**Yunji Seo**

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**Profile Summary** – **Recent M.ASc. graduate and results-driven researcher** with a strong foundation in pharmaceutical chemistry and chemical engineering, specializing in drug delivery systems and regulatory sciences.

Passionate about GMP, regulatory affairs, and operations, with proven leadership experience in student organizations. Recognized with multiple academic scholarships, demonstrating a commitment to excellence and continuous learning.

• **Adept** at managing multidisciplinary research projects, collaborating with industry sponsors, and presenting scientific findings.

• **Proven** background in wet lab techniques (ELISA, nanoparticle synthesis, knowledge of LCMS and NMR), data analysis (Python, R) and proficiency in Microsoft Office.

**EDUCATION**

**M.ASc. Chemical Engineering & Applied Chemistry | University of Toronto | 2024**

**B.Sc. (Hons.) Pharmaceutical Chemistry** **| University of Toronto | 2022**

• GPA: 3.70/4.00 • Howard Ferguson Provincial Scholarships • University College Alumni Scholarship & Bursary Fund

**EXPERIENCE**

**Master of Applied Sciences in Chemical Engineering, Frank Gu Lab,** Toronto, ON. **-** 2022 – 2024

**Thesis:** Enhancement of Delivery of Ophthalmic Drugs through Carrageenan Incorporation in Etafilcon A Model Lens.

* Analyzed over **150 research articles** on peer-reviewed academic platforms during thesis development, improving experiment design and execution.
* Developed a therapeutic contact lens with an increase of up to **72%** **in drug loading capacity** via polymer-drug interaction to enhance efficiency and patient compliance.
* Actively engaged in **two different research team**s, coordinating resources and allocating equipment run times at various research facilities on and off-campus.
* Facilitated monthly meetings with steakholders to **provide updates on key deliverables**, including research findings and project progress, and **documented action items** in meeting minutes.
* Participated in the Chemical Engineering departmental poster presentation.

**Undergraduate Thesis, Ping Lee Lab,** Toronto, ON. **-** 2021 – 2022

* Investigated **4 novel combinations** of potential deep eutectic solvents, determining important physical properties such as melting point and composition ratio by applying design-of-experiment (**DOI**) methodologies and leveraging **decision-making skills**.
* Conducted independent research activities and reported weekly to the Principal Investigator.
* Prepared and delivered a **30-minute thesis presentation** to an audience of 25+ students and faculty.

**Independent Research Student, Riskin Lab,** Toronto, ON. **-** 2019 – 2020

* Managed end-to-end research workflows for soil phosphorus analysis, including sample collection, data generation through benchtop experiments, statistical modeling in **Excel and R**, and reporting.
* Addressed **technical challenges** with laboratory equipment and procedures by consulting existing literature and connecting with department staff, strengthening my ability to **troubleshoot** issues and **communicate effectively**.

**EXTRACURRICULAR EXPERIENCES**

Served as a student union representative for two years in two different roles: Event Coordinator and Treasurer.

* Developed a **$1000** funding proposal by strategically allocating resources for 10+ events, optimizing budget utilization to increase student engagement.
* Managed **financial documentation**, including receipt collection, bank deposits, and compliance reporting, ensuring adherence to the Arts & Science Student Union guidelines.
* Enhanced event participation by conducting and analyzing **survey responses from 60+** **students** to design tailored social events, fostering inclusivity and sense of community.
* Coordinated **5+ academic events**, including 4 faculty-led seminars and an Industry Night with 5 guest speakers, by recruiting relevant speakers and maintaining clear communication, to deliver engaging programs for 30+ student attendees.

**SKILLS**

* **Wet lab:** ELISA, Nanoparticle synthesis, UV spectrometry, Differential Scanning Calorimetry, Scanning Electron Microscopy, working knowledge of LCMS and NMR.
* **Technical:** Microsoft® Office (Word, PowerPoint, Excel), Data analysis (Python, R), Research (Literature review/regulatory translation), Communication, Critical thinking.