5 Year Engineer Position
Structural Biology Institute
Grenoble (France)

In the context of a project funded by European Research Council, a 5-year CNRS Engineer position is available in Grenoble, France. The successful applicant will work within a team of staff researchers, engineers, post-docs and PhD students studying the Folding & Mechanisms of Protein Quality Control (PQC) Machineries using real-time NMR spectroscopy. Our laboratory uses state of the art of NMR spectroscopy, isotope labeling and automated molecular biology techniques – all developed locally by the team – to characterize the off-equilibrium dynamics of supra-molecular assemblies at atomic resolution.

The engineer will be in charge of the day-to-day operation and maintenance of a wetlab dedicated to the production of large protein assemblies specifically labelled with stable isotopes for NMR studies. They will use high-throughput strategies and state of the art of isotopic labelling protocols, developed and patented by the team, for the production and screening of libraries of mutant machineries for NMR studies. The position will involve the supervision of students conducting large-scale expression (>10mg), isotopic labelling, and purification of high molecular weight protein assemblies for NMR studies. The successful candidate will also participate in a strong collaboration with groups at the IBS who specialize in the biology of hyperthermophilic supramolecular assemblies, automated molecular biology, X-ray crystallography, small angle neutron scattering and electron microscopy.

The research will be conducted at Institut de Biologie Structurale (IBS) in Grenoble, a French research unit founded in 1992 and currently employing a total of 220 people. Research at the IBS is focused on the structure-function relationship of biomolecules, with particular emphasis on problems related to human health. The IBS possesses high-performance, internationally-competitive facilities in physical and chemical biology for studying the structural and functional organization of proteins. IBS is located in Grenoble, a pleasant city situated in the French Alps, within the heart of one of Europe’s most vibrant structural biology communities. The Institute is a founding member of the recently initiated Partnership for Structural Biology (PSB) composed of a number of prestigious pan-European institutes located in Grenoble, including the ESRF, the European synchrotron X-ray source; the ILL, a European centre for neutron scattering; and the Grenoble Outstation of the EMBL. The PSB combines expertise in state-of-the-art molecular biology with the investigatory power of synchrotron radiation, neutron scattering, electronic microscopy and nuclear magnetic resonance spectroscopy.

We are seeking a highly motivated candidate, with a good educational background and formal training in molecular biology and/or biochemistry (at Master level or above) and significant experience in large-scale production of recombinant protein samples for structural biology. An ability to learn new technologies, independence and communication skills are expected. Prior experience in isotope labelling of proteins for structural studies would be highly appreciated but is not mandatory. A competitive salary (based on qualifications and previous research experience) is offered which includes health insurance, retirement plan, and language training allowance. Interested candidates should forward a Curriculum Vitae in English and electronic addresses of potential referees via e-mail to: diff-jobs-nmr@listes.ibs.fr

Selected publications of the team :