

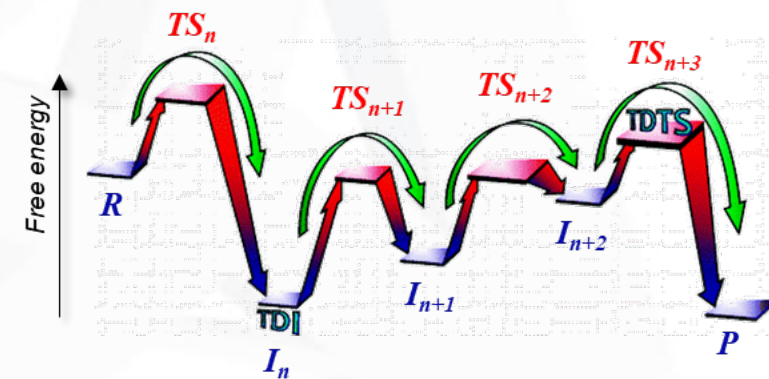
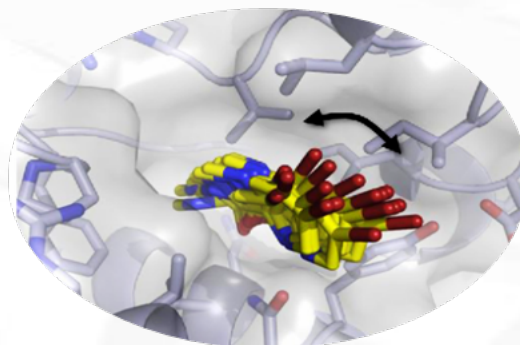
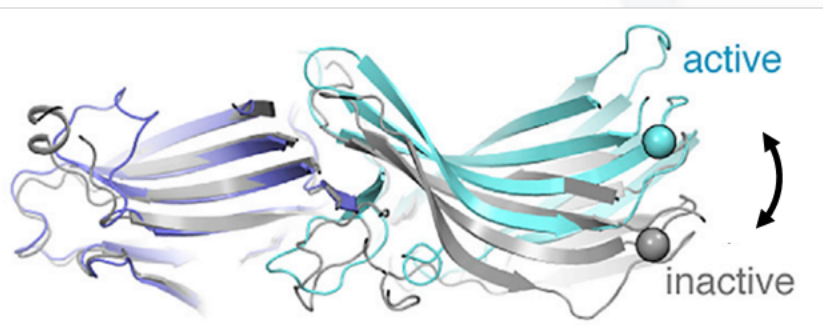
Luca Bertini – Federica Arrigoni – Giuseppe Zampella – Luca De Gioia
Laboratorio 4065 @ BTBS (luca.bertini@unimib.it)

Progetti di Tesi 2023/2024

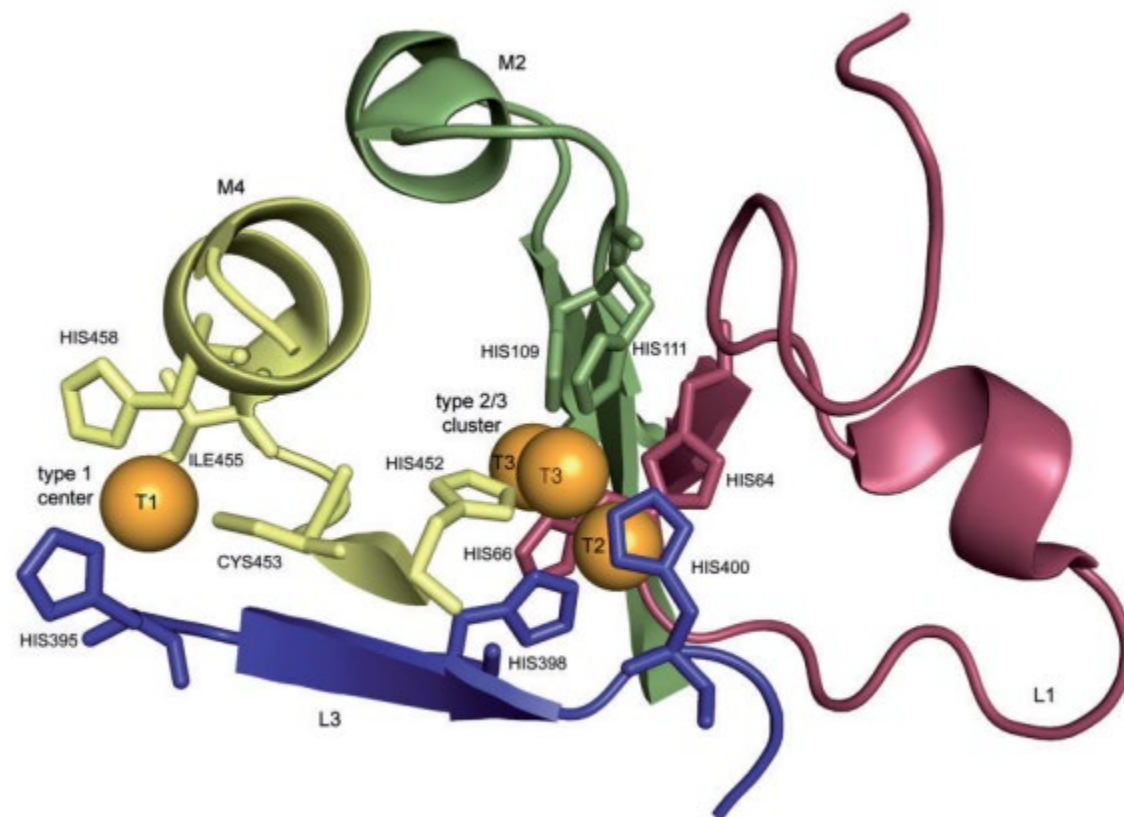
Modeling computazione e predizione delle proprietà di siti catalitici di metallo-enzimi

