

DIEN NGUYEN

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EDUCATION

- Master of Science in Chemistry** May 2022
Minor: **Electrical Engineering**
University of Minnesota Duluth (UMD), Duluth, Minnesota
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
- 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.
•Trained undergraduate students with preparation and running samples on GC-MS.
- 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 (P_2O_5).
•Obtained the heat capacity and second virial coefficient values of gaseous P_2O_5 .
- 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.