



Research Project Manager Position

Application of Advanced NMR Approaches for the Investigation of Dynamics Molecular Machines

Contract duration: up to 5 years

Funded by European Research Agency

Institut de Biologie Structurale – CNRS - Grenoble (FR)

The NMR of Large Assemblies group (NMRLA) is developing advanced in vivo and in vitro labelling methods together with optimized NMR spectroscopy to expand the application of NMR in biology. We integrate these innovative methods with other biophysical approaches to study the folding, structure, dynamics, transient interactions, and mechanisms of essential cellular machinery and large chaperones. Using methyl-specific labelling and methyl NMR (CH_3 NMR), we have expanded our investigation of proteins to assemblies of up to 1 MDa and plan to expand beyond that limit under our new ERC-funded project.

The NMRLA group is seeking to expand in order to apply new developed NMR and isotope labelling methods to challenging biological systems. We are hiring a research project manager to set up a dynamic research program to study the structure, dynamics, and mechanisms of large molecular machines, mainly using NMR methods. The selected applicant will benefit from the support of expert biochemists and spectroscopists who are developing innovative NMR approaches to overcome the size limit of NMR. The successful applicant will apply these new approaches to establish his/her own structural biology project, focusing on large protein complexes. He/She will benefit from the support of a Ph.D. student and will be supported by IBS in obtaining a permanent research position, which will allow him/her to progressively set up a new team.

For more information on IBS NMRLA group and our research activities, please visit our website :

<https://urlz.fr/tWJG>

IBS Facilities: The IBS is located on the European Photon and Neutron (EPN) campus alongside its European partners: the European Molecular Biology Laboratory (EMBL), the European Synchrotron Radiation Facility (ESRF), and the Institute Laue-Langevin (ILL). This unique location provides access to cutting-edge equipment for analyzing biological systems at various resolutions. The EPN site and the Grenoble scientific community represent a true hub of integrated structural and dynamic biology. The IBS employs 300 people and provides a lively, international work environment with state-of-the-art nuclear magnetic resonance (NMR) facilities. This facility includes 950-, 850-, 700-, and 600-MHz NMR spectrometers with liquid-state cryoprobes and solid-state technology. The IBS also has imaging facilities, including local access to a Titan Krios cryo-electron microscope. The IBS has dedicated wet-lab facilities for cloning, in vivo and in vitro expression, isotope labeling, and purification of challenging protein complexes.

Grenoble: The capital of the French Alps, Grenoble is a world-renowned scientific hub with a strong international flavor. Situated at the foot of three mountain ranges, it is a pleasant city offering many possibilities for cultural, outdoor, and sporting activities throughout the year. Grenoble is close to the French Riviera, Italy, and Switzerland, and it is served by international and national airports, as well as a high-speed rail network.

Position benefits: The selected candidate will become a CNRS Research Associate. The gross monthly salary ranges from €2991 to €4260 for full-time employment, depending on prior post-doctoral experience. The contract provides cover for health, unemployment, retirement plan and benefits. The initial contract is for three years and may be extended for up to two additional years. The start date is expected to be in winter 2025 or spring 2026 (negotiable). The selected candidate is expected to develop an ambitious research project and will be supported by IBS in obtaining a permanent research position and becoming an independent team leader.

Application: Ideal candidates will have a Ph.D. in biology, biochemistry, biophysics, structural biology, or related field, as well as substantial experience studying large proteins by nuclear magnetic resonance (NMR) and a solid publication record. While previous postdoctoral experience is preferred, applications from young PhD graduates with an excellent publication record will also be considered. Interested candidates should submit a CV, a list of publications, a cover letter, and the names and email addresses of two references. These documents should be emailed to Jérôme Boisbouvier (jerome.boisbouvier@ibs.fr) before October 1st 2025. Shortlisted candidates will be contacted for a visit and interview in fall 2025.