- Laccasi
- CYP152
- Idrogenasi

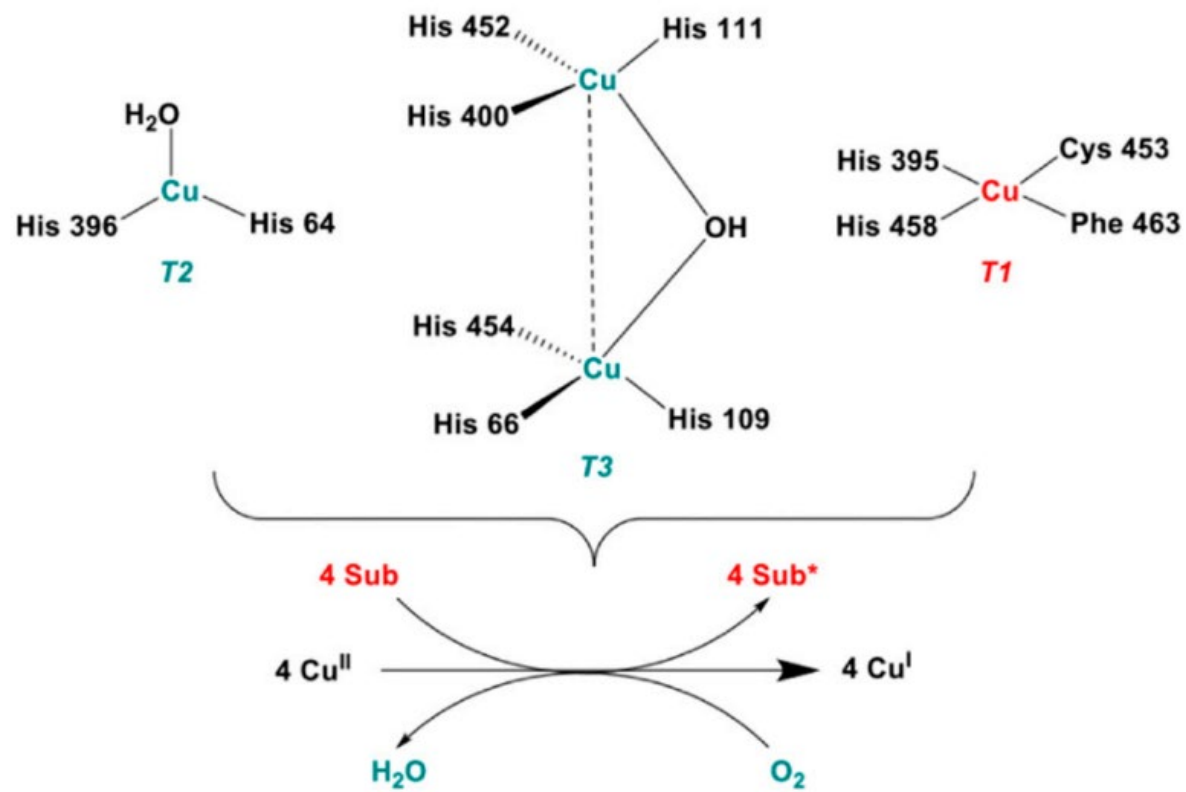
Modelling classico e quantistico



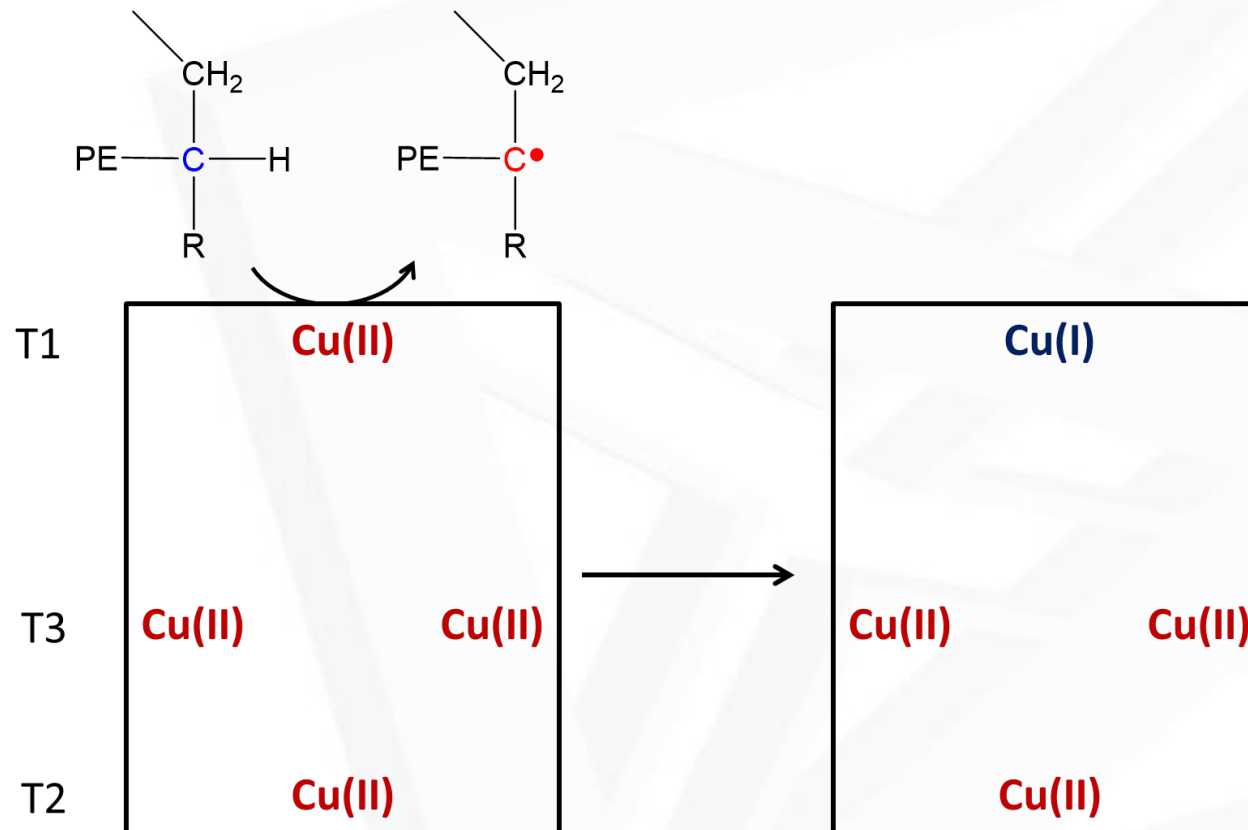
Laccasi batteriche e bioremediation



