

SEASONAL VARIABILITY OF UPPER OCEAN AND ASSOCIATED CHANGES IN THE CHLOROPHYLL-A IN THE EQUATORIAL INDIAN OCEAN

Dissertation Submitted for the partial fulfillment of the Degree of
Master of Science in Marine Science

By

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CERTIFICATE

This is to certify that this dissertation entitled “**Seasonal Variability of Upper Ocean and associated changes in the Chlorophyll-a in the equatorial Indian Ocean**” is an authentic record of research work done by **Laxman Sharma**, Department of Marine Science, School of Earth, Ocean and Atmospheric Sciences, Goa University. This work was carried out under my supervision and guidance at Council of Scientific and Industrial Research - National Institute of Oceanography (CSIR-NIO), Donapaula, Goa, for the partial fulfillment of the Degree of Master of Science in Oceanography. No part thereof has been presented for any other Degree in any University.

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DECLARATION

I hereby declare that this academic project entitled “**Seasonal Variability of Upper Ocean and associated changes in the Chlorophyll-a in the equatorial Indian Ocean**”, is an authentic record of my work carried out under the guidance of **Dr. Jayu Narvekar** at CSIR-National Institute of Oceanography, Goa, in partial fulfillment of requirement for the award of Degree of Master of Science in Oceanography from Department of Marine Science, School of Earth, Ocean and Atmospheric Sciences, Goa university, Goa during 11th October 2021 - 28th April 2022. I further declare that to the best in my knowledge that the dissertation report does not contain any part of work, which has been submitted for the award of any other degree either in this university or in any other without proper citation.



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