

Jacqkis Davis
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EDUCATION

<i>University of North Texas - Denton, TX</i> Doctorate of Philosophy, Organic Chemistry	2016-Present
<i>University of Louisiana at Lafayette - Lafayette, LA</i> Bachelors of Science, Chemistry – ACS Certified Minor: Mathematics	2009-2015

HONORS & AWARDS

SEGAL EDUCATION AWARD	2015-2016
Marvin and Warren Boudreaux Endowed Scholarship in Chemistry recipient	2014-2015
McNair Scholar	2013-2015
W. O. Webster Memorial Non-Endowed Scholarship in Chemistry recipient	2012-2015
LS-LAMP Scholar	2012-2015
Taylor Opportunity Program for Students (TOPS) recipient	2009-2013

RESEARCH EXPERIENCE

<i>University of North Texas - Denton, TX</i> <ul style="list-style-type: none">• Asymmetric Catalysis<ul style="list-style-type: none">○ Conduct reactions in relation to enamine-metal Lewis Acid bifunctional catalysis○ Designing experiments using epoxides for ring formation reactions.○ Advisor: Dr. Hong Wang	2016-Present
<i>University of Louisiana at Lafayette - Lafayette, LA</i> <ul style="list-style-type: none">• Selective reduction of carbonyl and nitro groups by fruits and vegetables<ul style="list-style-type: none">○ Green Chemistry Research○ Conduct experiments for studying selective reduction of carbonyl and nitro compounds○ Develop new uses for overlooked fruits and vegetables○ Analysis of how biodegradable catalysts can provide alternative methods to predetermine processes in pharmaceutical, perfumes, flavor enhancers, and dyes○ Advisor: Dr. August Gallo	2015-2016
<i>University of Memphis - Memphis, TN</i> <ul style="list-style-type: none">• Behavior and Kinetics of Haloacetic Acid Concentrations in Bulk Sodium Hypochlorite Solutions<ul style="list-style-type: none">○ <i>Analytical and Environmental Research</i>○ Worked with developing methods to understand the production of bleach disinfectant by-product over time at given temperatures.○ Mastered instrumentation practices of post column reaction ion chromatography to conduct research.○ Obtained thermodynamic data for real time analysis.○ Advisors: Dr. Gary L. Emmert – University of Memphis Dr. Paul Simone – University of Memphis	Summer 2014
<i>University of Louisiana at Lafayette - Lafayette, LA</i> <ul style="list-style-type: none">• Oxorhenium-catalyzed deoxydehydration of glycols and epoxides<ul style="list-style-type: none">○ Applied deoxydehydration techniques on different diols in order to remove hydroxyl groups and obtain alkenes.	2012-2014

- Developed an additional use for MeReO_3 as a noteworthy catalyst in renewable biomass research.
- Advisor: Dr. Radhey S. Srivastava – University of Louisiana at Lafayette

POSTER PRESENTATIONS

Davis, J.; Gallo, A.A., Selective Reduction of carbonyl and nitro groups by fruits and vegetables, ACS Southeast (SERMACS)/Southwest (SWRM) Regional Meeting – Memphis, TN, November 2015

Davis, J.; Srivastava R.S, Oxorhenium-catalyzed deoxydehydration of glycols and epoxides, Louisiana Academy of Sciences – Grambling, LA, March 2013

PUBLICATIONS

Davis, J, Srivastava, RS. Oxorhenium-catalyzed deoxydehydration of glycols and epoxides. Tetrahedron Letters. 2014; 55(30):4178–4180. doi:10.1016/j.tetlet.2014.05.044.

Anderson, V, Bettis, C, **Davis, J,** et al. Superlinear convergence via mixed generalized quasilinearization method and generalized monotone method. Involve, a Journal of Mathematics Involve. 2014:699–712. doi:10.2140/involve.2014.7.699.

SERVICE & LEADERSHIP

University of Louisiana at Lafayette AmeriCorps 2014-2015

- Built 4 Homes with Habitat for Humanity for deserving families.
- Assisted teachers at J.W.Fulk Elementary
- Tutored at S.M.I.L.E After School Tutoring Program.
- Participated in many volunteer opportunities in Lafayette and other cities.

PROFESSIONAL SOCIETIES

Student Affiliate of the American Chemical Society (SAACS) 2011-2014

WORK EXPERIENCE

Graduate Research Student - North Texas 2016-Present

Advisor: Dr. Hong Wang

Teaching Assistant - North Texas 2016-Present

- Taught undergraduate general chemistry lab to about 40 students per semester.
- Taught undergraduate organic chemistry lab to about 20 student per semester.
- Taught some organic chemistry recitation classes during a semester.

REFERENCES

Graduate Advisor: Dr. Hong Wang (hong.wang@unt.edu)

Undergraduate Advisor: August Gallo (gallo@louisiana.edu)