

**"CHEMICAL AND BIOLOGICAL APPROACHES FOR ZINC EXTRACTION FROM  
LOCAL INDUSTRIAL WASTE"**

A Dissertation for

Course code and Course Title: CHB- 651: Dissertation

Credits: 16

Submitted in partial fulfilment of Masters of

M.Sc. in Biochemistry

by

**RUTIKA RATNAKAR VELIP**

22PO460015

953109882187

201911580

Under the Supervision of

**Dr. Kanchanmala Deshpande**

School of Chemical Sciences

Biochemistry



**GOA UNIVERSITY**

**APRIL 2024**



Examined by:

*Dr. Kanchanmala Deshpande*  
*Dr. R. Ratnakar Velip*  
*Dr. S. Deshpande*  
*Dr. P. Deshpande*

Seal of the School



DECLARATION BY STUDENT

I hereby declare that the data presented in this dissertation report entitled, "**Chemical and biological approaches for zinc extraction from local industrial waste**" is based on the results of investigations carried out by me in the Degrees of Master's of Biochemistry at the School of chemical sciences/ chemistry department, Goa University under the supervision of Dr. Kanchanmala Deshpande and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand the Goa University or its authorities will not be responsible for the correctness of observations/ experimental or other findings given the dissertation.

I hereby authorize university authorities to upload this dissertation on the dissertation repository or anywhere else as the UGC regulations demand and make it available to any one as needed.

Date: 06/05/2024

Place: Goa University



RUTIKA RATNAKAR VELIP

22PO460015



COMPLETION CERTIFICATE


This is to certify that the dissertation report "CHEMICAL AND BIOLOGICAL APPROACHES FOR ZINC EXTRACTION FROM LOCAL INDUSTRIAL WASTE" is a bonifide work 'carried out by Ms Rutika Ratnakar Velip under my supervision in partial fulfilment of the requirements for the award of the degree of master of science in the Discipline Biochemistry at the School Of Chemical Sciences, Goa University.

Date: 06/05/2024

 06/05/2024

Dr. Vidhyadatta Verenkar  
School of Chemical Sciences  
Date: April 2024  
Place: Goa University

**Dean**  
**School of Chemical Sciences**  
**GOA UNIVERSITY**

  
Dr. Kanchanmala Deshpande  
Biochemistry



School Stamp