

Yangwoo Lee

Master Student at Department of Civil and Environmental Engineering
Seoul National University | dhkddid123@snu.ac.kr | +82)010-9449-1183

Research Interest

- Mechanics of Materials
- Building Materials
- Raman spectroscopy
- Density Functional Theory

Affiliation & Education

2021-Present: M.S. in Civil and Environmental Engineering, Seoul National University, South Korea
Advisors: Prof. Juhyuk Moon GPA: 4.1/4.3

2015-2021: B.S. in Civil and Environmental Engineering, Seoul National University, South Korea
Advisors: Prof. Joonho Song GPA: 3.69/4.3 **Cum Laude**

Publications & Conferences

- **Yangwoo Lee**, Hee-jeong Kim, Juhyuk Moon (2022) Manuscript in preparation.
- Seungchan Kim, **Yangwoo Lee**, J. Plank, Juhyuk Moon (2022)
Fundamental discrepancy of chemical reactivity of tricalcium oxy silicate(alite), dicalcium silicate (belite), and their polymorphs: A density functional theory study. In progress.
- Hyunuk Kang, **Yangwoo Lee**, Jihoon Lee, Juhyuk Moon (2022)
Investigation of the clinker phase variations mechanism induced by the micro-grinding program. Manuscript in preparation.
- **Yangwoo Lee**, Juhyuk Moon, "Quantitative Evaluation of Lime Paste Using Raman Spectroscopy", 2022 Spring Korea Concrete Institute Conference, Jeju, Korea (May. 2022)
- **Yangwoo Lee**, Juhyuk Moon, "Theoretical Investigation of the Energies, Structures, and Growth Properties of Artinite Surfaces", 2021 Fall Korea Concrete Institute Conference, Gyeongju, Korea (Nov. 2021)
- **Yangwoo Lee**, Juhyuk Moon, "Evaluation of Service Life of Reinforced Concrete Structure Exposed to Marine Environment through Probabilistic Method", 2021 Spring Korea Concrete Institute Conference, Yeosu, Korea (May. 2021)

Research Experience

Researcher at Civil Environmental Engineering, College of Engineering, Seoul National University, Korea (Mar. 2021 ~ Present) / Development of Raman Spectroscopy Analysis Scheme

Awards and Honors

- Wooduk Graduate Scholarship, Wooduk Foundation, Korea (May. 2022 ~ Dec. 2022)
- BrainKorea21 Four, Seoul National University, Korea (Mar. 2021 ~ Dec. 2022)
- Shortterm Study abroad scholarship, Seoul National University, Korea (Sep. 2019)
- Merit-based Scholarship, Seoul National University, Korea (Sep. 2018)
- Alumni Association of Department of Civil Engineering SNU Scholarship, Seoul National University, Korea (Mar. 2018)
- Work-Study Scholarship 2, Seoul National University, Korea (Sep. 2015)

Teaching Experience

Teaching Assistant (2021-S)

- 457.201 001: Mechanics of Materials and Lab.

Projects

- Development of multi-scale based technology for evaluating the internal dispersion of functional nanomaterials in cementitious composites, Institute of Construction and Environmental Engineering, Seoul Nation University, Korea (Jan. 2021 ~ Present)

Skills and Techniques

Language: English: TOEFL: 102/120

GRE: Verbal/Quant/Writing 157/170/3.0

Korean: Native

Tool: Raman Spectroscopy, TGA, DFT

Computer: Linux, R, Matlab, Python

EXTRA-CURRICULAR ACTIVITIES

- **KATUSA**, 630th Clearance Company, Pyeongtaek, South Korea/2016-2018

Served in the Army for two years as a KATUSA (Korean Army Augmented to the United State Army) which is a mandatory obligation in South Korea. Selected as a KATUSA based on a TOEIC test.

Promoted from a private to a sergeant.

- **Editor in chief** at Gong-dae-sang-sang (press release of college of engineering, SNU)/2015-2020

- Edited 10+ articles & revised 50+ articles.

- Organized 10+ camp for young engineering frontiers & counseled 100+ students.