PhD position in hyperpolarized NMR of biomolecules

A three-year PhD thesis funded by the Horizon2020 initiative of the EU is available at the biological chemistry department of the university Vienna.

The NMR / DNP group of the university Vienna is looking for a highly motivated student to carry out a PhD thesis project centered around novel (hyperpolarization) tools based on NMR spectroscopy for the characterization of protein and DNA interactions.

Our lab is working on combining dissolution dynamic nuclear polarization (DDNP), a technique to boost signal intensities in NMR spectra, with time-resolved detection of biomolecular NMR spectra on milliseconds to minutes time-scales. Our lab is equipped with 7 state-of-the-art NMR devices and integrated in a fully equipped biochemistry facility.

The project is centered around the interactions of intrinsically disordered proteins with proto-oncogenic factors that play a role in the development of breast cancer and aims at development of time-resolved models that describe the protein-protein binding events at an atomistic level to obtain a better understanding of the biological function of these interactions.

The interdisciplinary PhD project combines biochemical and biophysical research with instrumentalational and methodological developments of the NMR and DDNP technology. The candidate should therefore ideally have a biochemical orientation and an interest in NMR methodology.

The successful candidate holds a relevant degree in physics, chemistry, molecular biology, biochemistry or a similar field.

The University of Vienna aims at increasing the employment of women in both managing and academic positions and therefore invites applications from qualified female candidates.

If you are interested in this project please send a CV, a letter of motivation and two references to dennis.kurzbach@univie.ac.at.

The university of Vienna offers

- a dynamic research location with well-established research funding provisions
- attractive working conditions in a city with a high quality of life
- comprehensive advice and support in relation to finding an accommodation, change of schools and dual career
- a wide range of support services offered by central service institutions