

Gouri Prabhakar

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

Ph.D., Atmospheric Sciences with a minor in Global Change, August 2014

University of Arizona, Tucson, AZ

Dissertation: Characteristics of Regional Aerosols: Southern Arizona and Eastern Pacific Ocean

M.S., Atmospheric Sciences, May 2012

University of Arizona, Tucson, AZ

Thesis: Effect of urban growth on aerosol optical depth – Tucson, AZ 35 years later

M.S., Physics specialization in Atomic, Molecular and Optical Physics, May 2007

Bangalore University, Bangalore, India

B.Sc., Physics, Chemistry and Mathematics (triple major), May 2005

St. Joseph's College (affiliated to Bangalore University), Bangalore, India

Research Experience

Assistant Professor of Practice

Present

Department of Earth, Atmospheric, and Planetary Sciences, Purdue University, West Lafayette

Research Affiliate

2017 – 2019

Christopher Cappa (Ph. D.), Department of Civil and Environmental Engineering, University of California, Davis

Post-Doctoral Researcher

2014 – 2017

Christopher Cappa (Ph. D.), Department of Civil and Environmental Engineering, University of California, Davis

Graduate Research Assistant

2012 – 2014

Armin Sorooshian (Ph. D.), Department of Atmospheric Sciences, University of Arizona

Graduate Research Assistant

2009 – 2012

Eric Betterton (Ph.D.) and William Conant (Ph.D.), Department of Atmospheric Sciences, University of Arizona

Independent Research Project **2006 – 2007**

Sharath Ananthamurthy (Ph. D.), Department of Physics, Bangalore University, India

Teaching Experience**Graduate Teaching Assistant** **2009 – 2012**

Department of Atmospheric Sciences

Lecturer in Physics **2007 – 2008**

National College (affiliated to Bangalore University), Bangalore, India

Courses taught

EAPS 22100/NRES 23000 Survey of Atmospheric Science

EAPS 23000 Laboratory in Atmospheric Science

EAPS 36000 Great Issues in Science and Society

EAPS 52100/CHM 58100 Atmospheric Chemistry

EAPS 53300 Atmospheric Physics II (Radiative Transfer in the Atmosphere)

Publications

- Coelho, Paula; Fitzgerald, Gracie; Isaacson, Kristofer; Diop, Rasul; **Prabhakar, Gouri**; Heffner, Stephanie; Verma, Akshat; Youngblood, Jeffrey; Choi, Youn Jeong; Surdyka, Stefanie; Spears, Samuel; Frisbee, Marty D.; Del Real, Katherine; Gustafson, Lauren; Torrez, Ana Maria; Proctor, Caitlin; Lee, Linda; Whitehead, Heather ; Doudrick, Kyle; Harpur, Brock; Whelton, Andrew (2024): Environmental and Private Property Contamination Following the Norfolk Southern Chemical Spill and Chemical Fires in Ohio, *Environ. Sci. and Tech.*, submitted
- Joseph Schlosser, Hossein Dadashazar, Eva-Lou Edwards, Ali Hossein Mardi, **Gouri Prabhakar**, Connor Stahl, Haflidi Jonsson, Armin Sorooshian (2020), Relationships between Giant Sea Salt Aerosol and Marine Boundary Layer Conditions: Insights from Repeated Identical Flight Patterns, *J. Geophys. Res. Atmos.*, doi: 10.1029/2019jd032346
- 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
- **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

- 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
- **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
- **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
- **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
- 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

Awards/Scholarships

Graduate Professional Support Council Travel Grant, August 2013, University of Arizona.
Herbert E. Carter Travel Award, University of Arizona

College of Science Galileo Circle Scholarship 2012, University of Arizona.

College of Science Graduate Student Award for Exceptional Teaching 2011, University of Arizona

Space science fellowship program sponsored by the Indian Space Research Organization, 2002.

Service

Judge for Purdue Undergraduate Research Expo

Judge for the Outstanding Student Presentation Awards, AGU Fall Meeting

Reviewer for the following journals: *Atmos. Chem. Phys.*, *Atm. Env.*, *The Journal of Purdue Undergraduate Research*

Volunteer at the Lawrence Hall of Science, Berkeley, 2017 to 2018

Member of Green Keepers – an organization dedicated to community service with a focus on environmental activities, September 2013 to 2014

Served as chair of editorial committee, Atmospheric and Interdisciplinary Research Conference, 2012 and 2013