

## PROFESSIONAL EXPERIENCE

### Norwegian Meteorological Institute

Research scientist, Division for Climate Modelling and Air Pollution  
Developer of EMEP atmospheric chemistry transport model  
Current focus: VOC, O<sub>3</sub>, and SOA chemistry

Oslo  
2022.11 - Present

## EDUCATION

### University of Edinburgh and UK Centre for Ecology & Hydrology

Atmospheric Chemistry Modelling, Doctor of Philosophy (PhD), School of Chemistry  
Recipient of Principal's Career Development PhD Scholarship  
Recipient of Edinburgh Global Research Scholarship  
Recipient of ScotCHEM Saltire Exchange Scheme Funding  
Recipient of ScotCHEM Postgraduate and Early Career Researcher Exchange Funding

Edinburgh  
2022.10

### The Hong Kong University of Science and Technology

Master of Philosophy (MPhil), Department of Chemistry, School of Science  
Recipient of Postgraduate Studentship  
Department Research Assistant in Analytical Chemistry  
GPA: 4.075/4.300

Hong Kong  
2019.8  
2017.9 - 2019.8

### Ocean University of China

Bachelor of Science (BSc), Department of Chemistry, College of Chemistry and Chemical Engineering  
Recipient of First-Class Scholarship for Excellent Academic Performance (TOP 5%)  
Recipient of Excellent Undergraduate Scholarship (TOP 5%)  
Recipient of Ziqiang Undergraduate Scholarship (TOP 5%)  
Recipient of Social Practice Scholarship  
GPA: 3.64/4.00

Qingdao, China  
2017.6  
2015.9  
2015.10  
2016.10  
2013 - 2016

## RESEARCH ACTIVITIES

### EMEP project, Norwegian Meteorological Institute

- Development of VOC emission profiles and chemical mechanisms
- Improve the photolysis module in EMEP model
- Application of new VOC chemistry scheme to EMEP model simulations
- Evaluation of EMEP model outputs with European VOC measurements

Oslo  
2022.11 – Present

### PhD Project, School of Chemistry, University of Edinburgh

- Evaluation of global EMEP atmospheric chemistry transport model with measurements
- Assessment of global and regional budgets and lifetimes of atmospheric reactive N and S gases and aerosols
- Investigation of sensitivities of emission reductions for the mitigation of PM<sub>2.5</sub> and reactive N and S species
- Publications (first author): [Ge et al., Geosci. Model Dev., 2021](#); [Ge et al., Atmos. Chem. Phys., 2022](#), [2023](#)

Edinburgh  
2019.9 – 2022.10

**Short-term Placement, Cambridge Environmental Research Consultants**

Cambridge

- Application of high-resolution urban scale modelling (ADMS-Urban model) to Ireland
- Evaluation of ADMS-Urban model outputs with measurements
- Verification of the location of continuous monitors in model and real world

2022.3 - 2022.4

**MPhil Project, Department of Chemistry, School of Science, HKUST**

Hong Kong

- Exploring the combination of aerosol carbon analyser and chemiluminescent NO<sub>x</sub> analyser
- Investigation of the differentiation of organic and inorganic nitrogen-containing species in aerosol
- Researching on the inorganic S formation from heterogeneous OH oxidization of organosulfates
- Publications (co-author): [Xu et al., \*ACS Earth Space Chem.\*, 2020](#); [Yu et al., \*Environ. Sci. Technol.\*, 2021](#).

2017.9 - 2019.8

**BSc Project, Department of Chemistry, Ocean University of China**

Qingdao, China

- Investigation of the effect of aerosol aging on Fe solubility in PM<sub>2.5</sub>
- Collected and analysed aerosol samples using Ion Chromatography and ICP-MS
- Utilised the trajectory simulation model HYSPLIT and the extended AIM Aerosol Thermodynamics Model

2016.9 - 2017.6

**Undergraduate Research and Development Program, Ocean University of China**

Qingdao, China

- Research Team Leader
- Researched on the bioavailability of dissolved organic nitrogen of seawater in typical zone with algal bloom
- Collected and analysed seawater samples, processed experimental data, and wrote program report.

2014.12 - 2015.12

**TEACHING ACTIVITIES****Laboratory Facilitator, School of Chemistry and School of Geosciences**

Edinburgh

- Teaching support role in the undergraduate course: Environmental Chemistry
- Teaching support role in the undergraduate course: Meteorology: Atmosphere and Environment
- Demonstrating and actively supporting students during their practical lab sessions
- Marking laboratory notebooks and final reports

2020.1 - 2022.4

**Tutor, School of Geosciences, University of Edinburgh**

Edinburgh

- Teaching assistant in the postgraduate course: Atmospheric Quality and Global Change
- Delivering tutorials and grading course assessments

2021.3 – 2021.4

**Supervising Assistant, School of Chemistry, University of Edinburgh**

Edinburgh

- Assisting final-year BSc and MSc students with their dissertation projects

2020.9 - 2022.7

**ADDITIONAL INFORMATION****Languages**

Fluent in English and Chinese

**Programming Skills**

Proficient: Python, Linux

Intermediate: Fortran, LaTeX

**Hobbies**

Cross-country skiing, inline skating, hiking, baking