

# Karim Lakhani

Georgia Institute of Technology ♦ Earth and Atmospheric Science (EAS)  
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## Education

### **PhD Candidate in Earth and Atmospheric Science (EAS)**

Georgia Institute of Technology (Georgia Tech), Atlanta, Georgia, United States (US) August 2018 - present  
Advisor: Jean Lynch-Stieglitz

### **Bachelor of Science in Chemical Engineering**

California Institute of Technology (Caltech), Pasadena, California, US September 2014 - June 2018  
Specialized in Environmental Science and Engineering

## Research Experience

### **Graduate Research/Teaching Assistant**

Advisor: Jean Lynch-Stieglitz, Georgia Tech (2018-current)  
Topic: Investigating Ocean-Atmosphere Interactions with Planktonic Foraminifera in the Tropical Pacific during the Last Glacial Maximum (LGM)

### **Summer Undergraduate Research Fellow (SURF)**

Advisor: Tapio Schneider, Caltech (2017)  
Topic: Atmospheric Energy Balance and its effect on the Intertropical Convergence Zone in CMIP5 and PMIP3 models

Advisor: Mitchio Okumura, Caltech (2016)  
Topic: Ethane as a Marker for Thermogenic Methane in Aliso Canyon

Advisor: Geoffrey Smith, University of Georgia, Athens, Georgia, US (2015)  
Topic: Development of a three-wavelength cavity ring-down spectrometer

## Publications

**K.Q. Lakhani**, J. Lynch-Stieglitz, M.M. Monteagudo, Constraining Calcification Habitat using Oxygen Isotope Measurements in Tropical Planktonic Foraminiferal tests from Surface Sediments, *Marine Micropaleontology*, 170, 102074, [doi.org/10.1016/j.marmicro.2021.102074](https://doi.org/10.1016/j.marmicro.2021.102074), 2022

## Invited Seminars

WHOI/MIT Paleoclimate Seminar November 2022

## Teaching Experience

### **Grader for EAS 4300: Oceanography, Spring 2022**

Georgia Tech

### **Grader for EAS 6500: Climate and Global Change, Fall 2021, 2022**

Georgia Tech

### **Teaching Assistant for EAS 4350/6136: Paleoclimatology and Paleoceanography, Spring 2021**

Georgia Tech

- Assisted professor of record in creating data analysis projects suitable for reinforcing course objectives
- Guided students on understanding climate data and performing analyses

### **Teaching Assistant for EAS 1601: How to Build a Habitable Planet, Spring 2019, Fall 2019, Fall 2020**

Georgia Tech

- Taught 2 sections of ~20 students in a laboratory setting
- Proctored and graded exams and labs for the class

### **Teaching Assistant for SA 16: Cooking Basics, Winter 2018 - Spring 2018**

Caltech

- Taught groups of 6-12 students how to cook and helped cook a set of recipes every week
- Designed a set of recipes for an Indian cuisine menu
- Led a group as head chef in creating a five-course meal

## Conference Presentations

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**K.Q. Lakhani**, J. Lynch-Stieglitz, E. di Lorenzo, M.M. Monteagudo, B. Findley, G. Kim, Upper Ocean Conditions in the Tropical Pacific from Oxygen Isotopes in Planktonic Foraminifera, 14<sup>th</sup> International Conference on Paleoclimate (2022)

**K.Q. Lakhani**, J. Lynch-Stieglitz, M.M. Monteagudo, Constraining Tropical Thermocline Structure using Oxygen Isotope Measurements in Planktonic Foraminiferal Tests from Multiple Species, American Geophysical Union Fall Meeting Poster Presentation (2021)

**K.Q. Lakhani**, J. Lynch-Stieglitz, E. Di Lorenzo, M.M. Monteagudo, Planktonic Foraminifera, Upper Ocean Density, and Surface Winds, Comer Climate Conference Poster Presentation (2020)

**K.Q. Lakhani**, J. Lynch-Stieglitz, M.M. Monteagudo, Global Spatial Trends in the Apparent Calcification Depth for Planktonic Foraminifera from the Late Holocene

- American Geophysical Union Fall Meeting Poster Presentation (2019)
- Comer Climate Conference Oral Presentation (2019)
- Georgia Tech EAS Graduate Student Symposium Oral Presentation (2019)

## Volunteer Experience

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### *Treasurer, Graduates in Earth and Atmospheric Science*

March 2020 – August 2021

- Coordinated organization funding and managed spending for events

### *Student Recruitment Chair, Graduates in Earth and Atmospheric Science*

January 2019 – March 2020

- Coordinated the Prospective Students weekend for the department and provide input to the graduate student organization in the department

### *Community Consulting Team Project*

January 2019 – May 2019, January 2020 – June 2020

- Assisted the non-profit organization “Keep North Fulton Beautiful” in reevaluating their business model and diversifying funding sources for 2019 project
- Assisted the non-profit organization “Community Farmers Market” in developing a transition plan for how they organize their data on customers, vendors, and donors for 2020 project

### *Ruddock House Social Manager*

April 2016 – January 2018

- Managed a team of 5 students to organize, set up, and clean up social events for Ruddock dormitory

## Accolades

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**Herbert P. Haley Fellowship, Georgia Tech, 2022-2023**

**Research Excellence award, Georgia Tech EAS Department, 2022**

**Comer Climate Fellow, 2019-present**

**Interviewed for Caltech Associates newsletter, 8/8/2018, <https://associates.caltech.edu/news/climate-mathematician-summer-researcher-explores-future-solutions>**

**The Associates SURF Fellow, 2017**

**James J. Morgan SURF Fellow, 2016**

## Outreach

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Volunteer judge, **Undergraduate Research Symposium, Georgia Tech (2019)**

Volunteer presenter, **Haunted Lab Tours, Georgia Tech EAS Department (2018)**

Session Convener, **Graduate Student Symposium, Georgia Tech EAS Department (2018)**