

CURRICULAM VIATE

DR. SABU PRABHAKARAN

Scientist-D, Ocean Science Group
National Centre for Antarctic and Ocean Research
Ministry of Earth Sciences, Govt. of India
Phone: +91- (0)832-2525641
Email: sabu@ncaor.gov.in



ACADEMIC BACKGROUND:

2009 Ph.D. (Physical Oceanography), National Institute of Oceanography, Kochi
2002 M.Sc. (Physical Oceanography), Cochin University of Science & Technology, Kochi
1999 B.Ed. (Physical Science), Kerala University
1997 B.Sc. (Physics), Kerala University

PROFESSIONAL CARRIER:

2016 Scientist-D, National Centre for Antarctic & Ocean Research, MoES, Goa
2011 Scientist-C, National Centre for Antarctic & Ocean Research, MoES, Goa
2009 Project Scientist-B, Centre for Marine Living Resources & Ecology, MoES, Kochi
2006 Senior Research Fellow (CSIR), National Institute of Oceanography, Kochi
2003 Junior Research Fellow, National Institute of Oceanography, Kochi
2002 Project Assistant, National Institute of Oceanography, Kochi

AWARDS & RECOGNITIONS:

2016 NCAOR funding to participate in SCAR conference in Malaysia during 2016
2006 Senior Research Fellowship (CSIR)
2003 Junior Research Fellowship (MoES)

RESEARCH INTERESTS:

Hydrodynamics of the Southern Ocean
Air-Sea-Ice interaction in the Southern Ocean
Small-scale mixing in the Southern Ocean & Arctic fjord
Upper Ocean physics on chlorophyll variability

ONBOARD EXPERIENCE:

Altogether more than 600 days sailing experience in Arabian Sea, Bay of Bengal, Andaman Sea, Tropical Indian Ocean, Southern Ocean and coastal waters of Antarctica as part of various national scientific programmes

MEMBERSHIPS:

Ocean Society of India
Indian Meteorological Society

PUBLICATIONS:

24. Honey U. K. Pillai, N. Anilkumar, C. T. Achuthankutty, C. R. Mendes, **P.Sabu**, K.V. Jayalakshmi, C. R. Asha Devi, Dipti Dessai, J.V. George, Sini Pavithran, , C. K., Hari Devi, S.C.Tripathy, and N.R. Menon (2018). Planktonic food web structure at SSTF and PF in the Indian Ocean sector of Southern Ocean during austral summer 2011, *Polar Research*, *In Press*.
23. Anilkumar, N. and **P. Sabu** (2017). Physical process influencing the ecosystem of the Indian sector of the Southern Ocean- An overview, *Proceedings of Indian National Science Academy*, 83, 363-376.
22. Bhaskar, J.T., S.C. Tripathy, **P. Sabu**, C. M. Laluraj and S. Rajan (2016). Variation of phytoplankton assemblages of Kongsfjorden in early autumn 2012: A microscopic and pigment, *Environmental Monitoring and Assessment* 188 (4):224.

