"BRIEF STUDY OF NICKEL DOPPED COPPER OXIDE (Ni-CuO) NANOPARTICLES"

RESEARCH PROJECT SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE



FOR THE DEGREE OF

MASTER OF SCIENCE

IN

ORGANIC CHEMISTRY

UNDER THE FACULTY OF SCIENCE

BY

MR. Chetan Balasaheb Shahane

UNDER THE GUIDANCE OF

Prof.Ms. Swati Chatur Madam

DEPARTMENT OF CHEMISTRY

G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE, SINNAR 422103

OCT/NOV 2024-2025



Maratha Vidya Prasarak Samaj's

G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE, SINNAR, DIST- NASHIK

DEPARTMENT OF CHEMISTRY

This is to certify that the work incorporated in the project entitled

Topic name: "BRIEF STUDY OF NICKEL DOPPED COPPER OXIDE (Ni-CuO)
NANOPARTICLES"

Was satisfactorily carried out by Mr. Chetan Balasaheb Shahane of M.Sc. Organic Chemistry. He has completed this project under my supervision and guidance during Academic Year 2024 -2025. This project work submitted by his original and the scientific information obtain from other sources have been acknowledged.

Prof.Ms. Swati Chatur Madam

(Project Guide)



Maratha Vidya Prasarak Samaj's G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE, SINNAR, DIST- NASHIK DEPARTMENT OF CHEMISTRY

CERTIFICATE

This is to certify that PG dissertation entitled Synthesis "BRIEF STUDY NICKEL DOPPED COPPER OXIDE (CuO) NANOPARTICLES" submitted by Mr. Chetan Balasaheb Shahane and it was carried out by the candidate under the supervision of prof.Ms.Swati Chatur. He has successfully completed the project work in Organic Chemistry (CHO-607) during the Sem-III of academic year 2024-2025.

Date:

Place: Sinnar

Prof. Ms. Swati Chatur (Project Guide)

(Maware Prof.(Dr), M.R. Gaware (HoD)

(Principal) G.M.D. Arts, B.W. Commerce and

Science College, Sinnar, Dist Nashik

DECLARATION

Thereby declare that the presented Research Project on brief study of nickel dopped copper oxide (cuo) nanoparticles is uniquely prepared by me at G.M.D. Arts, B.W. Commerce And Science College Sinnar under the guidance of Prof. Ms. Swati Chatur.

Place: Sinnar

Date:

Sign-

Name- Chetan Balasaheb Shahane

ACKNOWLEDGMENT

- ❖ I would like to express my sincere gratitude to M.V.P. Samaj's G.M.D.Arts, B.W. Commerce and Science College, Sinnar for providing the necessary resources and infrastructure to carry out this project.
- ❖ I extend my heartfelt thanks to our esteemed College Principal, Dr. P. V. Rasal, for his unwavering support and for ensuring the availability of essential facilities for this project.
- ❖ I am deeply grateful to the Head of the Department, Prof. M.R. Gaware, for his constructive assistance throughout this project.
- ❖ My special thanks go to my project guide, Prof.Ms. Swati Chatur, for her constant encouragement, insightful feedback, and expert guidance, which were invaluable in overcoming the challenges encountered during this project.
- ❖ I would also like to thank the faculty members of the Department of Chemistry for providing the theoretical and practical knowledge necessary to complete this project.
- Finally, I wish to acknowledge my classmates and colleagues for their valuable feedback and stimulating discussions, which greatly enriched my understanding of the subject matter.