.D. degree in a field relevant to the research area of the project and accredited expertise in laser spectroscopy-optics-single molecule fluorescence spectroscopy and their application to proteins and/or nucleic acids. Experience and publication track record in time-resolved spectroscopy, lasers and photonics, and/or single-molecule spectroscopy is required. Additional experience in instrument design and development, optics and electronics, implementation of data acquisition protocols, and complex kinetic data analysis is highly desired.

This position is for a highly motivated researcher with the capacity to work in a team and actively collaborate with other group members with different expertise while maintaining scientific independence and leadership. The successful candidate will lead the laser spectroscopy and single-molecule efforts within MOLRHEOSTAT, being in charge of carrying out his/her own research within this project, maintain and manage our existing custom made time-resolved instruments (fluorescence and infrared nanosecond laser induced temperature jump instruments and single-molecule confocal fluorescence microscope), and building a basic TIRF single-molecule fluorescence microscope. The position is offered for two years, starting immediately or upon mutual agreement, and with the possibility of being renewed further up to completion of the project (May 2018). Applications, including a letter of motivation and future research interests, a CV and list of publications, and contact information for two references, should be directed by email to Victor Muñoz (vmunoz@cnb.csic.es).

Spanish National Biotechnology Centre

