## Education

PhD Student, Chemical Engineering

Yale University

Advisor: Professor Mingjiang Zhong •

### **Bachelor of Chemical Engineering**

McGill University

Dean's Honor List •

# **Awards and Honors**

- NSERC Natural Sciences and Engineering Research Council Postgraduate Scholarship Doctoral, \$120,000 (2024-2027) •
- Yale Planetary Solutions Doctoral Fellowship, \$9,000 (2025) .
- Yale Excellence in Service Award (2025)
- Yale Dodge Fellowship (2025)
- Yale Sheffield Fellowship, \$2,500 (2023)
- NSERC Undergraduate Research Award, \$18,000 (2021, 2020, 2019)
- FRQNT Fonds de recherche Québec, Nature and Technology Award, \$6,000 (2021, 2020, 2019)
- Inspirare Excellentia Scholarship, \$2,500 (2022)
- Dr. P.K. Ganguli Memorial Scholarship, \$432 (2020)
- Brian Cullen Memorial Scholarship, \$2,000 (2019)
- J W McConnel Scholarship, \$3,000 (2018)

#### Publications

- Alrefai, M., Meola, V., and Maric, M., ARGET ATRP of Ethylene Glycol Dicyclopentenyl Ether Methacrylate with Vegetable Oil and Terpene-derived Methacrylic Monomers. J. Polym. Sci. 2022, 1-15.
- Matthews, S., Xu, E., Dumont, E., Meola, V., Pikuda, O., Cheong, R., Guo, M., Tahsara, R., Larsson, H., and Tufenkji, N., Polystyrene micro- and nanoplastics affect locomotion and daily activity of Drosophila melanogaster. Environ. Sci.: Nano, 2021, 8, 110-121.

#### **Research Experience**

#### PhD Research (Yale University - Prof. Mingjiang Zhong & Prof. Meny Elimelech) Aug 2023 – Present Designing, synthesizing, and analyzing the performance of bio-inspired polymers to inhibit silica scaling on membranes. Undergraduate Research (McGill University – Prof. Milan Marić) May 2021 – Apr 2022 Synthesized and characterized sustainable polymers. Optimized the light-activated curing of polymers to create environmentally sustainable UV-curable wood coatings with thiol-ene clicking. Undergraduate Research (McGill University – Prof. Pierre-Luc Girard-Lauriault) May 2020 – Aug 2020 Designed a plasma water purifier to sanitize contaminated water using plasma activation. Undergraduate Research (McGill University - Prof. Nathalie Tufenkji) May 2019 - Aug 2019 Investigated the impacts of microplastics and nanoplastics in water contamination to the activity, mobility, and fertility of

Drosophila melanogaster (fruit fly) as a model of humans. Awarded first place in Advanced Materials and Nanotechnology Poster Presentation.

# **Teaching and Mentoring Experience**

#### **Teaching Fellow (Yale University)**

- Appointed as a teaching fellow for ENAS 500 Mathematical Methods and CENG 300 Chemical Engineering Thermodynamics.
- Designed and taught several lectures, held recitation sessions and office hours, and graded problem sets and exams. •

## Mentoring (Yale University)

Mentored one high school summer intern and one undergraduate summer intern in the lab.

# Undergraduate TA for CHEM 120 and CHEM 212 (McGill University)

- Led weekly tutorials to groups of 15 students in CHEM 120 general chemistry and CHEM 212 organic chemistry. •
- Awarded the Tomlinson Engagement Award for Mentoring in Chemistry, \$600 (2019).

#### victoria.meola@yale.edu

Aug 2023 – Present

Sept 2018 – Feb 2023

#### Jan 2020 - Dec 2020

June 2024 – Aug 2025

Sept 2024 – May 2025