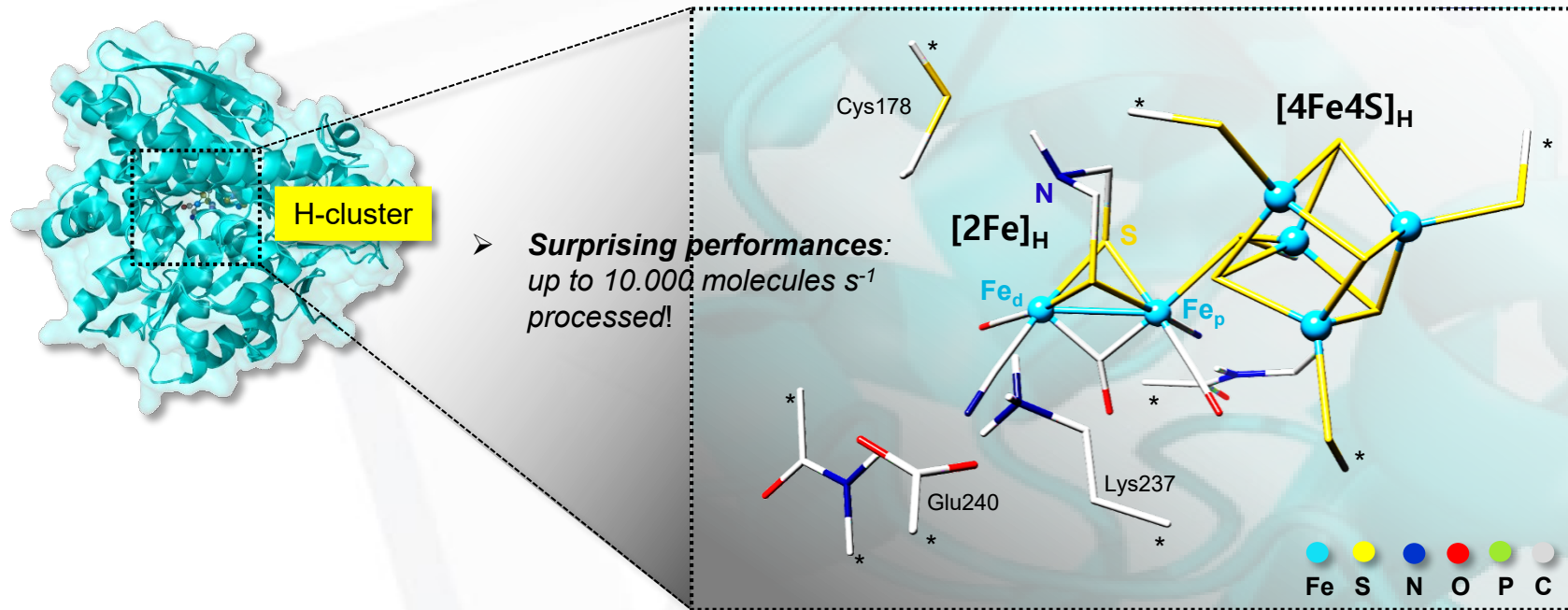
Laccasi batteriche e bioremediation



Laccasi batteriche e bioremediation

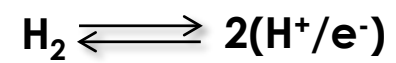


