

# Wesley Black

Houston, TX 832-555-5555

wblack@email.com

## Summary

Skilled chemical laboratory researcher with 2 years of experience working with electrochemistry processes and analytic techniques and products in renewable energy.

## SKILLS

Laboratory: Differential scanning calorimetry (DSC), thermal gravimetric analysis (TGA), gas chromatography (GC), nuclear magnetic resonance (H-NMR/C<sup>13</sup>-NMR), infrared spectroscopy (IR), cyclic voltammetry (CV), and ultra-visible spectroscopy (UV-Vis)

Software: SPSS, DC Arc Optical Emission, Proficient in Microsoft (MS) Word, Excel, PowerPoint

## EDUCATION

**Bachelor of Science in Chemistry Candidate**

May 2020

University of Houston-Downtown, Houston, TX

GPA: 3.7

Awards: Scholar's Academy Scholarship Recipient

## RELEVANT COURSEWORK

Physical Chemistry I and II

August 2014-May 2015

- Conducted theoretical investigations of condensed phase properties and applications in battery and alternate electrical power systems

*Analytical Chemistry I and II*

- Explored impact of chemical processes on environmental hazards, deep sea 'black smoker' vents, early detection of cancer, high-speed DNA sequencing, bio-and chemical warfare agents and ultramicrofabricated sensors

## RESEARCH

**Chemistry Department Research Assistant**

Jan.2017-Present

University of Houston-Downtown, Houston, TX

- Research kinetics of attaching metalloporphyrins to self-assembled monolayers on gold electrodes
- Perform electrochemistry processes on the monolayers to improve electrical conductivity
- Synthesized research findings into 10-page paper to submit for publication

## RELATED EXPERIENCE

**Intern**

August 2017-August 2019

Texas Energy Group, Houston, TX

- Devised a renewable energy fact sheet which included information on renewable technologies, environmental benefits, economic impacts, and consumer education issues
- Gathered green power purchasing data from Phoenix metropolitan utilities and compiled report
- Updated website and social media outlets to notify others of organization's mission and events

**Intern**

May 2016-August 2017

Shell Oil Corp., Houston, TX

- Collaborated with a team of 5 to develop an expanded testing method on the DC Arc Optical Emission Spectrometer to measure trace metal impurities in molybdenum metal
- Participated in the installation, operation, and maintenance of chemistry lab equipment and duties
- Installed and operated a wide variety of laboratory equipment including NMR and high-resolution lasers

## PRESENTATIONS

UHD Student Research Conference, University of Houston-Downtown, Houston, Texas

"Kinetics of Attaching Metalloporphyrins to Self-Assembled Monolayers on Gold Electrodes," April 2015