## Ali Hasan Siddiqui

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Department of Earth and Planetary Sciences

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RESEARCH INTERESTS

Climate variability in the north Atlantic and Arctic ocean on decadal time scales. 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. Candidate

• Dissertation Topic: "Controls on Large Scale Freshwater Anomalies in the Subpolar North Atlantic." Advisor: Thomas W.N. Haine

Indian Institute of Science, Bengaluru, Karnataka India

M.Tech., Climate Sciences, 2018

• Thesis: "Climate Variability in the Antarctic." Advisor: J. Srinivisan

National Institute of Technology, Bhopal, Madhya Pradesh India

B.Tech. Civil Engineering, 2015

**PUBLICATIONS** 

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

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<br>Awards |  |
|----------------------|--|
| Presentations        |  |

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

| 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           |
| Ocean Sciences, virtual, Poster  | Feb 2022             |
| Ocean Sciences, virtual, Town Hall tutorial  | Feb 2022             |
| UMD Oceans brown bag seminar (Invited Talk)  | $\mathrm{Dec}\ 2021$ |
| 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<br>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 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

Spring 2020 Teaching Assistant

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

11-21 October 2022

CLIVAR/CliC Northern Oceans Region Panel, Søminestationen, Denmark

Summer School on Bouyancy Driven Flows

June 2017

International Center for Theoretical Sciences (ICTS), Bangalore

FIELD EXPERIENCE US GO-SHIP A22 transect RV Thomas G. Thompson LADCP & CTD deployment and Operations April 18 - May 17, 2021 Chief Scientist : Dr. Viviane Menezes Graduate Representative Organization, Co-Chair, EPS Rep, JHU ACADEMIC AND 2023 University Johns Hopkins Cross-Institutional Student Advisory Committee, Graduate Rep, 2023 SERVICE Unlearning Racism in Geoscience (URGE), EPS, JHU Pod member, 2023 Teachers and Researchers United - UE, Graduate worker union, Organizer, JHU 2022-present Expert Reviewer for IPCC report, Working Group I, 2021 Coordinator. Atmospheres and Oceans seminars, Earth and Planetary Sciences, JHU 2020 - 2022

2019

Project Bridge, Volunteer JHU