Idrogenasi



Idrogenasi

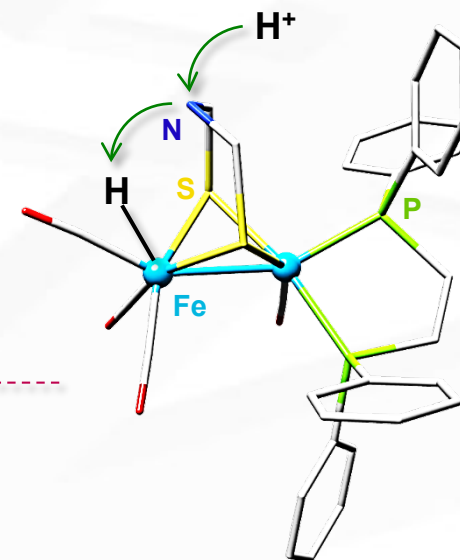
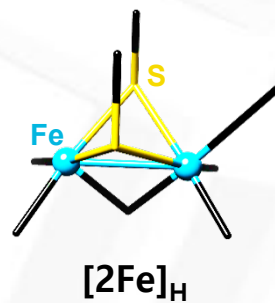
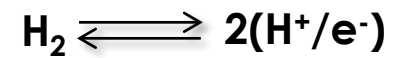
[FeFe]-HYDROGENASES



