

PhD Position Opening in Air Quality Modeling
Department of Chemical Engineering, University of Utah

Applications are invited for Chemical Engineering PhD students to join the Atmospheric Turbulence and Air Quality Research Group (<http://haholmes.wordpress.com/>) at the University of Utah (UU). The Graduate Research Assistantship provides financial support for tuition, health benefits, and a monthly stipend. The position will be to conduct research toward a PhD degree under Dr. Heather Holmes in air pollution, numerical modeling, and atmospheric turbulence. The primary focus will be on numerical weather prediction models (WRF), chemical transport modeling (WRF-Chem, CMAQ), and source apportionment modeling to research atmospheric chemistry and physics in the western United States. Specific topics of investigation include novel source apportionment methods to identify drivers of wintertime air pollution events, development and implementation of turbulence parameterizations for atmospheric models, and air pollution and human health studies.

The successful applicant will manage their research project and work closely with collaborators at the UU, University of Nevada-Reno, and UC-Riverside. The research is inherently interdisciplinary so it is expected that collaborations will come from multiple departments including engineering, atmospheric sciences, and health sciences. Applicants should have a BS degree in atmospheric sciences, physical sciences, chemistry, engineering, mathematics or a related field. Candidates with a strong computational background or experience working with large data sets are encouraged to apply. Preference will be given to candidates that have completed a Master's degree or have a strong publication record.

Interested students should contact Dr. Heather Holmes (h.holmes@utah.edu) and attach a cover letter (stating qualifications, relevant experience and motivation for the position) and curriculum vitae. Candidates must also submit an application to the graduate school for admission. The priority deadline for Fall 2020 applications is December 15th and the final deadline is January 15th. Application requirements, instructions, and the submission link can be found here: <https://www.che.utah.edu/graduate/admissions>

The University of Utah is an R1 research institution and one of the leading universities in technology innovation and commercialization. The Department of Chemical Engineering fosters a collaborative, interdisciplinary environment. The Center for High Performance Computing provides resources and technical support for individuals in simulation science. The state of Utah enjoys a thriving economy with consistent recognition as one of the top states for business, job growth, and quality of life.