

# SYNTHESIS, CHARACTERIZATION AND SUPERCAPACITOR APPLICATION OF $\text{SnO}_2$ , $\text{ZrO}_2$ AND THEIR NANOCOMPOSITES

M.sc Dissertation Report for

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M.Sc. in Physical Chemistry

By

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GOA UNIVERSITY

APRIL 2023



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### DECLARATION BY STUDENT

I hereby declare that the data presented in this dissertation report entitled, "**Synthesis, Characterization and Supercapacitor Application of SnO<sub>2</sub>, ZrO<sub>2</sub> and their nanocomposites**" is based on the results of investigations carried out by me in the Physical Chemistry at the School of Chemical Sciences, Goa University under the Supervision of Dr. Pranay P. Morajkar and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will be not be responsible for the correctness of observations / experimental or other findings given the dissertation.

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### COMPLETION CERTIFICATE

This is to certify that the dissertation report “Synthesis, Characterization and Supercapacitor Application of  $\text{SnO}_2$ ,  $\text{ZrO}_2$  and their nanocomposites” is a bonafide work carried out by **Mr. Mohit Dilip Mainikar** under my supervision/mentorship in partial fulfilment of the requirements for the award of the degree of **M.Sc.** in the Discipline Physical Chemistry at the School of Chemical Sciences, Goa University.



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