



- [Home](#)
- [Equipment](#)
- [NMR Access](#)
- [Intranet](#)
- [Contact](#)
  
- [ [English](#) | [Español](#) ]
- 
- 
- 
- LRB Laboratorio de RMN de Barcelona - CCiTUB - Universidad de Barcelona



Laboratorio de RMN de la Universitat de Barcelona (LRB)

C/Baldri i Reixac 10-12 08028 Barcelona. España

Latitude 41.383632° ; Longitude 2.118282°

+34 934034464

lrb@rmn.ub.edu

*Director de la ICTS:*

Dr. José Ramón Seoane Trigo

*Director Técnico:*

Dr. Miquel Pons Valles

## Barcelona University NMR laboratory LRB



The **LRB** is part of [Scientific and Technologic Centers of the University of Barcelona \(CCiTUB\)](#) and is formed by high field NMR instruments and scientific and technical staff of support. Since 2000 it is located in a 722 m<sup>2</sup> space in the [Barcelona Science Park](#) Cluster building, specially designed to house high field NMR spectrometers. Currently the LRB offers access to an 800 MHz, two 600 MHz and three 500 MHz NMR instruments as well as to a Dynamic Nuclear Polarization (DNP) instrument attached to one of the 500 MHz spectrometers. The 800 MHz and one of the 600 MHz instruments are equipped with cryoprobes. One of the 500 MHz NMR spectrometer is equipped with a HRMAS probe specially adapted to study biological tissues or gel phase samples. The 800 MHz and Dynamic Nuclear Polarization instruments and the specially designed low magnetizable and highly stable laboratory environment are the main singularities of the facility. The availability of a range of instruments of different fields in the same location offers additional capabilities.

Its location at the PCB building offers an exceptionally rich scientific environment, especially concerning to Pharmaceutical industry and Biomedical research. The Barcelona Portal of Knowledge is a 227 Ha area housing the campus of two universities, 13 research institutes and two technology parks housing 80 companies.

The facility is strongly linked to internationally recognized NMR group that ensure that the facility remains at the leading edge of the technique and is available to offer advice to non-expert users. A team of specialists as the dedicated staff of the facility that takes care of the instruments and promoting education in the area of NMR. The facility personnel guides the users according to their need, ranging from experts wishing to implement new experiments to non-expert users requiring help in experimental design and interpretation to take full advantage of the NMR facilities.

Typical users come from a wide diversity of areas, including:

- Biomolecule structure.
- Interactions (Pharmaceutical research).
- Functional Biology.
- Drug delivery.
- Structural identification In Organic and Inorganic Chemistry.
- Food Science and Technology.
- New methodologies: NMR applications development.

### Goals

Make widely available enabling NMR technology for structural research in the interface between chemistry and biology by providing state of the art instrumentation and expertise.

Provide researchers from centers of public and private research, access to benefits and more advanced techniques in the field of NMR, not only in the instrumental aspects, but also in the field of training and scientific collaboration.

## Keywords

Nuclear Magnetic Resonance, Protein structure determination, Drug discovery, High Throughput ligand screening, NMR Methodological studies, Dynamic nuclear polarization experiments, NMR studies in small molecule, Food Science and Technology.



- *Name:* Laboratorio de Resonancia Magnética Nuclear de la Universitat de Barcelona (LRB)
- *Address:* C/Baldiri i Reixac 10-12 08028 Barcelona. España
- Latitude 41.383632° ; Longitude 2.118282°
- +34 93 403 44 64
- +34 93 403 44 65
- lrb@rmn.ub.edu
- *Director de la ICTS:* Dr. José Ramón Seoane Trigo
- *Director Técnico:* Dr. Miquel Pons Valles
- *Web:* <http://www.rmn.ub.edu/lrb>

[Laboratorio de RMN de Barcelona](#)

[Centres Científics i Tecnològics \(CCiTUB\)](#) / [Universitat de Barcelona](#)

C/Baldiri i Reixac 10-12 08028 Barcelona. España

[Edifici Cluster del Parc Científic de Barcelona](#)

+34 93 403 44 64

+34 93 403 44 65

lrb@rmn.ub.edu