DIEN NGUYEN

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EDUCATION

Master of Science in Chemistry

May 2022

Minor: Electrical Engineering

University of Minnesota Duluth (UMD), Duluth, Minnesota

Overall GPA: **3.875/4.0**

Thesis title: "Building a map of plant triterpenoid occurrences using literature and citizen-collected mass spectrometry

samples"

Thesis supervisor: Dr. Lucas Busta

Bachelor of Science in Chemistry and Biochemistry

May 2020

Minor: French

University of Minnesota Duluth (UMD), Duluth, Minnesota

Overall GPA: 3.456/4.0

Community College Coursework

2015-2016

San Jacinto Community College (South Campus), Houston, Texas

RESEARCH EXPERIENCE

Graduate Researcher August 2020-May 2022

Chemistry & Biochemistry Department, UMD, Duluth, Minnesota

- •Prepared plant chemical extracts for gas chromatography-mass spectrometry (GC-MS) analysis.
- •Operated and maintained the GC-MS systems and other equipment in the lab.
- •Analyzed GC-MS data using RStudio.

Undergraduate Researcher

August 2019-May 2020

Undergraduate Research Opportunities Program (UROP)

Chemistry & Biochemistry Department, UMD, Duluth, Minnesota

- •Wrote a research proposal which was selected for funding under UROP.
- •Performed Car-Parrinello molecular dynamic simulations of gaseous phosphorus pentoxide (P2O5).
- •Obtained the heat capacity and second virial coefficient values of gaseous P₂O₅.

Volunteer Research Assistant

Spring semester 2019

Chemistry & Biochemistry Department, UMD, Duluth, Minnesota

•Assisted in research of how 2-photon fluorescence microscopy can be used for assessment of breast cancer cells.

WORK EXPERIENCE

Field Technician Intern

July-December 2019

Environmental Health Testing Services (EHTS), Minneapolis, MN

- •Performed health & safety inspections at various residence sites to investigate lead, asbestos and indoor air quality.
- •Collected and screened soil samples for signs of contamination using photoionization devices.

Weekend Student Custodian

February 2018-March 2020

Facilities Management, UMD, Duluth, Minnesota

•Managed janitorial supplies and kept the school facilities in order and clean.

TEACHING EXPERIENCE

Graduate Teaching Assistant

August 2020-May 2022

Chemistry & Biochemistry Department, UMD, Duluth, Minnesota

- •Teach and instruct students in undergraduate level courses:
 - -General Chemistry lecture CHEM 1153
 - -General Chemistry laboratory CHEM 1154
 - -Instrumental Analysis laboratory CHEM 4243
- •Host office hours and provide instruction for students remotely through email outside of working hours.

CERTIFIED TRAINING, LABORATORY & COMPUTER SKILLS

- •Certification for 40-hour Hazardous Waste Operation & Emergency Response (HAZWOPER) training, OSHA 10-hour General Industry Safety & Health Training at EHTS and Clinical Practice & Laboratory Ethics training from the Responsible Conduct of Research (RCR) program.
- •Experience with analytical instruments (HPLC, GC-MS ...), titration and chromatography techniques and computational chemistry from UMD Quantitative/Instrumental Analysis lab & Biochemistry lab and project Research.
- •Have working knowledge of Microsoft Office Word, Excel, Adobe Acrobat, and computational chemistry software WebMO, statistical software Rstudio, software PyMOL for Python language, and bioinformatics software Jalview.
- •Flexible in learning and applying any additional computer programs.

LANGUAGE KNOWLEDGE

- •Vietnamese, fluent.
- •English, fluent.
- •French, intermediate.

ACTIVITIES AND SERVICE

UMD Chemistry and Biochemistry Club, September 2016-present.

REFERENCES

References are available upon request.