Name: Williamson, Christina

Researcher ID: http://www.researcherid.com/rid/D-1484-2016 **Website:** www.christinajwilliamson.com

Education



 2015 PhD in Earth Science, Goethe University of Frankfurt am Main, 1.0 magna cum laude, Thesis advisor: Joachim Curtius Thesis: "Inversion and Analysis Techniques for Understanding Aerosol Nucleation and Growth with Diethylene-Glycol Condensation Particle Counters"
 2011 MPhys, Oxford University (Exeter College)

Professional Appointments

- 2018 present Cooperative Institute for Research in Environmental Sciences (CIRES), University of Colorado (CU) Boulder and US National Oceanic and Atmospheric Administration (NOAA) Chemical Science Laboratory (CSL), Research Scientist II
- 2015 2018 CIRES, CU Boulder and NOAA CSL, Research Scientist I

Fellowships, Grants and Awards

- 2018-2020 US National Science Foundation, Asian summer monsoon Chemical and Climate Impacts Project (ACCLIP), \$130 000
- 2019 CIRES, Individual Outstanding Performance Award in Science and Engineering "For creatively improving and operating a set of unique atmospheric instruments to challenge and enhance process understanding and global climate models."
- 2019 NASA Group Achievement Award "For outstanding scientific accomplishments by the ATom team in exploring remote swaths of the global atmosphere to improve our understanding of climate and air quality."
- 2018-2019 NASA ATom, Reducing uncertainties on pre-industrial aerosol with measurements of the pristine marine atmosphere, \$59 000
- 2013-2015 Marie Skłodowska-Curie Fellowship, CLOUD-TRAIN
- 2012-2013 Marie Skłodowska-Curie Fellowship, CLOUD-ITN

Teaching and Supervision

- 2021 Supervisor Undergraduate Summer Student Field Work, NOAA CSL
- 2021 Supervisor CIRES research scientist, CIRES associate scientist
- 2014 Supervisor Bachelor's student project, *Goethe University*, Frankfurt am Main
- 2013 Supervisor Master's thesis, *Goethe University*, Frankfurt am Main
- 2006 Teaching English and Music in several schools in south India, students aged 4-16

Service to Profession

2020	Committee member - CIRES Committee for Diversity Inclusion, CU Boulder	
2020	Founder and director - NOAA CSL Anti-Racism Working Group	
2019	Grant proposal review panel - US Department of Energy Office of Biological and Environmental	
	Research	
2018-present	Organizer - AeroCom phase III model comparison experiment on new particle formation	
2016-present	Reviewer - Nature Communications, Aerosol Science and Technology, Atmospheric Chemistry and	
	Physics, Atmosphere and Journal of Advances in Modeling Earth Systems	
2015-present	Science communication for general audiences: christinajwilliamson.com/blog and as a guest writer for	
	online platforms such as NASA's Notes from the Field	
2015-2018	Founder and coordinator - NOAA CSL Early Career Group	

Meetings and Conferences

- Co-convener of the session "*Aerosols, Clouds and Chemistry in Polar and Pristine Regions*" at the 2019 American Geophysical Union Fall Meeting.
- Convener of the session "Aerosols and Clouds" at the 2018 NASA ATom Science Team Meeting and "Unexpected Discoveries" 2017 ATom Science Meeting
- Invited presentations at 2 international conferences and 6 universities/research institutes, including 2019 American Geophysical Union Fall Meeting, and keynote at 2018 AeroCon/AeroSat workshop.

2 Christina Williamson – Curriculum Vitae

- First author presentations at 15 international conferences, including the 2019 European Aerosol Conference, the 2018 International Aerosol Conference and the 2018 American Meteorological Society annual meeting.

Field and Chamber Studies

- 2019-2020 US National Science Foundation Asian summer monsoon Chemical and Climate Impacts Project (ACCLIP), Instrument Principle Investigator
- 2016-2018 NASA Atmospheric Tomography Mission (ATom)
- 2014 NUcleation CLoud and Aerosol Characterization Experiment (NUCLACE), Jungfraujoch High Alpine Research Station
- 2012-2015 Comics Leaving OUtdoor Droplets (CLOUD) at the European Center for Nuclear Research (CERN)

Instrument Development and Experimental Design

- 2019-2020 Adapting instrumentation to measure at higher altitudes and meet new certification requirements
 2015-2018 Design and execution of a system to operate multiple particle counting and sizing instruments on an aircraft platform, including in-flight calibration, trapping vapors in instrument exhaust lines and minimizing inlet sampling losses
 2016-2018 Improvement and characterization of two custom built instruments for high time resolution
- 2016-2018 Improvement and characterization of two custom built instruments for high time-resolution measurement of aerosol size distributions from 2-60 nm on aircraft platforms
- 2015-2017 Design and execution of ultra-fine aerosol generation systems
- 2013-2015 Organization and execution of experiments on the CLOUD chamber to understand aerosol nucleation and growth in a variety of conditions
- 2012-2015 Improvement and characterization of two diethylene-glycol condensation particle counters for detection of particles starting a 1.7 nm diameter

Other Relevant Experience

- 2011 Volunteer work designing and building shelters and sanitation facilities following an earthquake, Pisco, Peru
- 2010 CERN summer student, 13-week program of high energy physics lectures and conducting research on particle accelerators, Geneva, Switzerland
- 2009 Oxford University Physics Department summer internship in accelerator science, modeling interactions of fundamental particles, Oxford, UK
- 2008 Software development internship, Tessella, Abingdon, UK

Mobility

2015-present	Research Scientist, NOAA/CU Boulder, Colorado, USA	
2014	Secondment with Richard Flagan, California Institute of Technology, California, USA	
2012-2015	Marie Curie PhD Student, Goethe University of Frankfurt am Main, Germany	
2006-2011	Undergraduate Masters, University of Oxford, UK	

Languages

Fluent	English
Conversational	French, German, Spanish