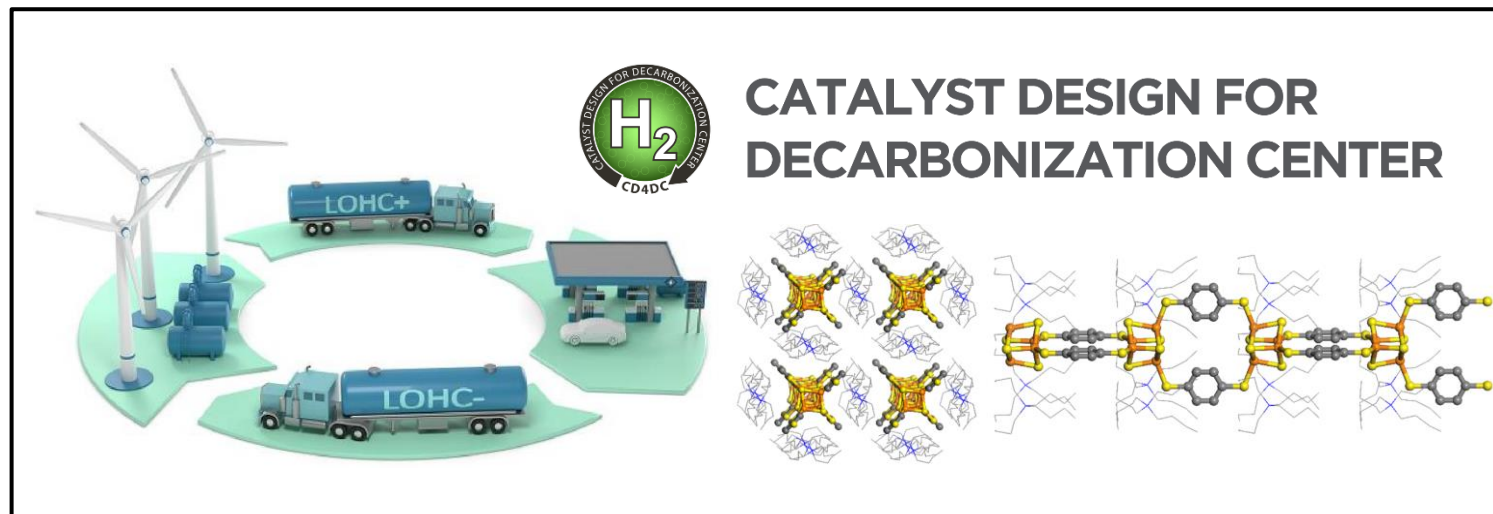


Catalyst Design for Decarbonization Center (CD4DC)

Laura Gagliardi (University of Chicago); Class: 2022-2026

MISSION: To discover and develop reticular metal-organic framework materials as catalysts for the decarbonization energy transition and to optimize the key catalytic reactions involved.

<https://cd4dc.center.uchicago.edu/>



RESEARCH PLAN

CD4DC will address the essential need for alternate forms of H₂ transport and storage, via the development of methanol and liquid organic hydrogen carriers (LOHCs). CD4DC will discover new, low temperature, high activity catalysts for H₂ addition and removal, and C-C bond formation. We will link synthesis of catalytic materials, catalytic transformations and the kinetic description of the transformations, characterization of catalysts and organic species, computational modeling and active learning.



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