Department of Chemistry
UNIVERSITY OF COLORADO **BOULDER**

PhD Program in Analytical, Environmental, and Atmospheric Chemistry

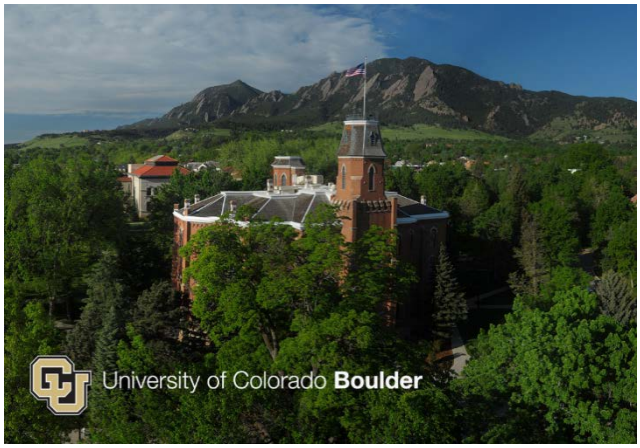
Our Research and Facilities:

- CU-Boulder ranked **#1** in Atmospheric science worldwide (2018 Shanghai Ranking)
- World-class laboratory and field programs
  - Aircraft, ship, and ground-based field research
  - New simulation chamber facility
  - State-of-the-art instrumentation
- Collaborations across departments/fields, nationally and internationally, and with the nearby national labs
  - The Boulder area has the largest number of atmospheric scientists and chemists worldwide
- $4 million/yr research budget, ~50 papers/yr









Boulder, CO:

- 300 days of sun
- Bike and pedestrian friendly
- Skiing, biking, hiking, climbing, and more
- Lively downtown (Pearl St)
- 30 min. to Denver
- vimeo.com/181645979

Our Program:

- ~30 grad students and ~10 postdocs/res. scientists
- Atmospheric chemistry focus within the Chemistry Dept.
- Graduates have careers in national labs, academia, industry, policy & government

Examples of Recent Student Research

Allison Harris, Vaida Lab

Multiphase photochemistry of keto-acids under atmospheric conditions
colorado.edu/lab/vaidagroup/allison-e-reed-harris

J. Phys Chem. A publication:
pubs.acs.org/doi/full/10.1021/jp502186q

Quantifying gas-surface partitioning of semi- and low-volatility compounds and the impact on organic aerosol yield
cires1.colorado.edu/jimenez-group/group_alumni.html

Environ. Sci. Tech. publication:
pubs.acs.org/doi/abs/10.1021/acs.est.6b00606

Jordan Krechmer, Jimenez Lab

Our Faculty

Eleanor Browne
sites.google.com/a/colorado.edu/brownelab
Laboratory and field studies of organonitrogen and organosilicon chemistry, instrument development

Margaret Tolbert
cires.colorado.edu/research/research-groups/margaret-tolbert-group
Laboratory studies of particulate matter on Earth, Mars, and Titan

Steven Brown (adjoint)
esrl.noaa.gov/csd/staff/steven.s.brown
Atmospheric nitrogen oxides, nighttime tropospheric chemistry, and high-sensitivity optical instrumentation

Rainer Volkamer
ciresgroups.colorado.edu/volkamergroup
Lab and field measurements of radicals and trace gases, air-sea exchange, agriculture, advanced optical in-situ and remote sensing instrumentation

Joost de Gouw
sites.google.com/view/de-gouw-lab
Volatile organic compounds in the atmosphere, mass spectrometry, atmospheric impact of energy systems

Veronica Vaida
colorado.edu/lab/vaidagroup
Spectroscopy and reactivity of atmospheric molecules and radicals

Jose-Luis Jimenez
cires.colorado.edu/jimenez
Aerosol composition and sources, aircraft and simulation chamber studies, advanced instrumentation

Paul Ziemann
sites.google.com/site/ziemanngroup
Laboratory studies of the products, mechanisms, and kinetics of atmospheric oxidation of organic compounds and aerosol formation

Collaborating Institutions

The Cooperative Institute for Research in Environmental Sciences (CIRES) is a joint research partnership that connects scientists at NOAA and several departments at CU.

NCAR studies the behavior of the atmosphere and related Earth and geospace systems.

RASEI is a joint institute between CU-Boulder and the National Renewable Energy Laboratory (NREL) addressing complex problems in energy with a multidisciplinary, multi-institutional approach.

Interested? Applications for admission into the Department of Chemistry PhD program are due the 15th of December 2018, for the class entering in Fall 2019. Opportunities for under-represented students can be found at colorado.edu/smart/
More application information here:
tinyurl.com/ANYL-1st and colorado.edu/chemistry/prospective-graduate/admission