# Synthesis and Characterization of

# Co<sub>x</sub>Zn<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub> (x=0, 0.25, 0.5, 0.75, 1.0)

# by combustion method and study of its solid state properties and their application

A Dissertation for

Course Code and Course Title: CHC-651 Dissertation

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M.Sc. in Inorganic Chemistry

by

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### **DECLARATION**

I hereby declare that the data presented in this Dissertation report entitled, "Synthesis and characterization of  $Co_{x}Zn_{1-x}Fe_{2}O_{4}$  (x=0.0,0.25,0.5,0.75,1.0) by combustion method and study of its solid state properties and their application" is based on the results of investigations carried out by me in the Inorganic Chemistry at the School Of Chemical Sciences, Goa University under the Supervision of Prof. V.M.S Verenkar 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 not be responsible for the correctness of observations / experimental or other findings given the dissertation.

I hereby authorize the University authorities to upload this dissertation on the dissertation repository or anywhere else as the UGC regulations demand and make it available to any one as needed.

Sheffali Jeevan Jena 22P0490066

Date: 19/04/2024

Place: Goa University

## COMPLETION CERTIFICATE

This is to certify that the dissertation report "Synthesis and characterization of  $Co_xZn_{1-x}Fe_2O_4$  (x=0.0,0.25,0.5,0.75,1.0) by combustion method and study of its solid state properties and their application" is a bonafide work carried out by Ms Sheffali Jeevan Jena under my supervision in partial fulfilment of the requirements for the award of the degree of Master of Science in Chemistry in the Discipline Inorganic Chemistry at the School of Chemical Sciences, Goa University.

Guide: Prof Vidhyadatta M Shet Verenkar Inorganic Chemistry

Date: 19/04/2024

Dean: Prof Vidhyadatta M Shet Verenkar School of Chemical Sciences Date: |9|04|2024Place: Goa University

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