

Dedicated to

Everybody who made it happen...

Especially my parents, beloved family and providence...

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Chirita Chatterjee
27.5.2021

Signature of the Candidate with date

Declaration

I hereby declare that this thesis containing the original research work has been carried out by me under the supervision of Dr. Shampa Sarkar (Biswas), Assistant Professor, Department of Life Sciences, Presidency University, Kolkata, India as part of the Ph.D. programme.

All information in this document has been obtained and presented in accordance with the academic rules and ethical conduct of Presidency University.

I also declare that, as required by these rules and conduct (Presidency University), I have fully cited and referenced all materials and results that are not original in this work.

I also declare that this work has not been submitted for any other degree either in part or in full to any other Institute or University before.

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To whom it may concern

This is to certify that the thesis entitled “Characterization of Indigenous Sewage Microbial Communities of Kolkata and their Bioremediation Potentiality in Heavy Metal Contaminated Soil” submitted by Smt. Chitrita Chatterjee (Registration Number R-14RS18210015 and date of registration 5th May, 2016), who got her name registered for PhD programme under my supervision [Dr. Shampa Sarkar (Biswas)] and that neither her thesis nor any part of the thesis has been submitted for any degree/diploma or any other academic award anywhere before.

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