

**ASSESSMENT OF METAL TOXICITY THROUGH  
SPECIATION OF METALS IN MUDFLAT SEDIMENTS  
AND BIOACCUMULATION IN EDIBLE BIVALVES  
IN THE LOWER REGION OF THE KALI ESTUARY,  
WEST COAST OF INDIA**



Dissertation  
Submitted To  
**GOA UNIVERSITY**  
IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR  
THE DEGREE OF  
MASTER OF SCIENCE  
IN  
MARINE SCIENCE

BY  
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## DECLARATION

I hereby declare that the work incorporated in this dissertation, which is in partial fulfilment of the M.Sc. degree course, is original and carried out in Marine Science, School of Earth, Ocean and Atmospheric Sciences, Goa University, Goa and it has not been submitted in any part or in full for any other degree or diploma of any other university.

Date: 11/04/2023



Nidhi .S. Prabhu Dessai

## CERTIFICATE

This is to certify that the dissertation entitled as "Assessment of metal toxicity through speciation of metals in mudflat sediments and bioaccumulation in edible bivalves in the lower region of the Kali Estuary, west coast of India" is a heretofore and an authentic record of the research carried out by Ms. Nidhi .S. Prabhu Desai, student of M.Sc. Marine Science, under my supervision and guidance at the School of Earth, Ocean and Atmospheric Sciences, Goa University, Goa, in partial fulfillment of the requirement of M.Sc. Marine Science Degree of the University and that no part has been submitted before for any other degree or diploma in any other University.

Date 11/04/2023

  
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