



EDUCATION

University of Guelph – M.Sc. Food Science

2024 – 2026

University of Waterloo – B.Sc. Honours Co-operative Chemistry

2018 – 2023

Analytical Chemistry Lab:

- Efficiently performed laboratory experiments with precision and accuracy to obtain quality results within a tight timeframe
- Other skills and concepts acquired: various titration methods, gravimetric analysis, spectrophotometry, producing calibration curves, electrochemistry, fluorometric quantification, IC, gas chromatography (GC-FID, GC-MS), LC-MS, HPLC, SPME

RESEARCH INTERESTS

Investigations of the supramolecular nature of chocolate tempering through the study of the nanostructures and microstructures within chocolate

RESEARCH EXPERIENCE

Research Assistant

May. 2024 – Aug. 2024

Department of Food Science, University of Guelph, Guelph, ON

- Gained proficiency in using a novel laboratory USAXS machine to analyze complex food systems including cheeses and chocolates to better understand the microstructures
- Analyzed experimental data of cheese samples to interpret the structural characteristics in order to improve on the physical properties of the food
- Assisted in writing and drafting book chapters and research papers, contributing to the dissemination of food structure research

Research Assistant

Sept. 2020 – Dec. 2020

Department of Chemistry, University of Waterloo, Waterloo, ON

- Performed over 200 molecular dynamic simulations of protein and quantum dot systems to understand the aggregation effect of Alzheimer's disease
- Conveyed ability to interpret computational data calculations and analysis to discover trends and effects of molecular interactions within systems of interest
- Extensively researched scientific literature to explain, compare and back up experimental findings to reach conclusions on studied protein systems

PROFESSIONAL EXPERIENCE

Quality Control Technician

Jan. 2022 – Aug. 2022

Lorama Group Inc., Mississauga, ON

- Conducted comprehensive quality control testing on various products, including colourants, LPR samples, and gel products, ensuring compliance with industry standards and specifications
- Utilized advanced laboratory equipment and testing methodologies to perform thorough analysis and evaluation of raw materials and finished products
- Participated in research projects aimed at finding alternative ingredients for specific formulas, resulting in cost savings and improved product performance