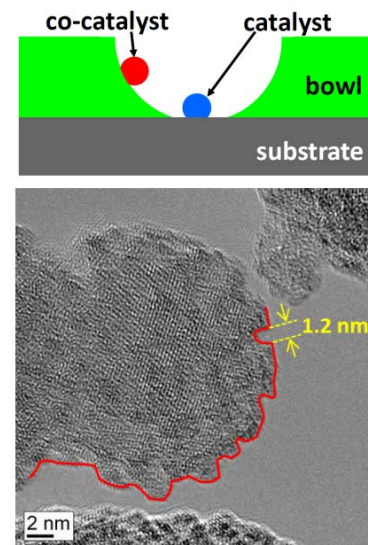


Mission Statement: IACT is addressing the key catalytic conversions that could improve the efficiency of producing fuels from biomass. This Center is focusing on advancing the science of catalysis for the efficient conversion of energy resources into usable forms. IACT's goal is to find ways to achieve control and efficiency of chemical conversions comparable to those in Nature.

Atomically-precise metal catalysts located in nanobowl structures (at right) can be used to both isolate and stabilize nanostructured catalysts under severe bioprocessing conditions.



RESEARCH PLAN AND DIRECTIONS

- Acquire fundamental understanding of catalytic processes for the selective removal of oxygen from biomass.
- Develop synthetic control of catalyst structures at the atomic and nanometer length scale. Synthesis of three-dimensional nanostructured catalysts
- Understand how catalyst structure evolves in a reactive environment