

Gouri Prabhakar

Assistant Professor of Practice Earth,
Atmospheric, and Planetary Sciences
Purdue University
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Education and Appointments

2019 – Present	Assistant Professor of Practice, Purdue University
2017 – 2019	Research Affiliate, University of California Davis
2014 – 2017	Post-Doctoral Scholar, University of California Davis <i>Advisor: Christopher D. Cappa</i>
2012 – 2014	Ph.D., Atmospheric Science, University of Arizona <i>Advisor: Armin Sorooshian</i>
2009 – 2012	M.S., Atmospheric Science, University of Arizona <i>Advisor: Eric A. Betterton</i>
2007 – 2008	Lecturer, National College Jayanagar (<i>affiliated to Bangalore University</i>)
2005 – 2007	M.S., in Physics, Bangalore University

Teaching Experience

2019 - Present	Purdue University, Assistant Professor of Practice
2009 - 2011	University of Arizona, Teaching Assistant
2007 - 2008	National College (Bangalore University), Lecturer

Research Interests

Aerosol-cloud interactions, analysis of ground and aircraft observations to understand chemical and physical processes that dictate the formation of atmospheric aerosols and their interaction with cloud droplets, chemical imaging and characterization of aerosols

Field Research Experience

Monterey Aerosol Research Campaign (MONARC), Aircraft Campaign over Eastern Pacific, July 2019 (PI: Armin Sorooshian)

Nucleation in Clouds Experiment (NiCE), Aircraft Campaign over Eastern Pacific and Central Coast of California, July 2013 (PIs: Armin Sorooshian and John Seinfeld)

Publications

1. **Gouri Prabhakar**, Johannes Mulmenstadt, Matthew M. Coggon, Roy K. Woods, Haflidi H. Jonsson, Lynn M. Russell, Richard C. Flagan, John H. Seinfeld, Armin Sorooshian: Factors suppressing ship track formation: Study based on airborne and satellite observations, *In Preparation*
2. Joseph Schlosser, Hossein Dadashazar, Eva-Lou Edwards, Ali Hossein Mardi, **Gouri Prabhakar**, Connor Stahl, Haflidi Jonsson, Armin Sorooshian (Submitted in 2019): Relationships between Giant Sea Salt Aerosol and Marine Boundary Layer Conditions: Insights from Repeated Identical Flight Patterns, Submitted to *J. Geophys. Res. Atmos.*
3. Armin Sorooshian, Alexander B. MacDonald, Hossein Dadashazar, Kelvin H. Bates, Matthew M. Coggon, Jill S. Craven, Ewan Crosbie, Scott P. Hersey, Natasha Hodas, Jack J. Lin, Arnoldo Negron Marty, Lindsay C. Maudlin, Andrew R. Metcalf, Shane M. Murphy, **Gouri Prabhakar**, Tracey A. Rissman, Taylor Shingler, Varuntida Varutbangkul, Zhen Wang, Roy K. Woods, Patrick Y. Chuang, Athanasios Nenes, Haflidi H. Jonsson, Richard C. Flagan and John H. Seinfeld (2018): A multi-year data set on aerosol-cloud-precipitation-meteorology interactions for marine stratocumulus clouds, *Sci. Data*, doi: 10.1038/sdata.2018.26
4. **Gouri Prabhakar**, Caroline Parworth, Xiaolu Zhang, Hwajin Kim, Dominique Young, Andreas J. Beyersdorf, Luke D. Ziemba, John B. Nowak, Timothy H. Bertram, Ian C. Faloona, Qi Zhang and Christopher D. Cappa (2017): Observational assessment of the role of nocturnal residual-layer chemistry in determining daytime surface particulate nitrate concentrations, *Atmos. Chem. Phys.*, doi: 10.5194/acp-17-14747-2017
5. A. Sorooshian, **G. Prabhakar**, H. Jonsson, R. K. Woods, R. C. Flagan and J. H. Seinfeld (2015): On the presence of giant particles downwind of ships in the marine boundary layer, *Geophys. Res. Lett.*, doi: 10.1002/2015GL063179
6. **Gouri Prabhakar**, Armin Sorooshian, Emily Toffol, Avelino F. Arellano and Eric Betterton

- (2014): Spatiotemporal distribution of airborne particulate metals and metalloids in a populated arid region, *Atmos. Environ.*, 92, 339 – 347, doi: 10.1016/j.atmosenv.2014.04.044
7. **Gouri Prabhakar**, B. Ervens, Z. Wang, L. Maudlin, M. M. Coggon, H. H. Jonsson, J. H. Seinfeld and A. Sorooshian (2014): Sources of nitrate in stratocumulus cloud water: Airborne measurements during the 2011 E-PEACE and 2013 NiCE studies (2014): *Atmos. Env.*, 97, 166 – 173, doi: 10.1016/j.atmosenv.2014.08.019
 8. **Gouri Prabhakar**, E. A. Betterton, W. Conant and B. M. Herman, Effect of urban growth on aerosol optical depth – Tucson, AZ, 35 years later (2014) *Journal of Applied Meteorology and Climatology*, 53, 1876 – 1885, doi: 10.1175/JAMC-D-14-0001.1
 9. Z. Wang, A. Sorooshian, **G. Prabhakar**, M. M. Coggon and H. H. Jonsson (2014): Impact of emissions from shipping, land, and the ocean on stratocumulus cloud water elemental composition during the 2011 E-PEACE Field Campaign, *Atmospheric Environment*, doi:10.1016/j.atmosenv.2014.01.020

Professional Affiliations

American Geophysical Union, member

American Association for Aerosol Research, member

Purdue Climate Change Research Center, Purdue University, affiliate

Awards/Scholarships

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| 2013 | Graduate Professional Support Council Travel Grant, University of Arizona |
| 2012 | College of Science Galileo Circle Scholarship, University of Arizona |
| 2011 | College of Science Graduate Student Award for Exceptional Teaching, University of Arizona |
| 2002 | Space science fellowship, sponsored by the Indian Space Research Organization |

Professional Service and Outreach

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| 2019 | Expert Judge, Virtual Poster Showcase, AGU Fall Meeting |
| 2017 | Volunteer at the Lawrence Hall of Science, Berkeley, California |
| 2012 – 2013 | Chair of editorial committee, Atmospheric and Interdisciplinary Research Conference |