

12th CERMAX practical course on basic NMR

Oeiras, 8th – 12th July, 2019

Program

8th of July

14.00 – Introduction to NMR spectroscopy. **PL (Room 3.02)**
15.30 – *Break*
15.50 – Instrumental aspects of the spectrometer /Rules for spectrometer use. **HM (Room 3.02)**
16.30 – Spectrometer Guided tour and sample preparation **HM (NMR Lab)**

9th of July

9.30 – 1D Acquisition and processing **PL (Room 3.02)**
10.15– Introduction to 2D NMR spectroscopy (Homonuclear correlation) **PL (Room 3.02)**
11.00 – *Break*
11.30 – The Nuclear Overhauser Effect **ROL (Room 3.02)**
12.30 – *Lunch break*
14.00 – Heteronuclear correlation for small molecule **PL (Room 3.02)**
15.00 – Protein assignment and structure **PL (Room 3.02)**

10th of July

9.30 – The paramagnetic effect and metalloproteins **ROL (Room 3.02)**
10.15 – Residual Dipolar Couplings and disordered proteins **TC (Room 3.02)**
11.00 – *Break*
11.15 – Practical session I **PL, HM, LG, TC**
Acquisition (1D, presat, p90, APT) Processing and analyzing 1D **(NMR Spect and room 3.02)**
13.30 – *Lunch break*
14.30 – Practical sessions I (cont) **PL, HM, LG, TC**

11th of July

9.30 – NMR and Metabolomics/ Quantitative NMR **LG (Room 3.02)**
11.00 – *Break*
11.15 – Practical session II **PL, HM, LG, TC**
Acquisition (COSY, HSQC) Processing and analyzing 2D **(NMR Spect and room 3.02)**
13.30 – *Lunch break*
14.30 – Practical sessions II (cont) **PL, HM, LG, TC**

12th of July

9.30 – Assignment strategies in small molecules (tutorial and exercises) **PL (Room 3.02)**
10.45 – *Break*
11.15 – Assignment strategies (cont) **PL (Room 3.02)**
13.00 – *Lunch break*
14.00 – Practical session III **PL, HM**
Acquisition exercises **(NMR Spect and WS)**

Faculty:

Luís Gafeira
Helena Matias
Pedro Lamosa
Ricardo Louro
Tiago Cordeiro