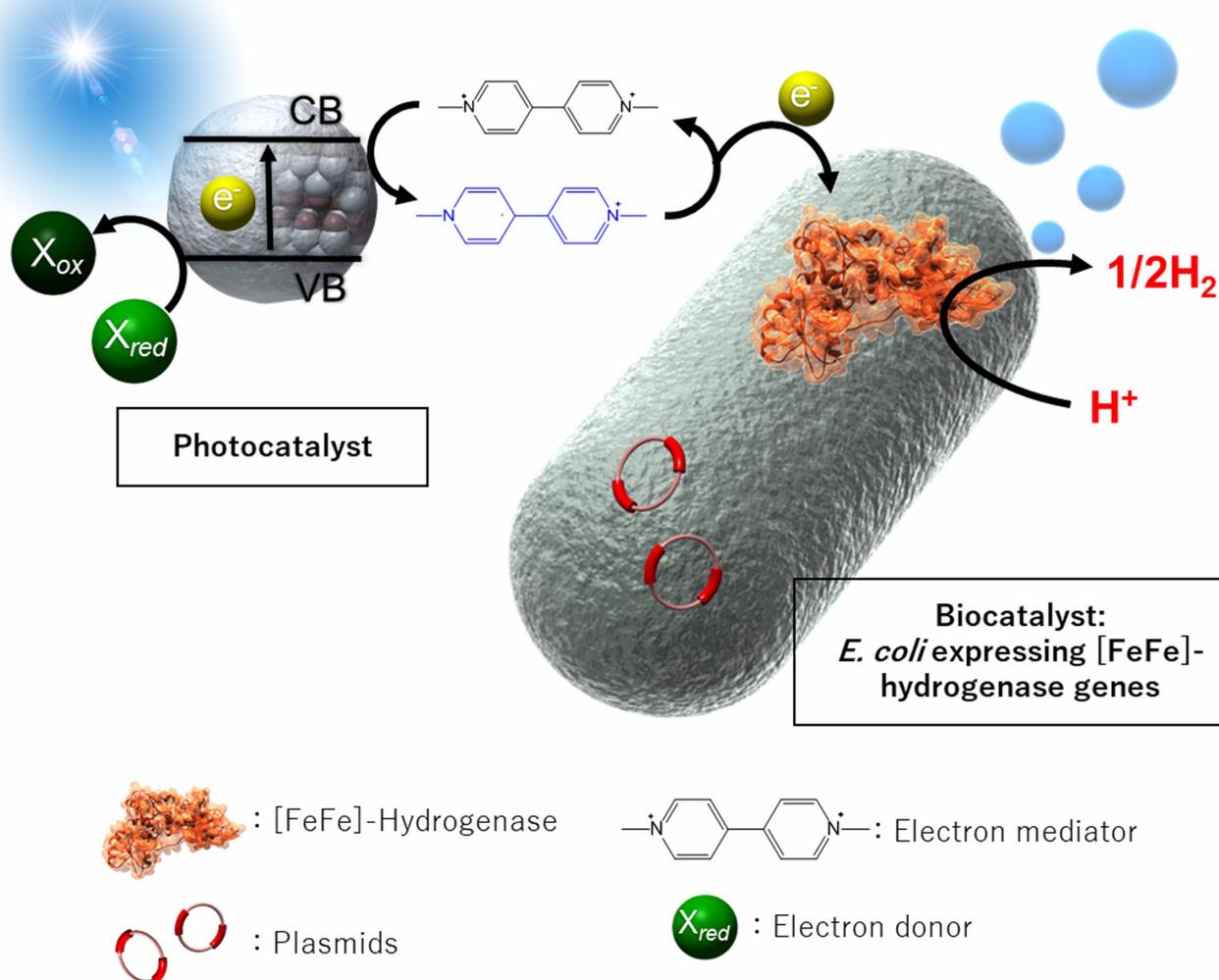


Research on elucidation of catalytic mechanisms, enhancement, and application of metalloenzymes

Yuki HONDA [Chemistry Course]

Hybrid reaction system of Hydrogen-forming metalloenzyme + Photocatalyst



Biocatalytic reaction based of hydrogen-forming biocatalyst and photocatalyst.

Biocatalytic system for useful compound production is expected to realize the development of sustainable society since biocatalysts, such as enzymes and microorganisms, can generally proceed reactions under mild conditions. For further exploitation of biocatalyst functions, we should reveal how biocatalysts realize their excellent catalytic functions. I dedicate efforts to elucidate the catalytic mechanisms of biocatalysts (metalloenzymes) and to develop the enhanced biocatalysts and the new biocatalytic systems for useful compounds.

Keywords : Biocatalyst, biochemistry, enzyme, metalloenzyme