

## Scanning Tunneling Microscopy & Spectroscopy

Postdoctoral position available in the Borguet group, Department of Chemistry at Temple University (USA)

A postdoctoral position is available in our collaborative Scanning Tunneling Microscopy and Spectroscopy of Layered 2-Dimensional Materials project. (There are also opportunities for short-term visitors, typically four-month minimum, at all levels.) The research focus is the role of oxidation and vacancy defects on catalytic water splitting. Recent papers include

Reimagining the eg1 electronic state in oxygen evolution catalysis: Oxidation-state-modulated superlattices as a new type of heterostructure for maximizing catalysis

Ran Ding, Parisa Yasini, Haowei Peng, John P. Perdew, Eric Borguet, and Michael J. Zdilla, *Advanced Energy Materials* 11(41), 2101636 (2021) DOI: 10.1002/aenm.202101636 <<https://doi.org/10.1002/aenm.202101636>>

Layer by Layer Deposition of 1T'-MoS<sub>2</sub> for the Hydrogen Evolution Reaction

Farbod Alimohammadi, Parisa Yasini, Tim Marshall, Nuwan Attanayake, Eric Borguet and Daniel R. Strongin, *ChemistrySelect*, 7(7), e202103386 (2022) DOI: 10.1002/slct.202103386 <<https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/slct.202103386>>

Postdoctoral candidates must have experience with Scanning Tunneling Microscopy (STM), preferably obtaining atomic and molecular resolution, in ambient and under fluid. Expertise in electrochemistry, preparation of single crystal electrodes, and growth of self-assembled monolayers is desirable. A strong record of publication in peer-reviewed literature attesting to these capabilities is required. Additional responsibilities include training and supervision of students, and preparation of reports and manuscripts for publication. Ph.D. in Chemistry or related discipline, awarded in the last five years, is necessary.

Interested candidates should send a CV to: Dr. Eric BORGUET

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Group website: <https://sites.temple.edu/borguet/>