

This thesis is
dedicated to

My

Beloved

Parents

DECLARATION

I hereby declare that the thesis entitled “**Assessment of metal contamination of landfill site and application of polyaniline bio-composites for removal of toxic metals from leachate**” being submitted to the Department of Environmental Science, School of Sciences, Tezpur University in partial fulfillment for the award of the degree of Doctor of Philosophy is a record of original research work carried out by me under the supervision of **Dr. Sumi Handique**, assistant professor of department of Environmental Science, Tezpur University.

I also declare that neither this work as a whole nor a part of it has been submitted to any other university or institute for award of any other degree or diploma.

All helps received during thesis writing from various sources have been duly acknowledged.

Place: Tezpur, Assam

Date: 03-12-2024

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CERTIFICATE OF THE SUPERVISOR

This is to certify that the thesis entitled “**Assessment of metal contamination of landfill site and application of polyaniline bio-composites for removal of toxic metals from leachate**” submitted to the School of Sciences, Tezpur University in partial fulfillment for the award of the degree of Doctor of Philosophy in Environmental Science is a record of research work carried out by **Ms. Piu Saha** under my supervision and guidance.

All help received by her from various sources have been duly acknowledged.

No part of this thesis has been submitted elsewhere for award of any other degree.

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Micrometre
Cadmium
Degree of freedom
Ducan mean range test
Efficiency
Figure
Gram
hours
Lead
Kelvin
Mean square
Kinetic rate constant for pseudo-first order reaction
Kinetic rate constant for pseudo-second order
reaction
Equilibrium adsorption
Regression coefficient
rotation per minute
Sugarcane