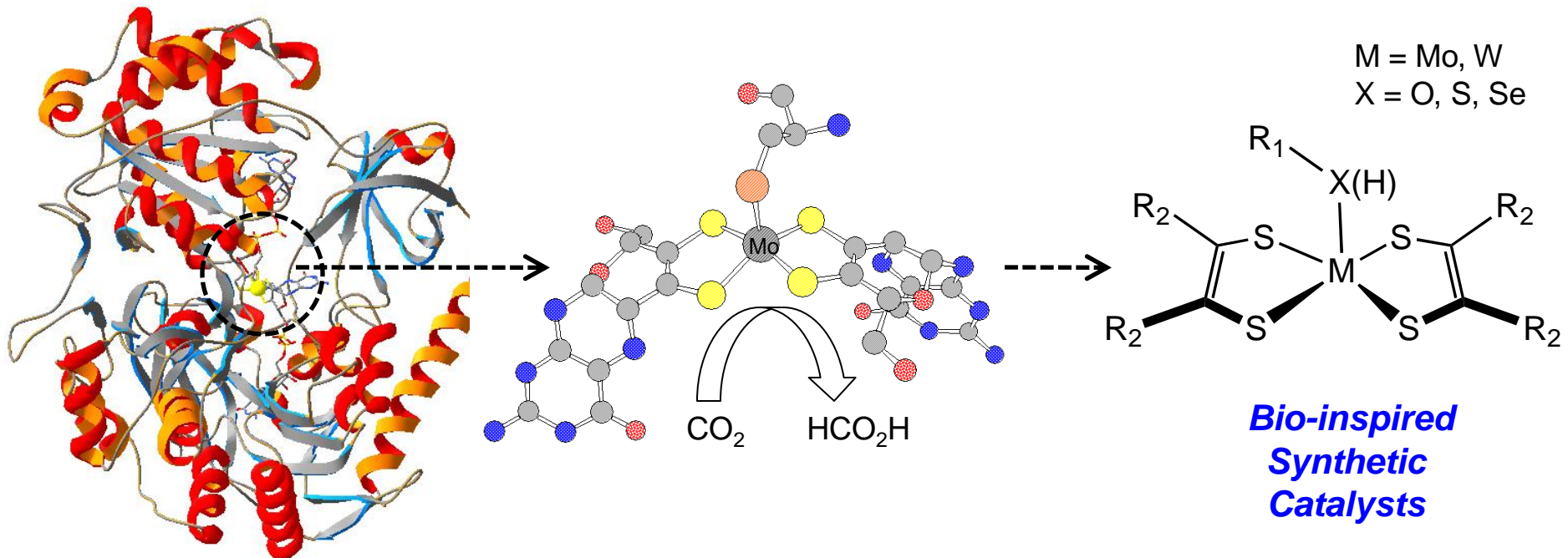


# Bio-inspired Catalysts for CO<sub>2</sub> Reconversion

*Approach:* Apply the known enzyme structures & principles to build synthetic catalysts for CO<sub>2</sub> conversion

## Example: Biomimetic catalysts for conversion of CO<sub>2</sub> to formic acid



### Step 1

Find an enzyme of interest (e.g., formate dehydrogenase for CO<sub>2</sub> conversion)

### Step 2

Focus on the reaction site and learn how the enzyme converts CO<sub>2</sub> to formic acid

### Step 3

Synthesize catalysts that mimic the enzyme's CO<sub>2</sub> reduction chemistry