SYNTHESIS, CHARACTERIZATION AND INVESTIGATING ANTIBACTERIAL AND ANTIFUNGAL ACTIVITY OF NANOCRYSTALLINE ZnO-Nio Mixed Metal Oxide.

THE PROJECT SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE.

FOR THE AWARD OF M.Sc. ORGANIC CHEMISTRY IN THE FACULTY OF SCIENCE AND TECHNOLOGY

SUBMITTED BY

MR. KRUSHNA BHAUSAHEB LOHAR

UNDER THE GUIDANCE OF

ASST, PROF. MISS, SWATI M. CHATUR

DEPARTMENT OF CHEMISTRY

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

SINNAR, TAL- SINNAR, DIST-NASHIK (422104)

WORK PLACE

POST GRADUATE DEPARTMENT OF CHEMISTRY

AND RESEARCH CENTER,

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

SINNAR, TAL- SINNAR, DIST-NASHIK.

OCT/NOV 2024



G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE, SINNAR, TAL- SINNAR, DIST-NASHIK (422104)

CERTIFICATE

DEPARTMENT OF CHEMISTRY

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

Synthesis, characterization & investigating antibacterial and antifungal activity of nanocrystalline ZnO-NiO mixed metal oxide .

Was satisfactorily carried out by Mr. Krushna Bhausaheb Lohar of M.Sc. Organic Chemistry. He has completed this project Under my supervison and guidance during Academic Year 2024-2025. This project work submitted by his original and the scientific information obtain from other sources have been duly acknowledge.

Asst. Prof. Miss. Swati M. Chatur

(Project Guide)



MARATHA VIDYA PRASARAK SAMAJ. NASHIK

G.M.D. ARTS, B.W. COMMERCE AND SCIENCE COLLEGE, SINNAR, TAL- SINNAR, DIST-NASHIK (422104) DEPARTMENT OF CHEMISTRY (PG)

CERTIFICATE

This is to certify that **Mr. Krushna Bhausaheb Lohar** of M.Sc. II (Organic Chemistry) has satisfactorily completed the project work in **organic Chemistry** during the semester III of Academic Year **2024-2025**.

Date: 16/11/2024.

Place: Sinnar.

Project Incharge

Spadake 16/11/24

Examine

BY Rote

HoD Chemistry
HEAD

DEPARTMENT OF CHEMISTRY
G.M.D. Arts, B.W. Commerce
and Science College, Sinnar

PRINCIPAL
G.M.D. Arls. B.W. Commerce and
Science Counts Signar, Dist. Nashik

ACKNOWLEDGEMENT

- I would like to thank M.V.P. Samaj's G.M.D. Arts B.W. Commerce and science college Sinnar, For providing me with the necessary resources, infrastructural and facilities to carry out this project.
- I would like to thank our College Principal Dr. P. V. Rasal for constant support and providing infrastructural facility for this project work.
- I would like to thank, HoD Prof. M. R. Gaware for his constructive help during project.
- I would like to thank, Asst. Prof. Miss. S. M. Chatur (Project Guide), for their constant encouragement, insightful feedback, and expert guidance that help me to navigate through the various challenges of this project.
- I would like to thank all the faculty members of the Department of Chemistry, for.
 imparting me with the theoretical and practical knowledge necessary to
 completed this project.
- I would like to thank my classmates and colleagues, for their feedback, suggestions and stimulate discussion that enriched my understanding of the subject matter.

Bluf.
Lohar Krushna Bhausaheb