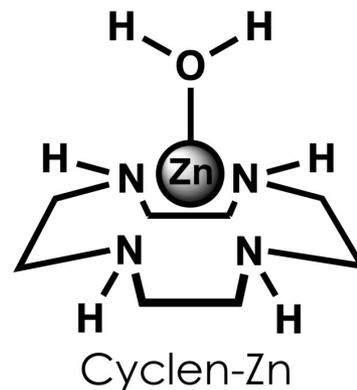
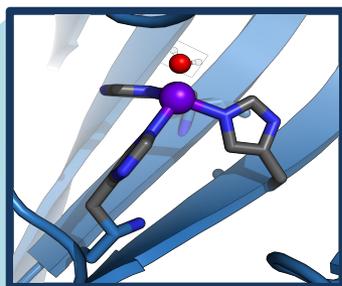
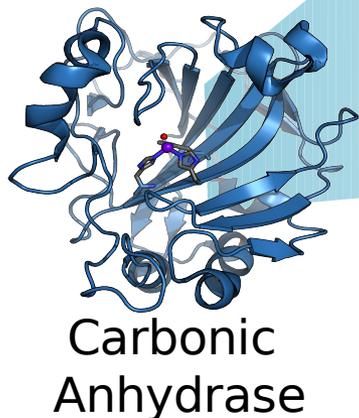


Small-molecule bio-mimetic catalysts for carbon capture

Lawrence Livermore National Laboratory, Babcock & Wilcox Co.,
and the University of Illinois at Urbana-Champaign

⇒ Integrated, interdisciplinary development
process from molecular design to pilot
scale testing



Objectives:

- Harness the features of a natural enzyme to catalyze the hydrolysis of CO₂ without enzyme drawbacks
- Achieve capture with fast kinetics and lower binding energy
- Optimize catalyst placement at the gas-liquid interface
- Enable innovative system designs