Norwegian Meteorological Institute Postboks 43 Blindern 0313, Oslo, Norway yaog@met.no

WORK

Norwegian Meteorological Institute

Oslo

Research scientist, Division for Climate Modelling and Air Pollution

2022.11 - Present

Developer of EMEP atmospheric chemistry transport model

Current focus: VOC, O3, and SOA chemistry

EDUCATION

University of Edinburgh and UK Centre for Ecology & Hydrology

Edinburgh

Atmospheric Chemistry Modelling, Doctor of Philosophy (PhD), School of Chemistry

2022.10

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

The Hong Kong University of Science and Technology

Hong Kong

Master of Philosophy (MPhil), Department of Chemistry, School of Science

2019.8

Recipient of Postgraduate Studentship

2017.9 - 2019.8

Department Research Assistant in Analytical Chemistry

GPA: 4.075/4.300

Ocean University of China

Qingdao, China

Bachelor of Science (BSc), Department of Chemistry, College of Chemistry and Chemical Engineering

2017.6

Recipient of First-Class Scholarship for Excellent Academic Performance (TOP 5%)

2015.10

2015.9

Recipient of Excellent Undergraduate Scholarship (TOP 5%)

2013.10

Recipient of Ziqiang Undergraduate Scholarship (TOP 5%)

2016.10

Recipient of Social Practice Scholarship

2013 - 2016

GPA: 3.64/4.00

RESEARCH ACTIVITIES

EMEP project, Norwegian Meteorological Institute

Oslo

• Development of VOC emission profiles and chemical mechanisms

2022.11 - Present

- 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

PhD Project, School of Chemistry, University of Edinburgh

Edinburgh

• Evaluation of global EMEP atmospheric chemistry transport model with measurements

2019.9 - 2022.10

- 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_{2.5} and reactive N and S species
- Publications (first author): Ge et al., Geosci. Model Dev., 2021; Ge et al., Atmos. Chem. Phys., 2022, 2023

Short-term Placement, Cambridge Environmental Research Consultants

Cambridge

• Application of high-resolution urban scale modelling (ADMS-Urban model) to Ireland

2022.3 - 2022.4

- Evaluation of ADMS-Urban model outputs with measurements
- Verification of the location of continuous monitors in model and real world

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

Hong Kong

• Exploring the combination of aerosol carbon analyser and chemiluminescent NOx analyser

2017.9 - 2019.8

- 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.

BSc Project, Department of Chemistry, Ocean University of China

Qingdao, China

• Investigation of the effect of aerosol aging on Fe solubility in PM_{2.5}

2016.9 - 2017.6

- Collected and analysed aerosol samples using Ion Chromatography and ICP-MS
- Utilised the trajectory simulation model HYSPLIT and the extended AIM Aerosol Thermodynamics Model

Undergraduate Research and Development Program, Ocean University of China

Qingdao, China

· Research Team Leader

2014.12 - 2015.12

- 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.

TEACHING ACTIVITIES

Laboratory Facilitator, School of Chemistry and School of Geosciences

Edinburgh

• Teaching support role in the undergraduate course: Environmental Chemistry

- 2020.1 2022.4
- 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

Tutor, School of Geosciences, University of Edinburgh

Edinburgh

- Teaching assistant in the postgraduate course: Atmospheric Quality and Global Change
- 2021.3 2021.4

• Delivering tutorials and grading course assessments

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