



**TEZPUR UNIVERSITY
SCHOOL OF ENGINEERING
DEPARTMENT OF ENERGY**

Certificate

We hereby recommend that the thesis entitled "***Impedance Spectroscopy: An Efficient Technique to Characterize Silicon Wafers and Solar Cells***" based on the work carried out at Silicon Solar Cell Group, CSIR-National Physical Laboratory, New Delhi under our supervision by **Rupali Das** may be accepted for the partial fulfillment for the degree of Master of Technology in Energy Technology.

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Certificate of approval

The foregoing thesis by **Miss. Rupali Das** (Roll Number ENE11033) is hereby approved as creditable study carried out and presented in a manner satisfactory to warrant its acceptance as a pre-requisite to degree for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approved only for the purpose for which it is submitted .

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On

Final Examination for

Evaluation of Thesis

DECLARATION

I, Rupali Das, hereby declare that this dissertation thesis entitled **“Impedance Spectroscopy: An Efficient Technique to Characterize Silicon Wafers and Solar Cells ”** is submitted to the Department of Energy, Tezpur University, Tezpur, Assam, India for acceptance to award the degree of the Master of Technology in Energy is a dissertation prepared by me and the same has not been/ is not being submitted to any other institution.

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