21. Jayalakshmi, K.J., **P. Sabu**, C.R. Asha Devi and V.N. Sanjeevan (2015). Response of micro- and mesozooplankton in the southwestern Bay of Bengal to a cyclonic eddy during the winter monsoon, 2005, *Environmental Monitoring and Assessment*, 187:473.
20. **Sabu, P.**, C.R. Asha Devi, C.T.Lathika, V.N.Sanjeevan and G.V.M.Gupta (2015), Characteristics of a cyclonic eddy and its influence on mesozooplankton community in the northern Bay of Bengal during winter monsoon, *Environmental Monitoring and Assessment*, 187 (6).
19. **Sabu, P.**, J.V. George, N. Anilkumar, Racheal Chacko, Vinu Valsala and C.T. Achuthankutty (2015), Observations of watermass modification by mesoscale eddies in the southern Subtropical Indian Ocean, *Deep Sea Research II* 118(B), 152-161.
18. Anilkumar, N., R. Chacko, **P. Sabu** and J.V. George (2015), Freshening of Antarctic Bottom Water in the Indian Ocean Sector of Southern Ocean, *Deep Sea Research II*, 118 (B), 162-169.
17. Tripathy, S. C., S. Pavithran, **P. Sabu**, H. U. K. Pillai, D. R. G. Dessai and N. Anilkumar (2015), Role of deep chlorophyll maxima on primary production variability in the Indian Ocean sector of the Southern Ocean during austral summer, 2011, *Deep Sea Research II*, 118 (B), 240-249.
16. **Sabu, P.**, N. Anilkumar, J.V. George, R. Chacko, S.C.Tripathy and C.T. Achuthankutty (2014). Influence of air-sea-ice interactions on anomalous phytoplankton in the Indian Ocean sector of Antarctic Zone of the Southern Ocean during Austral summer, 2011, *Polar Science*, 8(4), 370-384.
15. Anilkumar, N., R. Chacko, **P. Sabu**, Honey U.K.Pillai, J. V.George and C.T. Achuthankutty (2014). Biological response to physical processes in the Indian Ocean sector of the Southern Ocean, *Environment Monitoring and Assessment* 186, 8109-8124.
14. Tripathy, S.C., S. Pavithran, **P. Sabu**, R.K.Naik, Sharon B Noronha, P.V.Bhasker and N.Anilkumar (2014). Is phytoplankton productivity in the Indian Ocean sector of Southern Ocean affected by pigment packaging effect? *Current Science*, 1019-1026.
13. Jacob, J., Prosenjit Ghosh, A.P. Dineshbabu, **P. Sabu**, K.Sreenivas and B.Sulochanan (2014). Hydrographic characteristics and oxygen isotopic signatures of water of a coastal environment (Mangalore) along the South Eastern Arabian Sea, *Journal of Oceanography* 70, 251-256.
12. Anilkumar, N., J. V. George, R. Chacko, M.Nuncio and **P. Sabu** (2014). Variability of fronts, fresh water input and chlorophyll in the Indian Ocean sector of Southern Ocean, *New Zealand Journal of Marine and Fresh water research*, 49 (1), 20-40.
11. Laluraj, C.M., K.K.Balachandran and **P. Sabu** (2012). Biogeochemistry of the southeastern Arabian Sea during spring intermonsoon, *Advances in oceanography and limnology*, 1-13.
10. George, R., K.R.Muraleedharan, G.D.Martin, **P.Sabu**, V. J. Gerson, P.K.Dineshkumar, S.M.Nair, N.Chandramohanakumar and K.K.C.Nair (2012). Nutrient biogeochemistry of the eastern Arabian Sea during the southwest monsoon retreat. *Environmental Earth Sciences*, 68 (3), 703-718.
9. **Sabu P.** and C. Revichandran (2011). Mixed layer processes of the Arabian Sea Warm Pool during spring intermonsoon:-A study based on insitu and satellite data, *International Journal of Remote Sensing*, 32(19), 5425- 5441.
8. Ashadevi, C. R., R. Jyothibabu, **P. Sabu**, Josia Jacob, H. Habeebrehman, P. Prabhakaran, K. J. Jayalakshmi and C. T. Achuthankutty (2010)., Seasonal variations and trophic ecology of microzooplankton in the southeastern Arabian Sea, *Continental Shelf Research*, 30, 1070-1084.

7. Sanjeevan, V. N., P. Jasmine, B. R. Smitha, T. Ganesh, **P. Sabu**, and T. Shunmugaraj (2009). Eastern Arabian Sea marine ecosystems, *Proc. of International conference on Marine Ecosystems- Challenges and Opportunities (MECOS)*, The Marine Biological Association of India, 1-2.
6. Habeebrehman, H., M.P. Prabhakaran, Josia Jacob, **P. Sabu**, K.J. Jayalakshmi, C.T. Achuthankutty and C.Revichandran (2008). Variability in biological responses influenced by upwelling events in the Eastern Arabian Sea. *Journal of Marine systems*, 74, 545-560.
5. Jyothibabu, R., C.R. Ashadevi, N.V. Madhu, **P. Sabu**, K.V. Jayalakshmy, Josia Jacob, H. Habeebrehman, M.P. Prabhakaran, T. Balasubramanian and K.K.C. Nair (2008). The response of microzooplankton (20–200µm) to coastal upwelling and summer stratification in the southeastern Arabian Sea, *Continental Shelf Research*, 28, 653–671.
4. Karuppasamy, P.K., S.Balu, Simmy George, Vimala Persis, **P. Sabu** and N.G. Menon (2007). Distribution and abundance of the swarming crab *Charybdis (Goniohellenus) smithii* Macleay in the deep scattering layer of the eastern Arabian Sea, *Indian Hydrology*, 10 (1), 165-170.
3. Laluraj, C.M., K.K.Balachandran, **P. Sabu** and U.P. Saramma (2006). Persistent Volcanic Signature observed around Barren Island, Andaman Sea, India, *Marine Geophysical Research*, 27, 283–288.
2. Sahayak, S., R.Jyothibabu, K.J.Jayalakshmi, H.Habeebrehman, **P. Sabu**, K. Prabhakaran, Rejomon George, P.Shajju, Threisamma Joseph and K.K.C. Nair (2005). Red tide of *Noctiluca miliaris* off south of Thiruvananthapuram subsequent to the 'stench event' at the southern Kerala coast, *Current Science*, Vol. 89, No. 9.
1. Prasannakumar, S., Jayu Narvekar, Ajoy Kumar, C.Shaji, P.Anand, **P. Sabu**, G.Rijo, J.Josia, K.A.Jayaraj, A.Radhika and K.K.C.Nair (2004). Intrusion of the Bay of Bengal water into the Arabian Sea during winter monsoon and associated chemical and biological response, *Geophysical Research Letters*, 31, L15304. doi: 10.1029/2004GL020247

