College of Earth, Ocean and Atmospheric Sciences
Burt 434, Oregon State University
Corvallis, OR, USA 97330.
Last updated: January 16, 2019

541-737-8622
deepak@cherian.net
www.cherian.net
http://orcid.org/0000-0002-6861-8734

Deepak A. Cherian

Education

2016: Ph.D., MIT-WHOI Joint Program in Oceanography, Physical Oceanography
Dissertation: When an eddy encounters shelf-slope topography.

2010: M.Tech., Ocean Engineering & Naval Architecture,
Indian Institute of Technology, Kharagpur.

2010: B.Tech. (Hons.), Ocean Engineering & Naval Architecture,
Indian Institute of Technology, Kharagpur.

Positions

2019 Mar – present: Postdoctoral Fellow, National Center for Atmospheric Research

2017 Jan – 2019 Mar: Research Associate (Post-Doc), Oregon State University

2016 Sep – 2017 Jan: Postdoctoral Investigator, Woods Hole Oceanographic Institution

2010–2016: Graduate research assistant, Massachusetts Institute of Technology
& Woods Hole Oceanographic Institution

2009 May–July: Research intern, Earth and Planetary Sciences, John Hopkins University

2008 May–July: Research intern, Center for Ocean-Atmosphere Prediction Studies,
Florida State University

2007 May–July: Research intern, National Institute of Oceanography, Goa, India

Articles

Cherian, D.A. and Brink, K.H. (2018). "Shelf flows forced by deep-ocean anticyclonic eddies at the shelfbreak". Journal of Physical Oceanography. 48 (5): 1117-1138

Cherian, D.A. and Brink, K.H. (2016) "Offshore Transport of Shelf Water by Deep-Ocean Eddies.", Journal of Physical Oceanography 46 (12): 3599–3621

Brink, K.H. and Cherian, D.A. (2013) "Instability of an idealized tidal mixing front: Symmetric instabilities and frictional effects."
Journal of Marine Research 71 (6): 425–450.

Haine, T.W.N. and Cherian, D.A. (2013) "Analogies of Ocean/Atmosphere Rotating Fluid Dynamics with Gyroscopes: Teaching Opportunities."
Bull. Amer. Meteor. Soc. 94: 673–684.

Cherian, D.A., Farrar, J.T. and Durland, T.S. (in prep., available on request)
"The upper-ocean vertical structure of 7-day period inertial-gravity waves in the equatorial Pacific."

Talks & Posters

2019 Jun: "Shelf flows forced by deep-ocean eddies at the shelfbreak." (Invited talk)
Gordon Research Conference, Coastal Ocean Dynamics.

2019 Mar: "The wind-forced seasonal cycle of mixing in the Bay of Bengal"
Physics of the Ocean and Atmosphere Seminar,
College of Earth, Ocean and Atmospheric Sciences, Oregon State University.

2018 Jun: "Turbulent mixing (and lack thereof) in the Bay of Bengal" (Poster)
Gordon Research Conference, Ocean Mixing.

2018 Feb: "Turbulent mixing (and lack thereof) in the Bay of Bengal" (Talk)
2018 Ocean Sciences Meeting, Portland.

2017 Jun: "Shelf-flows forced by deep-ocean eddies at the shelfbreak" (Poster)
Gordon Research Seminar & Conference, Coastal Ocean Dynamics.

2017 Mar: "Offshore export of shelf water by deep-ocean eddies"
Physics of the Ocean and Atmosphere Seminar,
College of Earth, Ocean and Atmospheric Sciences, Oregon State University.

2017 Feb: "Offshore export of shelf water by deep-ocean eddies"
Institute of Oceanography, National University of Taiwan.

2016 Oct: "Arresting an eddy's cross-isobath translation."
Physics of the Ocean and Atmosphere Seminar,
College of Earth, Ocean and Atmospheric Sciences, Oregon State University.

2016 Aug: "When an eddy encounters shelf-slope topography."
Department Seminar, Center for Atmospheric and Oceanic Sciences,
Indian Institute of Science.

2016 Mar: "Eddy vs. shelf-slope topography."
Sack Lunch Seminar, Massachusetts Institute of Technology.

2016 Feb: "How eddies at the shelfbreak permanently export shelf water." (Talk)
2016 Ocean Sciences Meeting, New Orleans.

2015 June: "Cross-isobath motion of eddies across slopes." (Talk, Poster)
Gordon Research Seminar & Conference, Coastal Ocean Modeling.

2013 June: "Dynamics of the flood tide jet through Cattle Pass." (Poster)
Gordon Research Conference, Coastal Ocean Circulation

Teaching

2017 Winter Term: Guest Lecture for "Geophysical Waves" ,
(graduate level course), Oregon State University

2014 Fall semester: Teaching Assistant, "Observational Physical Oceanography"
(graduate level course), Massachusetts Institute of Technology.

2013 Jan: Lecturer, Four lectures on "Physical Oceanography",
WHOI Winter Semester for Undergraduates
(aimed at students from liberal arts colleges).

2012 Jan: Teaching Assistant, "Physical Oceanography",
WHOI - British Petroleum course.

Outreach & Service

Reviewer for Geophysical Research Letters, Journal of Geophysical Research - Oceans,
Journal of Marine Research and Journal of Physical Oceanography.

Conducted rotating tank lab demonstrations for broad audience (public,
scientists, students — graduate and K-12) at WHOI GFD Open Days, 2013.

Additional Training

2014 Coastal and Estuarine Field Methods Summer School,
Woods Hole Oceanographic Institution

2013 Teaching Certificate Program, Massachusetts Institute of Technology

2012 Estuarine and Coastal Fluid Dynamics Summer School,
University of Washington Friday Harbor Laboratories

Awards

2010 Institute Silver Medal, Indian Institute of Technology, Kharagpur
for exceptional academic performance in department.

2008 Hem Raut Award, Indian Institute of Technology, Kharagpur
for exceptional academic performance in department.

Fieldwork

2018 Sep: *R/V Thomas G. Thompson*, Western Pacific. PI: Jim Moum (OSU)

2017 Feb: *R/V Roger Revelle*, South China Sea. PI: Lou St-Laurent (WHOI)

2014 July: *R/V Tioga*, off Martha's Vineyard. (student-run cruise for summer school)
PI: Deepak Cherian, Jonathan Fincke, Cara Manning (WHOI).

2013 Nov: *R/V Roger Revelle*, Bay of Bengal. PI: Emily Shroyer (OSU)

2011 July: *SSV Corwith Cramer*, Middle Atlantic Bight. PI: Donglai Gong (WHOI)

Software

Contributed to python packages `xarray` (core developer) and `tracpy`.

References

Prof. Emily Shroyer (OSU, postdoctoral advisor)

Prof. James Moum (OSU, postdoctoral co-advisor)

Dr. Kenneth Brink (WHOI, thesis advisor)

Dr. Steve Lentz (WHOI, thesis committee member)

Prof. James Yoder (URI, teaching reference)