## **DECLARATION BY THE CANDIDATE**

The thesis entitled "Theoretical Studies on the Electronic and Ligand Properties of Carbenes and Biomimetic Model Complexes for the Active Site of [FeFe]-Hydrogenase" is being submitted to Tezpur University in part fulfillment for the award of degree of Doctor of Philosophy in Chemical Sciences is a record of bonafide research work accomplished by me under the supervision of Prof. Ashwini K. Phukan, Professor, Department of Chemical Sciences, Tezpur University.

All helps 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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