TECHNICAL REPORTS/ARTICLES:

1. **Sabu, P.**, N.Anilkumar, R. Chacko (2018). Hydrographic studies along different fronts in the Indian Ocean sector of Southern Ocean during austral summer, *In Southern Ocean Technical Report 2015*, In press.
2. Anilkumar, N., J.V.George, S.C.Tripathy, **P.Sabu**, R.K.Naik, P.V.Bhaskar, S. Rajan (2015). Hydrodynamics and Biogeochemistry of the South West Tropical Indian Ocean region: A perspective, *The Indian Ocean Bubble2*, 3, p6-7.
3. **Sabu, P.**, N.Anilkumar, T. D. David, R. Chacko (2015). Studies on hydrodynamics of the Indian Ocean sector of the Southern Ocean, *In Southern Ocean Technical Report 2013*, P5-9, ISBN978-93-5267-057-4.
4. Anilkumar, N., R. Chacko, J. V. George, **P. Sabu** (2014). Studies on hydrodynamics in the Indian sector of Southern Ocean Expedition, *In Southern Ocean Technical Report 2011*, p5-9, ISBN978-93-5156-520-8.
5. Anilkumar, N., R. Chacko, J. V. George, **P. Sabu** (2014). Frontal structure and Water Mass characteristics in the Indian sector of Southern Ocean. *In Southern Ocean Expedition Technical Report 2010*, p3-8, ISBN978-93-5156-583-3.

CONFERENCE/WORKSHOP PRESENTATIONS:

1. **Sabu, P.**, R. Chacko and N. Anilkumar, Variability of fronts and watermasses in the Indian sector of the Southern Ocean during austral summer-Results from the repeated XCTD survey', *OSICON17*, NCESS, Thiruvanthapuram, 28th-30th August, 2017.

2. **Sabu, P.**, R. Chacko and N. Anilkumar, Observational evidence of anomalous warming in the Prydz Bay, coastal waters of east Antarctica during austral summer of 2017, *National Conference on Polar Sciences*, NCAOR, Goa, 16th-17th May, 2017.
3. **Sabu, P.**, N. Anilkumar, R. Chacko, Impact of Southern Annular Mode and ENSO on chlorophyll anomalies in the Indian Ocean sector of the Antarctic zone of the southern ocean during austral summer, *SCAR open science conference* held at Kuala Lumpur, Malaysia, 22nd to 26th Aug, 2016.
4. **P.Sabu**, N. Anilkumar, J. V.George, V. Valsala, R. Chacko. Inertial and sub-inertial oscillations in the Seychelles-Chagos Thermocline Ridge region in the southwest tropical Indian Ocean, *International Symposium on the Indian Ocean*, NIO, Goa, 30th November to 4th December, 2015.
5. **Sabu, P.**, J.V.George, N. Anilkumar, R. Chacko, V. Valsala, C.T.Achuthankuty. Cyclonic and anticyclonic eddies in the southern subtropical frontal region of Indian sector of the Southern Ocean: Implications on watermasses, heat content and chlorophyll variability, *World Ocean Science Congress*, Kochi, India 2015, 5th-8th February, 2015.
6. **Sabu, P.**, R. Chacko, N. Anilkumar, J.V.George, T. Divya David, R. Ravindra. Variability of Dicotermal Layer in the Indian sector of Southern Ocean during Austral Summer, *Pan Ocean Remote Sensing Conference (PORSEC)*, Kochi, India, 5th-09th November, 2012.
7. **Sabu,P.**, C.T. Lathika, C.R.Ashadevi, G.V.M. Gupta, V.N. Sanjeevan, Characteristics of cyclonic eddy and associated biological production in the central Bay of Bengal, *Symposium on Indian Ocean Marine Living Resources*, Kochi, India, 2nd-3rd December, 2010.
8. **Sabu, P.**, C. Ravichandran, Heat budget of the Arabian Sea Warm Pool during the collapsing stage-A study based on observational and satellite data, *National Conference on recent developments in ocean science, technology and engineering*, Vishakhapatnam, March, 2009.

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