

ICReDD International Seminar Series



Dr. Christina W. Li

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Tuning Active Sites in Catalytic Nanomaterials through Colloidal Synthesis

Place: Hokkaido University, ICReDD Building 4F,
ICReDD Hall A

Time: Thursday, 9th May 2024
14:00-16:00

Abstract: In our group, we develop nanomaterial surface functionalization strategies in order to precisely tune both the ensemble geometry and redox properties of active site metal atoms. These strategies include 1) the adsorption of inorganic ligands on colloidal nanoparticle surfaces in order to synthesize monolayer and sub-monolayer core-shell catalysts, 2) control of bimetallic surface ensemble geometry to catalyze diastereoselective organic reactions, and 3) tuning the metal-sulfur coordination environment of single atoms supported on metal chalcogenide nanosheets for electrochemical catalysis. I will also share my career path and discuss the importance of mentorship and empowerment in recruiting and retaining women in chemistry.

