# Victoria Meola

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### **Education**

### **PhD Student, Chemical Engineering**

Aug 2023 - Present

Yale University (New Haven, Connecticut)

• Advisors: Professor Mingjiang Zhong and Professor Menachem Elimelech

### **Bachelor of Chemical Engineering**

Sept 2018 - Feb 2023

McGill University (Montréal, Québec)

- Dean's Honour List Top 10% GPA in the Faculty of Engineering graduating class (2023)
- Dean's Honour List Top 10% GPA in the Faculty of Engineering (2018-2019)
- Inspirare Excellentia Scholarship (2022)
- Dr. P.K. Ganguli Memorial Scholarship (2020)
- Brian Cullen Memorial Scholarship (2019)
- J W McConnel Scholarship (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.

#### **Awards**

- NSERC Natural Sciences and Engineering Research Council of Canada Undergraduate Research Award, \$18,000 (2021, 2020, 2019)
- FRQNT Fonds de recherche Québec, Nature and Technology Award, \$6,000 (2021, 2020, 2019)
- Summer Undergraduate Research Advanced Materials and Nanotechnology Poster Award 1<sup>st</sup> Place (2019)
- Tomlinson Engagement Award for Mentoring in Chemistry, \$600 (2019)
- Schulich Leader Scholarship Nominee (2018)
- Loran Scholar Nominee (2018)

# Research Experience - McGill University

## **Sustainable Polymer Researcher**

May 2021 – Apr 2022

Synthesized and characterized sustainable polymers in two 16-week chemical engineering research projects with Dr. Milan
Marić funded by NSERC URSA. Optimized the light-activated curing of polymers to create environmentally sustainable UVcurable wood coatings with thiol-ene clicking. Independently synthesized polymers via traditional and ARGET (activators
regenerated by electron transfer) ATRP (atom transfer radical polymerization) methods with an emphasis on minimizing
toxins and characterized the resultant cross-linked coatings.

## Plasma Researcher

May 2020 - Aug 2020

• Designed a plasma water purifier in a 16-week chemical engineering research project with Dr. Pierre-Luc Girard-Lauriault funded by NSERC URSA. Constructed an apparatus to sanitize contaminated water using plasma activation.

### **Nanomaterials Researcher**

May 2019 - Aug 2019

- Analyzed nanomaterials in the environment in a 16-week chemical engineering research project with Dr. Nathalie Tufenkji funded by NSERC URSA. Investigated the impacts of microplastics and nanoplastics in water contamination to the activity of *Drosophila melanogaster* (fruit fly) as a model of humans. Dialyzed polystyrene and polyethylene nanoparticles to incorporate in the food. Independently initiated a procedure to monitor the activity of the flies after exposure to nanomaterials.
- Awarded first place in Advanced Materials and Nanotechnology Poster Presentation Award.

## **Leadership Experience**

**Tutor** 

June 2020 - Apr 2022

• Conducted one-on-one tutoring several times a week in first year math and chemistry courses at McGill.

### **Undergraduate TA for CHEM 120 and CHEM 212**

Jan 2020 - Dec 2020

Led weekly tutorials to groups of 15 students in CHEM 120 general chemistry and CHEM 212 organic chemistry at McGill.