

**Search for molecular diversity of metallo- β -lactamase genes in
eubacterial isolates of Karala and Mahananda rivers of West Bengal**

A Thesis submitted to the University of North Bengal

For the Award of

**Doctor of Philosophy
in
Biotechnology**

By

Vivek Kumar Ranjan

Under the supervision of

Prof. (Dr.) Ranadhir Chakraborty



DEPARTMENT OF BIOTECHNOLOGY

UNIVERSITY OF NORTH BENGAL

February, 2021