

Course for Ph.D. students

39th cycle (Nov 2023 – Oct 2026)

Pharmacokinetic optimization in drug research: physico-chemical properties and in vitro ADME.
(1 ECTS)

Prof. Federica Vacondio
University of Parma

Course language: English

Friday, 23 February 2024 (14:30-17:30)
Friday, 1 March 2024 (14:30-17:30)

To attend the course please send an e-mail to: federica.vacondio@unipr.it

Course description

During the course we will explore the role of physico-chemical and in vitro ADME profiling in drug discovery and development pipelines. We will focus on the experimental models and *in silico* approaches for the determination of physico-chemical properties (pKa, lipophilicity, solubility, hydrogen-bonding) and in vitro ADME (metabolic stability, metabolic ID, plasma and tissue protein binding, permeability) which could impact on the *in vivo* behavior of new chemical entities. We will present case studies which will illustrate how evaluation of structure-property relationships can be successfully employed for lead optimization and to prioritize candidates for *in vivo* studies.