

Curriculum Vitae

MINWOO BAE

Undergraduate Student

Department of Chemistry, Massachusetts Institute of Technology

Samsung Scholarship Fellow

E-mail: minwoo@mit.edu

EDUCATION

Massachusetts Institute of Technology

Sep 2013 – May 2014

- B.A. in Chemistry, Class of 2019 (Expected); paused two years for military service.
- GPA: 5.0/5.0

Seoul Science High School

Mar 2010 – Feb 2013

RESEARCH EXPERIENCE

Undergraduate Researcher

MIT, Feb 2014 – May 2014

- Supervisor: Prof. Timothy Jamison
- Synthesized a palette of highly functionalized heterocycles using Cu-catalyzed C-N cross-coupling reaction. Conducted isocyanides formation and photoredox-catalyzed reactions. Performed chemical analysis methods such as HPLC, TLC and NMR.

Research and Education Program

Korea University, Apr 2010 – Dec 2010

- Supervisor: Prof. Kwang Yeon Hwang
- Thesis: "Protein Crystallization of A Recombinase Protein, XerC." Conducted gene cloning, protein purification using Ni-affinity, ion exchange and gel filtration chromatography and protein crystallization.

RELEVANT WORK

Military Service

KATUSA, Jul 2014 – Apr 2016

- Korean Augmentation to the US Army (KATUSA) program. Working in Behavioral Health Clinic as a Medic at 121st Combat Support Hospital, 8th Army USAG Yongsan.

Korean Chemistry Olympiad Summer/Winter School

KChO, 2010 – 2012

- Received trainings in organic chemistry, inorganic chemistry, physical chemistry and analytical chemistry for preparation of International Chemistry Olympiad.

PUBLICATION

1. "Synthesis of Highly Functionalized Polycyclic Quinoxaline Derivatives Using Visible-Light Photoredox Catalysis" He, Z; **Bae, M**; Wu, J; Jamison, T. F. *Angew. Chem. Int. Ed.* (2014)

HONORS

CRC Press Freshman Chemistry Achievement Award

MIT, 2014

- One of two freshmen selected for outstanding academic achievement in chemistry.

Samsung Scholarship

Samsung, 2012

- \$50,000/yr, one of five prospective undergraduates selected for academic excellence from Korea.

Gold Medal, 44th International Chemistry Olympiad

IChO, 2012

- Ranked 2nd out of 283 participants. "South Korea Dominates Chemistry Olympiad (C&EN)"