ACTIVE SITE

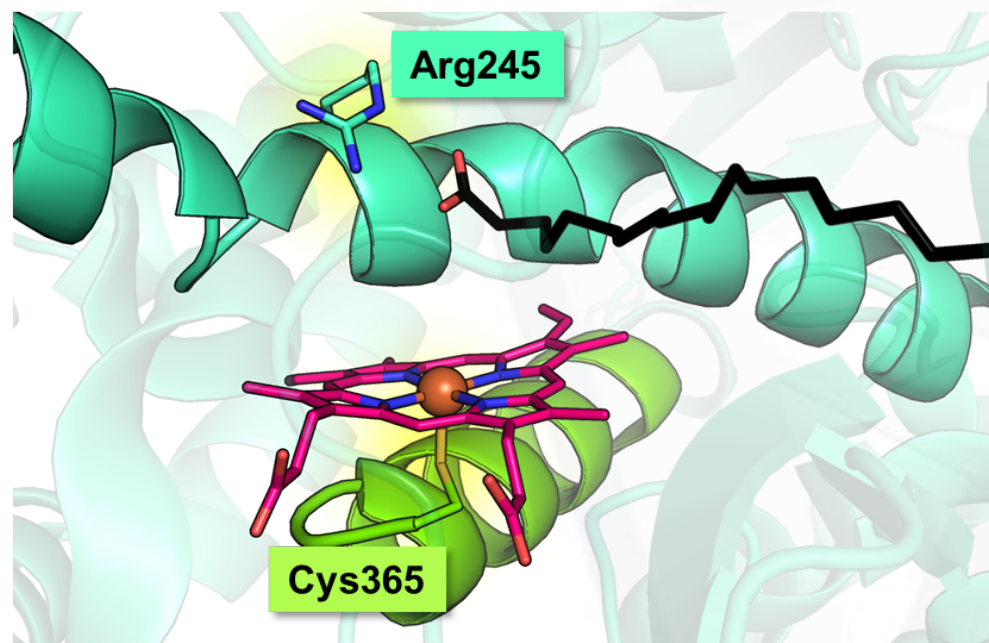
REACTIVE CORE

BIOMIMICS: Fe₂S₂ SYSTEMS

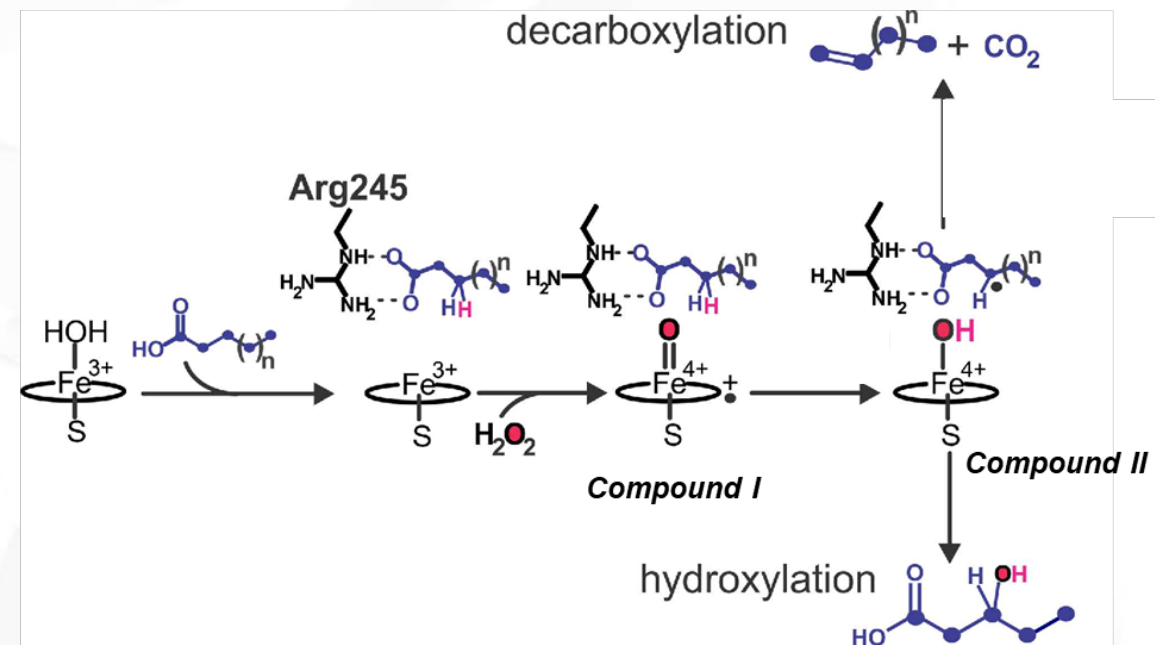


➤ **Lower performances**
than the natural
system in the H₂
production direction

CYP152



PDB ID: 4L40



Hsieh, C.H.; Huang, X. et al. *Biochemistry* **2017**, 56, 3347
 Blecher, J.; McLean, K.J. et al. *J. Biol. Chem.* **2014**, 289, 6535