

6th Hands-on Computational Enzyme Design

2-5 June 2025, Brno, CZECHIA



Introduction

Computational tools can dramatically accelerate the discovery and design of improved enzymes. This course will introduce a number of user-friendly **software tools** for predicting and redesigning enzyme properties, and will provide intensive **practical training**. The developers of those tools will run this interactive course. In the end the participants will be able to use the tools **independently**. Prior experience in molecular modelling or bioinformatics is not required and experimentalists are welcome.



Registration fees

	Academia	Industry
Early (31.3.2025)	1 350 €	2 450 €
Late (30.4.2025)	1 550 €	2 650 €

Fees include: course materials, welcome reception, all lunches and coffee breaks, gala dinner, certificate, guided city tour, visit to Mendel museum, and 21% VAT.

★ Limited number of participants ★



Program

Main topics

- Mining of novel enzymes
- Design of protein stability and solubility
- Design of enzyme activity and specificity
- Machine learning in biochemistry

Software and databases covered

- EnzymeMiner
- Hotspot Wizard
- FireProt, FireProt^{ASR}, FireProt^{DB}
- Caver, Caver Web, CaverDock,
- LoopGrafter
- SoluProt, SoluProtMut^{DB}, AggreProt
- AlphaFold, ProteinMPNN, RF Diffusion

Workshop format

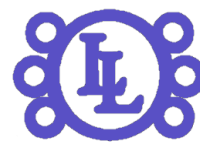
- Theoretical lectures
- Hands-on practical sessions
- User-personalized sessions



Organizers

- Loschmidt Laboratories, RECETOX, Faculty of Science, Masaryk University
- Enantis Ltd., FNUSA-ICRC
- ELIXIR.CZ, COST-COZYME, CLARA

Contact: LL.academy.general@gmail.com



Register now!

<https://loschmidt.chemi.muni.cz/academy>