

Students' Annual Webinar

CO₂ activation on Au surfaces

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In the field of CO₂ reduction, it has been found that controlling the surface structure of electrocatalysts can help improve product (CO) generation efficiency. In this talk, I will be focussing on physical adsorption of CO₂ (a key step before CO₂ activation) at various bulk pressures on Au single crystalline facets. Probing along the same lines, since, atomic arrangement of surfaces markedly affect the selectivity and activity of CO₂ reduction process, we examine how grain boundary - a 2D bulk defect affects the same. Since, determining the atomic structure of the interface is one of the most significant tasks in materials research, in this talk, I will also describe how we generate the grain boundary defect structures libraries for future work.

Wednesday, May 25th 2022

3:00 PM