

Woojin Bae

Department of Chemical Biological Engineering, Seoul National University (SNU)

1, Gwanak-ro, Gwanak-gu, Seoul, Republic of Korea (08226)

Phone | +82 10-7323-1459

Email | usmebbb@snu.ac.kr

LinkedIn | 

WORK EXPERIENCE

| | |
|--|----------------------------|
| Multi-dimensional Materials Chemistry Lab SNU, Seoul, Republic of Korea | Mar. 2024-Present |
| <ul style="list-style-type: none">Synthesis Ag cluster-based AIGS(silver indium gallium sulfide)-coreAnalyze LMBs SEI Components by Cryo-TEM Imaging and region-specific characterization | |
| Marketing team & manager SNU festival, Seoul, Republic of Korea | Jun. 2021-May. 2022 |
| <ul style="list-style-type: none">Promoted the festival through the online website during COVID-19Created and performed promotional content and videosSecured a 3,000,000 KRW sponsorship agreement with the shared scooter company 'Swing' | |
| Vice president CBE Interim Leadership, Seoul, Republic of Korea | Dec. 2020-Mar. 2021 |
| <ul style="list-style-type: none">Conducted freshman orientation, facilitating the integration of new students, via Zoom during COVID-19. | |
| R&E Student Center for Cell-Encapsulation Research, KAIST, Daejeon, Republic of Korea | Mar. 2018-May. 2019 |
| <ul style="list-style-type: none">Created a porous titanium oxide shell to facilitate the simple culturing of astrocytesConfirmed the function of encapsulated astrocytes by analyzing the length of neurons co-cultured with astrocytesPoster presentation on 'Korean Chemical Society Future Chemist Research Presentation Competition | |

EDUCATION

| | |
|---|---------------------|
| Bachelor's degree in Chemical Biological Engineering Seoul national University | 2020-Present |
| Major in Chemistry Daejeon Science High School for the gifted | 2017-2020 |

HONORS & AWARDS

| | |
|--|----------------------------|
| 3rd Prize AUA-HKUST Entrepreneurship Bootcamp Final Presentation | Jul. 2024 |
| <ul style="list-style-type: none">Borderless Healthcare: A Platform for Overseas Patients to Obtain Prescriptions Everywhere | |
| Excellence Poster Award The 5th Undergraduate Student Advanced Experimental Research Program | Jan. 2024 |
| <ul style="list-style-type: none">Consideration on the relationship between microscopic structure and macroscopic shape according to the synthesis conditions of Hollow ZSM-5 | |
| Team Section Selected Changing SNU Contest | Jul. 2022 |
| <ul style="list-style-type: none">Spatial-restricted messenger. The receiver can open a message only at the point where the sender had designated it to do so. Consists of an experimental UI Design, including 100 different interfaces for the loading screen. | |
| The Education and Research Foundation Scholarship College of Engineering, SNU | Mar. 2021-Jun. 2021 |
| Merit-based Scholarship Department of Chemical Biological Engineering, SNU | Sep. 2020-Dec. 2020 |
| 2020 Future Chemistry Talent Award The Korean Union of Chemical Science and Technology Societies | Feb. 2020 |
| <ul style="list-style-type: none">Awarded as one of the top 6 science high school students in Korea | |
| Excellence Poster Award 2019 Gifted School R&E Joint presentation | Jan. 2019 |
| <ul style="list-style-type: none">Regulation of astrocyte growth using porous titanium oxide shells | |
| Encouragement Prize 2017 Korea Foundation for the Advancement of Science & Creativity Conference | Jan. 2018 |
| <ul style="list-style-type: none">Correlation between Z-potential and contact angle of QDs solution | |

INTERNATIONAL ACTIVITIES

| | |
|---|----------------------------|
| AUA-HKUST Entrepreneurship Bootcamp 2024 HKUST, Hong Kong. | Jul. 2024 |
| SNU-UMN Culture Exchange Program via Zoom | Mar. 2024-Apr. 2024 |
| SNU in EU program Brussels School of Governance, Belgium | Jul. 2024 |
| <ul style="list-style-type: none">Understanding European Unions (EU)Make a presentation about "The European External Action Service" | |

- Korean representative** | 51st Joint School Science Exhibition, Hong Kong **Aug. 2018**
- Wettability Change of Self-Assembled Monolayers (SAMs) of Thiol on Gold
- Summer International Exchange program** | KAMS, Fort Hays state University, USA **Jul. 2018**
- Synthesis of conventional Quantum dots, CdSe; eco-friendly Quantum Dots, ZnSe. Furthermore, applying them on Gratzel cell

EXTRACURRICULAR ACTIVITIES

- Presentation on **TEM Seminar** | Multi-dimensional Materials Chemistry Lab, SNU **May. 2024**
- Amplitude and Phase Contrast
- 2023 Winter Vacation Data Science Bootcamp: **Computing** | Graduate School of Data Science, SNU **Feb. 2024**
- Encouragement Prize** | SNU in the World Program UCC Contest, Office of International Affairs, SNU **Nov. 2022**
- Serving military service** | Daegu, Republic of Korea **Aug. 2022- May. 2024**
- 110th Squadron, operating F-15K Slam Eagle
 - Selected as an exemplary soldier
- Student Mentor** | Seoul National University Social Responsibility **Apr. 2023-Present**
- Selected as a superb mentor

SKILLS & LANGUAGES

- **Instruments:** Cryo-TEM, SEM, UV-Vis, OM, PL
- **Language:** Korean (Native), English (C1, TOEFL 95)
- **Computer Language:** Python, C (Experienced), Html, CSS(Experienced)
- **Design:** Adobe Premiere Pro, Adobe illustrator, Color correction