Ali Hasan Siddiqui https://asiddi24.github.io/ ali_siddiqui@brown.edu

Research Interests

Climate variability in the north Atlantic and Arctic ocean. AMOC-Arctic interactions and influence of Arctic freshwater on the global overturning circulation. History of climate science.

Education

Johns Hopkins University, Baltimore, Maryland USA
Ph. D. in Earth and Planetary Sciences **Jan 2025**
Dissertation Topic: "*Salinity variability in the subpolar north Atlantic.*"
Advisor: Thomas W.N. Haine

Indian Institute of Science, Bengaluru, Karnataka India
M.Tech. in Climate Sciences **May 2018**
Thesis: "*Climate Variability in the Antarctic.*"
Advisor: J. Srinivisan

National Institute of Technology, Bhopal, Madhya Pradesh India
B.Tech. in Civil Engineering **May 2015**

Professional Appointments

Brown University, Providence, Rhode Island USA
Postdoctoral Research Associate **Feb 2025–present**

Publications

Ali H. Siddiqui, Thomas W. N. Haine, An T. Nguyen, Martha Buckley (2024). "Controls on upper ocean salinity variability in the eastern subpolar North Atlantic during 1992–2017". *JGR Oceans*, [paper].

Thomas W. N. Haine, **Ali H. Siddiqui**, and Wenrui Jiang (2023). "Arctic freshwater impact on the Atlantic Meridional Overturning Circulation: Status and prospects". *Philosophical Transactions of the Royal Society A*, 381(2262), 20220185, [paper].

Wilbert Weijer, Thomas WN Haine, **Ali H Siddiqui**, Wei Cheng, Milena Veneziani, Prajvala Kurtakoti (2022). "Interactions between the Arctic Mediterranean and the Atlantic Meridional Overturning Circulation: A Review". *Oceanography*, 35(3/4), 118–127, [paper].

Thomas Haine, Renske Gelderloos, Miguel Jimenez-Urias, **Ali Siddiqui**, Gerard Lemson, Dmitry Medvedev, Alex Szalay, Ryan Abernathey, Mattia Almansi, Christopher Hill (2021). "Computational Oceanography is Coming of Age". *Bulletin of the American Meteorological Society*, [paper].

Almansi, M., R. Gelderloos, T. W. N. Haine, A. Saberi, and **A. H. Siddiqui** (2019). "OceanSpy: A Python package to facilitate ocean model data analysis and visualization" *Journal of Open Source Software*, 4(39), 1506, [paper].

Papers in preparation

Ali H. Siddiqui, Thomas W. N. Haine, Anand Gnanadesikan, Who M. Kim, Gokhan Danabasoglu, Dan Amrhein. "Natural Variability of Upper Ocean salinity in the Subpolar North Atlantic" (*In prep for Journal of Climate*).

Ali H. Siddiqui, Thomas W.N. Haine. "Emerging signals of anthropogenic change in the subpolar north Atlantic" (*In prep for GRL*).

Honors and Awards

JHU Dean's Teaching Fellowship, Fall 2023

NCAR Advanced Study Program's Graduate Student (GVP) Fellowship, Summer 2023

Graduate Fellow (Declined) JHU Center for Medical Humanities and Social Medicine, 2023

Science Communication Fellow, JHU Professional Development and Career Office, 2022

Department Fellowship, Earth and Planetary Sciences, JHU, 2018–2019

Grantham Fellowship, Divecha Center for Climate Change, IISC Bangalore, 2017–2018

Outstanding student award, Outgoing class of Civil Engineering, NIT Bhopal, 2015

Presentations

AGU, Washington DC, Oral talk	December 2024
Ocean Sciences, New Orleans, Poster	February 2024
Summer Student Research Poster Symposium, NCAR, Boulder CO, Poster	August 2023
Arctic Processes in CMIP6 Bootcamp, Poster	October 2022
US AMOC Science Meeting, Woods Hole, MA, Poster	April 2022
Earth System Observation and Modeling Graduate Student Symposium, George Mason University, Oral talk	March 2022
Ocean Sciences, virtual, Poster	Feb 2022
Ocean Sciences, virtual, Town Hall tutorial	Feb 2022
UMD Oceans brown bag seminar (Invited Talk)	Dec 2021
27th IUGG General Assembly, Montreal, Poster	July 2019
Center for Atmospheric and Oceanic Sciences, IISc Bangalore, Talk	September 2017
Summer School on Antarctic Climate Variability and Ice Dynamics National Centre for Polar and Ocean Research (NCAOR), Goa, Poster	May 2017

Teaching Experience

Instructor Fall 2023

Proposed, designed and taught an undergraduate seminar course as part of the Dean's Teaching Fellowship at Johns Hopkins on the *History of Climate Science*. The course charts the evolution of the field of climate science over the last 250 years. [Syllabus][Course Feedback]

Teaching Assistant Fall 2024

Remote Sensing of the Environment

Undergraduate course, Johns Hopkins University.

Teaching Assistant Spring 2022, 2023

Guided tour of the planets

Undergraduate course, Johns Hopkins University. [TA feedback]

Teaching Assistant Fall 2020

Introduction to Global Environmental Change

Undergraduate course, Johns Hopkins University

Teaching Assistant Spring 2020

Oceans and Atmospheres

Undergraduate course, Johns Hopkins University. [TA feedback]

Additional Training	Teaching Academy, Certificate of Completion Center for Teaching Excellence and Innovation, JHU	2024
	Arctic Processes in CMIP6 Bootcamp CLIVAR/CliC Northern Oceans Region Panel, Søminestationen, Denmark	11-21 October 2022
	Summer School on *Bouyancy Driven Flows* International Center for Theoretical Sciences (ICTS), Bangalore	June 2017
Field Experience	US GO-SHIP A22 transect LADCP & CTD deployment and Operations Chief Scientist : Dr. Viviane Menezes	RV Thomas G. Thompson April 18 - May 17, 2021
Academic and University Service	**Reviewer** for Geophysical Research Letters	
	Expert Reviewer for IPCC report, Working Group I,	2021
	Reviewer for Advanced Undergraduate Research Fellowship, Brown University	2025
	Graduate Representative Organization, *Co-Chair, EPS Rep*, JHU	2023
	Johns Hopkins Cross-Institutional Student Advisory Committee, *Graduate Rep*,	2023
	Unlearning Racism in Geoscience (URGE), EPS, JHU *Pod member*,	2023
	Teachers and Researchers United - UE, Graduate worker union, *Organizer*, JHU	2022-2024
	Coordinator. Atmospheres and Oceans seminars, Earth and Planetary Sciences, JHU	2020–2022
	Project Bridge, *Volunteer* JHU	2019