

Joshua Caperton Curriculum Vitae

JoshuaCaperton2@my.unt.edu W. Mulberry St, Denton, TX, 76203

Education

May 2017 – Present

University of North Texas

PhD, Analytical/ Materials Chemistry

Denton, Texas, United States

August 2013 – May 2017

University of North Texas

Bachelor of Science, Chemistry

Denton, Texas, United States

Research Experience

May 2017 – Present

PhD Student

Advisor: Dr. Oliver Chyan (chyan@unt.edu)

Interfacial Electrochemistry and Materials Research (IEMR) Lab

Department of Chemistry, University of North Texas

Denton, Texas, United States

January 2017 – May 2017

Undergraduate Research

Advisor: Dr. Paul Marshall

Atmospheric Studies of Known Greenhouse Gas Pollutants

Department of Chemistry, University of North Texas

Denton, Texas, United States

May 2016 – Dec. 2016

Undergraduate Research

Advisor: Dr. Samuel Tenney

Thin Film Development for CO₂ Capture

Department of Chemistry, University of North Texas

Denton, Texas, United States

Joshua Caperton Curriculum Vitae

JoshuaCaperton2@my.unt.edu W. Mulberry St, Denton, TX, 76203

Expertise

X-Ray Photoelectron Spectroscopy (XPS), Scanning Electron Microscope (SEM), Energy Dispersive X-Ray (EDX) Spectrometry, Quartz Crystal Microbalance (QCM), Contact Angle Measurement, Infrared Spectroscopy (FTIR) – Multiple Internal Reflection (MIR), Transmission (TIR), Magnetron Sputtering, Contact Angle Measurement, Spin Coating, Wafer Cutting

Societies

June 2016 – Present American Chemical Society (ACS)

Accepted Publications

1. Novel Corrosion Prevention Treatments for Cu Wire Bonded Device to Improve Bonding Reliability, M. Asokan, **J. Caperton**, Z. Thompson, O. Chyan, M. Chowdhury, S. O'Connor, L. Nguyen, 2018 IEEE 68th Electronic Components and Technology Conference (ECTC)

References

Graduate Research Advisor – Dr. Oliver Chyan: chyan@unt.edu

Undergraduate Research Advisor – Dr. Paul Marshall: marshall@unt.edu