

## EPR spectroscopy: metal centres and radicals for the study of proteins

15<sup>th</sup>-17<sup>th</sup> May 2023

Electron Paramagnetic Resonance Facility in Life Sciences at the Chemistry-Biology interface,  
Marseille, France (EPR-MRS)

EPR spectroscopy is the technique of choice to study paramagnetic species in proteins. These paramagnetic species can be either endogenous (such as metals cofactors or radicals) or grafted to the protein of interest. This spectroscopy offers a wide range of applications including studies of enzyme mechanism, electron transfers, protein dynamics, structural transitions, and protein-protein interactions.

This short practical course is dedicated to beginners in EPR spectroscopy. It focuses on the use of different EPR spectrometers: from the classical ones (continuous wave, cw-EPR) to the most advanced ones (pulsed EPR, ENDOR, ELDOR).

During the course we will give lectures on the first half day to introduce the basics of EPR and the most common applications in the field of molecular biophysics. Then each attendee will perform 3 different hands-on measurements in small groups (3 to 4 students).

Best practices for EPR measurements including instrumental calibration, choice of the optimal parameters, high quality EPR spectra recording, and quantification will be reviewed. Some details about the analysis of EPR spectra will also be given.

### *Other details:*

Registration to the course is required. Participants will receive financial support to attend the course, including a contribution to their travel, lunches, dinners, and 2 nights of accommodation with breakfast (accommodation will be booked by the organizers). Successful applicants will be informed of the eligible expenses when they receive a formal acceptance letter.

Visit the website to find out more and to apply to take part in the course.

<https://www.mosbri.eu/training/end-user-short-courses/esc6/>