Electrocatalytic Water Oxidation by Manganese Pyridinophane Complexes
Jeremy M. Smith, New Mexico State University

Transformation of a $\text{H}_2\text{O}_2$ disproportionation catalyst into an $\text{H}_2\text{O}$ oxidation catalyst

Similar modification of other $\text{H}_2\text{O}_2$ disproportionation catalysts may lead to new water oxidation catalysts.

Electrocatalytic $\text{H}_2\text{O}$ reduction

- Aqueous phase electrocatalytic water reduction by catalysts containing inexpensive and abundant elements.
- N-H groups are critical to $\text{H}_2\text{O}$ reduction catalysis.