

ROBERT M VASQUEZ

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EDUCATION

Ph.D. Chemistry

University of Michigan, Ann Arbor
Concentration: Organic

Expected 2021

B.S. Chemistry

San Diego State University (SDSU)
Concentration: Biochemistry

2012-2016

PROFESSIONAL PREPERATION

Doctoral Research Assistant

University of Michigan, Ann Arbor
Mentor: Dr. Stephen Maldonado

Investigating surface functionalization using dehydrogenative coupling reactions using saline reagents on Si(111) to form new Si-Si bonds. Additionally, I am investigating chromophore analogs for dye-sensitized solar cells.

2017 – Present

Undergraduate Research Assistant

San Diego State University
Mentor: Dr. Douglas Grotjahn

Worked independently on a project synthesizing water oxidation (WOX) type single site metal catalysts and applying them to alkane oxidation. It was our hypotheses that our proton transferring ligands could also be applied to alkane oxidation by selectively targeting C-H bonds.

2013 – 2016

SPUR-LABS Scholar

University of California, Los Angeles
Mentor: Dr. Douglas Black

Studied the Rbfox family of RNA binding proteins and the multi-protein complex (LASR) it forms to elucidate the mechanism used during splicing regulation. The goal of the project was to characterize LASR and its interactions with Rbfox to determine the role it has in splicing regulation by assessing positions of sequence variation in the c-terminus of Rbfox 1.

Summer 2015

LEADERSHIP EXPERIENCE

Tactical Aircraft Maintenance

United States Air Froce

Responsible for aircraft maintenance, inspections, repairs, and parts at home station. Selected to be Night Supervisor for shipping and receiving at Camp Warrior in Iraq.

2006 - 2010

AWARDS AND HONORS

National Science Foundation - Graduate Research Fellowship Program (NSF GRFP).	2017
Rackham Merit Fellowship (RMF) Program.	2016
3 rd place poster, inorganic section at X Simposio Internacional Investigacion Quimica En la Frontera.	2015
ACS Sci-Mix, San Francisco.	2014
NIH Initiative for Maximizing Student Development at SDSU.	2014
SPUR-LABS summer program at UCLA.	2015
Pfizer La Jolla Academic Industrial Relations (AIR) Diversity Research Fellowships in Chemistry.	2013
Shiley Life Sciences Scholarship in Chemistry	2014
Harold & June Grant Memorial Scholarship	2013

PUBLICATIONS

Publications from undergraduate work

Gerlach, D.; Siek, S.; Dalton, B.; Tesh, J.; Thompson, C.; Vasquez, R.; White, N.; Zeller, M.; Grotjahn, D.; Papish E. *Inorganica Chimica Acta*, **2017**, Submitted.

Siek, S.; Burks, D. B.; Gerlach, D. L.; Liang, G.; Tesh, J. M.; Thompson, C. R.; Qu, F.; Shankwitz, J. E.; Vasquez, R. M.; Chambers, N.; Szulczewski, G. J.; Grotjahn, D. B.; Webster, C. E.; Papish, E. T. *Organometallics*, **2017**, 36(6), pp 1091-1106.