

Course for Ph.D. students 40th cycle (Nov 2024 – Oct 2027)

**Pharmacokinetic Optimization in Drug Research:
Physico-chemical properties and in vitro ADME
(1 ECTS)**

Prof. Federica Vacondio

UNIVERSITY OF PARMA

Course language: English

Approximative scheduling: February 2025

The exact date and time will be announced by e-mail and on the website in the page "Active courses" for each session.

To attend the course please contact: federica.vacondio@unipr.it

Course description

The course will be divided into two different parts: one focused on the experimental determination and data interpretation on physicochemical properties (pKa, lipophilicity, solubility,..), the other focused on *in vitro* ADME properties (metabolic stability and metabolite identification workflow, permeability, plasma and tissue protein binding, drug transporters, ..) which will be critically evaluated as factors and predictors of pharmacokinetic behavior. Case studies will be presented to show how the study of structure-property relationships could be successfully applied to select the most promising candidates to further development.