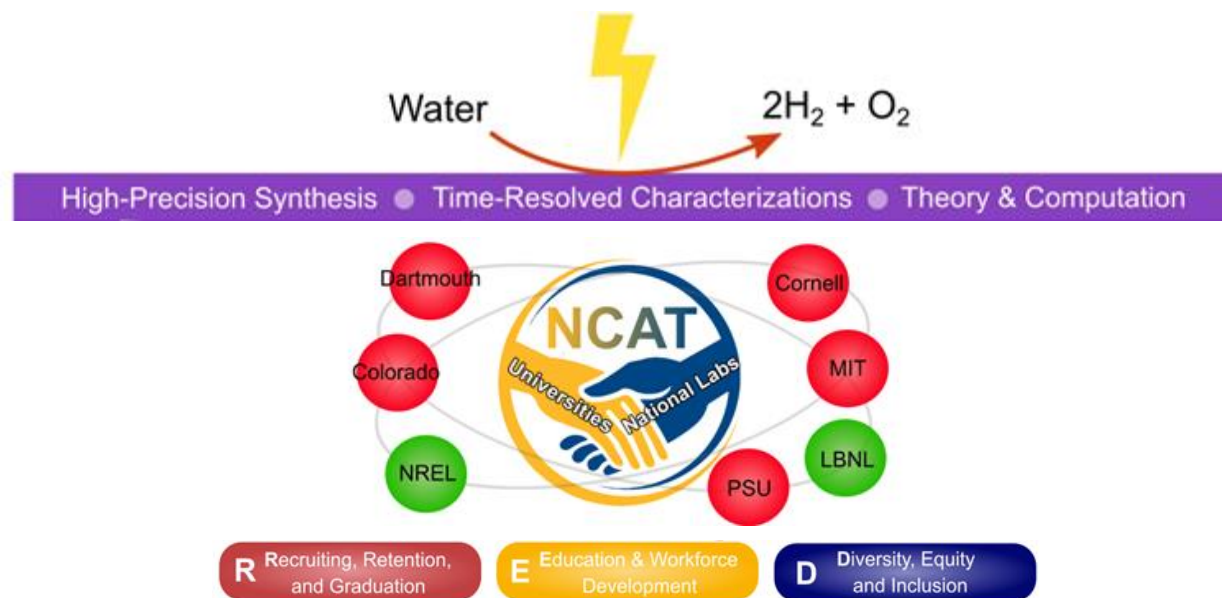


Center for Electrochemical Dynamics and Reactions on Surfaces (CEDARS)

Dhananjay Kumar (North Carolina A & T State University); Class: 2022-2026

MISSION: To reveal the formation of the transient intermediates of oxygen evolution reaction and hydrogen evolution reaction and how the catalyst evolves before, during, and after catalysis.

<https://www.ncat.edu/cedars>



RESEARCH PLAN

CEDARS tracks the electron and proton transfer process and surface bond formation and dissociation during the hydrogen production from water splitting. CEDARS integrates high-precision materials growth with studies of the intermediates by multi-modal scattering and spectroscopy approaches, and first-principles modeling. CEDARS is multidisciplinary in nature. Its plan interweaves across disciplines, from materials, chemical, to computational sciences.