Aditya Narayanan

Postdoctoral Researcher, Department of Marine Sciences, Carl Skottsbergs Gata 22 B, Gothenburg University, Sweden 41319

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Born: May 14th, 1988 Nationality: Indian

Current position

Postdoctoral Researcher, Department of Marine Sciences, Gothenburg University, Sweden

Areas of specialization

Shelf sea processes • Southern Ocean dynamics • Weddell Sea Polynya • Fluid Dynamics • Marine Turbulence

Education

Ph.D., Physical Oceanography, IIT Madras
MS., Ocean Engineering, IIT Madras
BTech in Civil Engineering, National Institute of Technology, Jalandhar

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Publications

Journals

Aditya Narayanan, Sarah Gille, Matthew Mazloff, Murali K, "Water mass characteristics of the Antarctic margins and the production and seasonality of Dense Shelf Water", *Journal of Geophysical Research: Oceans*, doi: https://doi.org/10.1029/2018JC014907

Queste, B. Y., E. P. Abrahamsen, M. D. du Plessis, S. T. Gille, L. Gregor, M. R. Mazloff, A. Narayanan, F. Roquet, and S. Swart, (2020), "Southern Ocean" [in "State of the Climate in 2019"], *Bull. Amer. Meteor. Soc.*, 101, S307-S309, doi:

Under preparation

Aditya Narayanan, Sarah Gille, Matthew Mazloff, Fabien Roquet, K. Murali, "Antarctic Slope Front: Shelf Water and Circumpolar Deep Water interaction"

Conferences

- Aditya Narayanan, Sarah T. Gille, Matthew Mazloff, Murali K, (2019), "Antarctic 2019 Shelf Break Processes and Circumpolar Deep Water Intrusion", AGU Fall Meeting, San Fransisco
- Aditya Narayanan, Sarah T. Gille, Matthew Mazloff, Murali K, (2019), "Antarctic 2019 shelf break processes and their role in determining the bottom temperature regime of the shelf seas", National Conference on Polar Sciences, National Centre for Polar and Ocean Research, Goa, India.
- Aditya Narayanan, Murali K, (2018), "Analysis of Turbulence in the Weddell Sea: 2018 Observations and Modeling", Ocean Sciences Meeting, Portland.
- Aditya, Narayanan (2016), "Mathematical and numerical modeling of the physics 2016 of cold water downslope flows", CLIVAR Open Science Conference, Qingdao.

Teaching

- Informal mentoring of M.Sc. student's dissertation on the dynamics of the Antarc-2020tic Circumpolar Current. 2021
- Informal mentoring of M.Sc. student's dissertation on the watermasses of the 2020-
- Antarctic marginal seas. 2021
- Lectured onboard research vessel during NCPOR's Southern Ocean Expedition Feb 2020 2020: on the basics of oceanographic, atmospheric, and climate data analysis and conducted practical workshops on using Python data analysis packages.
- Research seminar on the bottom temperature regime of the marginal seas of Antarc-Sep 2019 tica, Department of Ocean Engineering, IIT Madras.
- Talk on "Climate Systems" as part of the Open Seminar Series, Department of Oct 2018 Physics, IIT Madras.
- May 2018 Research Seminar on "Downslope Flows in the marginal seas of the Southern Ocean", Department of Ocean Engineering, IIT Madras.
- Nov 2017 Lectured in a workshop on numerical and scientific computing using Python, Department of Ocean Engineering, IIT Madras.

Grants

- Co-wrote and defended a grant received from Pacer Outreach Program (POP) under The Polar Science And Cryosphere (PACER) Programme initiative granted by ESSO-NCPOR (MoES) for the project titled, "Shelf sea and shelf break processes of the Antarctic margins and the production of Dense Shelf Water", for the period July 2019 to July 2021, sanctioned for an amount of Rs. 24,03,000/-.
- 2019- Co-wrote and defended successfully a project proposal "Antarctic Slope Front dynamics and cross slope exchanges of heat in the Prydz Bay" to sail with the Indian Southern Ocean Expedition, 2020 to be conducted by ESSO-NCPOR, Goa.

Academic achievements & awards

- Student participant in the Indian Southern Ocean Expedition, January to March 2020.
- AGU Student Travel Grant to attend the Fall Meeting in San Fransisco.
- ^{1st} runner up for best poster award during Young Polar Scientist Meeting held at the National Conference on Polar Sciences, National Center for Polar and Ocean Research, Goa, 2019.
- Erik Berkner travel grant to attend Ocean Sciences Meeting, Portland, 2018 (joint conference of AGU, TOS, and ASLO).
- 2016 WCRP CLIVAR Open Science Conference, Qingdao, 2016, travel assistance award.

Workshops Attended

- Air Sea Interactions in the Bay of Bengal, organised by TIFR-ICTS, Bengaluru
- International Summer School on Earth System Modeling, jointly organised by ICTP, Trieste, Italy, and Indian Institute of Tropical Meteorology, Pune
- Numerical modeling of free surface flows in coastal and ocean engineering, hands on experience, jointly organised by IITM and NTNU
- 2015 Internation Symposium on Antarctic Earth Sciences, Goa
- 2014 High Performance Computing Workshop, jointly organised by IIT Madras, IIT Bombay, C-DAC Pune, and NVIDIA Corporation

Skills and tools

- Descriptive and dynamical physical oceanography.
- Ship based measurements: CTD, underway CTD, LADCP etc.
- Climate and ocean data analysis
- Scientific computing and computational fluid dynamics

Appointments held

2019-	Senior Project Scientist, IC&SR, IIT Madras
2013-	Half time teaching assistant, IITM
2019-	Project Engineer and Project Manager, Flowline Systems Pvt Ltd
2013	
	Service
2018	Assisted university committee on improving diversity and representation in graduate student selection processes.
2014	Organised a graduate students' research conference.