



Su bin An

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EDUCATION

Hankuk University of Foreign Studies, Yongin

B.S. in Environmental Science & Computer Engineering (Feb 2026)

Professional Training

Gyeonggi-do Institute of Health and Environment Field Training, July. 2024

- Acquired theoretical, experimental knowledge in the fields of the fine/micro dust, air quality, and water environment.
- Performed formaldehyde analysis using HPLC and fine dust matter analysis using gravimetric method.
- Participated in sampling processes of particulate and gaseous air pollutants in exhaust gas, conducting dust concentration analyses in emissions.
- Analyzed soil pH, fluoride, and metals using ICP-OES.
- Understood microplastic analysis protocols and used FTIR for hands-on analysis.

Project Experience

Analysis on the Contribution of VOCs Observation to Ozone Formation, Team Leader,

Nov. 2024

- Conducted EPA PMF modeling based on the measurement data of 12 VOCs species using PTR-MS, which enables real-time analysis.
- Identified periods of high ozone concentrations to examine correlations with VOCs and determine key emission sources.

- Calculated OFP(Ozone Formation Potential) based on VOC concentration, MIR(Maximum Incremental Reactivity) and identified high OFP compounds during high-ozone periods.
- Gained comprehensive insight into air pollution mechanisms and ozone formation.
- Led the team by proposing research directions based on paper analysis and various ideas, calculating and comparing OFP(Ozone Formation Potential) to enhance the accuracy of ozone formation contributions by emission sources.

Measurement of 54 VOCs concentrations using GC-MS, *June. 2024 – Dec. 2024*

- Operated separate analyses using GC-MS with both trap and PAMS tube.
- Determined retention times from standard substances; identified compound areas and peak heights based on RT values.
- Performed additional standard substance analyses during the experiment to ensure accuracy, enhancing analytical skills throughout the process.
- Acquired hands-on experience in GC-MS operation, including handling different sampling methods, trap conditioning, and optimizing H2, air flow rates to ensure flame stability and precise analysis.

CAMPUS & COMMUNITY INVOLVEMENT

National Institute of Chemical Safety, *Online Monitoring Team*

- Reported illegal chemical transactions occurring online and researched improvement measures.
- Proposed illegal distribution countermeasures to three secondhand trading platforms, earning the Outstanding research group Award.

Korea Environmental Preservation Association, *Carbon Neutral Citizen Participation Group*

- Proposed a waste disposal policy to improve the volume-based waste disposal system.

Climate Change Center U-Savers, *Planning Department*

- Led a campus-wide waste management awareness campaign
- Organized the “Re-tumbler” project, redistributing over 100 reusable tumblers to promote re

source circulation.

Student Council, *Planning Department*

- Organized department events and festivals, demonstrating communication skills to mediate conflicts between different departments and ensure the smooth execution of events.

Skills

- Technical : GC-MS Analysis, PMF Modeling, Data Analysis (ADSP), Python/R Programming, Grapher
- Software : Microsoft Word, Microsoft Access, Excel, PowerPoint

Qualifications

- NEW TEPS | 377 | December. 2024 – November. 2026