



Postdoctoral Researcher
in Protein NMR (M/F)
CNRS

Mission

The successful candidate will work on the development of innovative isotope labelling methods to push the biological applications of NMR beyond their current limits, and will apply the new methods to the study of large molecular complexes and machines of medical importance, as part of the European ERC advanced grant XXL-NMR project.

Activities

- Development of isotope labelling protocols
- Cell-free expression of proteins and purification for NMR studies
- NMR characterization of large complexes
- Functional studies of large proteins complexes
- Co-supervision of students
- Publications writing
- Taking part in the life of the research group (contributing to logistics, monitoring stocks of reagents, etc.)

Skills

- Candidates must hold a PhD in chemistry, biochemistry or structural biology (or a related discipline) and have experience of protein expression and purification as well as experience or interest in solution NMR spectroscopy.
- Ability to conceptualise, creativity, scientific curiosity, sense of innovation.
- Good communication (written/oral) and teaching skills.
- Team spirit.
- C2 level English (written/oral)

Constraints and risks

No particular risk.

All research-related exchanges will be in English. To facilitate communication with IBS administrative services and integration in France, the selected candidate will have the opportunity to take French courses.

Working context

Located on the Grenoble science campus (ESRF/ILL/EMBL/IBS), the structural biology institute (IBS) is a leading national and international research institute in the field of integrated structural biology. The IBS is a research center, a technical infrastructure, a host site and a scientific training center. Its mission is to develop research in structural biology, a crucial field for understanding fundamental biological mechanisms. It is supported by 12 state-of-the-art facilities, including high field NMR facility equipped with 950, 850, 700 and 600 MHz NMR spectrometers, wet-lab facilities dedicated to in vivo and in vitro protein expression and purification, and state-of-the-art imaging and biophysics facilities for sample characterization.

joint research unit (CEA-CNRS-UGA), the IBS is made up of 21 research groups, each offering a multidisciplinary approach at the frontiers of biology, physics and chemistry, in line with the IBS's 3 main lines of research. Nearly 300 people work at IBS as researchers, post-docs, PhD students, engineers and technicians in a multicultural and international environment.

The postdoctoral researcher recruited will join the *NMR of Large Assemblies* group, which develops and applies advanced isotope labelling and NMR methods to study the structure, dynamics and mechanisms of large protein complexes. The group headed by Dr. Boisbouvier comprises a research director, three engineers, two post-docs and two PhD students.

Further information

The post can be extended for up to five years and is funded by the European Research Council under the European ERC advanced grant XXL-NMR programme. This post is ideal for young post-docs who wish to gradually develop independent research and apply for a permanent research post in France.

The indicated experience is 1 to 4 years, but the profile is also open to candidates with more experience (up to 10 years).

General information

Type of contract: fixed-term

Section CN: 16 or 20

Duration of the contract: 30 months (renewable up to 60 months)

Expected recruitment date: 01/06/2024

Work quota: Full time

Desired grade level: Applicant should hold a PhD in chemistry, biochemistry or structural biology (or a related discipline)

Desired experience: 0 to 7 years

Gross Monthly Salary: between 2905 € et 4 260 € (according to experience)

Submission of applications: <https://emploi.cnrs.fr/Offres/CDD/UMR5075-VALLAN-019/Default.aspx>