

## 学術講演会、



## Dr. Ailong Li

University of Science and Technology of China (USTC), Hefei, China

## Lattice Oxygen Stability as a Descriptor for Designing Stable OER Catalyst in Acid

日時:令和7年3月6日(木) 13:00~14:30

場所:化学系講義棟·第四講義室(学內建物H-23,1F)

To rationally design a catalyst, we need to understand which intrinsic structural characteristics, or descriptors, control catalysis. This is a more effective way to develop catalysts rather than a trial-and-error approach. However, as for now, there is no universal descriptor for stable catalysts. To achieve this, we combined catalysis research to obtain the stability performance, material structure analysis with synchrotron technology, and thermodynamic analysis with DFT scientist. Here, I will show our efforts toward finding the descriptors for designing stable OER catalyst in Acid (*Angew*, 2019; *Nature Catalysis*, 2022; *Nature Catalysis*, 2024; *Science* 2024, etc.).

Li博士は理研,中村龍平教授が率いる生体機能触媒研究チームの研究員として2017~2025年まで勤務し,今年2月からUSTCの教授へ昇進し,非常に活躍している若手研究者です.この度の来仙の機会に講演会を企画しました.

連絡先:東北大学・理学研究科・化学専攻 叶 深(6567)