

# **Studies on Some Trace Metals (Fe, Mn, Zn, Cu, and Co) in Surface Sediments of Zuari Estuary, West Coast of India.**

A Dissertation for

Course code and Course Title: MSD 480 Dissertation

Credits: 8

Submitted in partial fulfilment of Master's Degree

M.Sc. in Marine Sciences

by

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Roll Number: 21P040013

Under the Supervision of

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Marine Sciences



Goa University

April, 2023



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### DECLARATION BY STUDENT

I hereby declare that the data presented in this Dissertation report entitled “**Studies on some trace metals (Fe, Mn, Zn, Cu, and Co) in surface sediments of Zuari estuary, west coast of India**” is based on the results of investigations carried out by me in the (Marine Sciences) at the **School of Earth, Ocean and Atmospheric Sciences**, Goa University under the Supervision of **Prof. Vishnu M. Matta** and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will be not be responsible for the correctness of observations / experimental or other findings given the dissertation.

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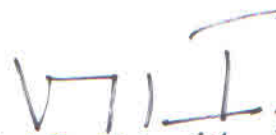
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This is to certify that the dissertation report “Studies on some trace metals (Fe, Mn, Zn, Cu, and Co) in surface sediments of Zuari estuary, west coast of India” is a bonafide work carried out by **Ms. Blency Miranda** under my supervision/mentorship in partial fulfilment of the requirements for the award of the degree of **Master of Science** in the Discipline of Marine Sciences at the School of Earth, Ocean and Atmospheric Sciences, Goa University.

Date:

 21/04/2024  
Prof. Dr. Vishnu Murty Matta



Dean  
Marine Sciences  
School of Earth, Ocean and Atmospheric Sciences  
Date: 25.04.2023  
Place: Goa University



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I hereby declare that the data presented in this Dissertation report entitled, "Analysis of heat index for the study of climate change over Goa" is based on the results of investigations carried out by me in the Marine Sciences at the School of Earth, Ocean And Atmospheric Sciences, Goa University under the supervision of Dr. Aftab Ahmed Khan and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will not be responsible for the correctness of observations / experimental or other findings given the dissertation.

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Place: Goa University

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