

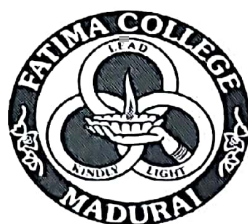
**ELEMENTAL ANALYSIS OF ANCIENT POTTERIES
OF TAMIL NADU BY TOTAL REFLECTION X-RAY
FLUORESCENCE TECHNIQUE**

Internship Report

Submitted by

Ms. B. AKSHA ZEN

(Register No: 2023MSCP03)



DEPARTMENT OF PHYSICS
FATIMA COLLEGE (AUTONOMOUS)
RE-ACCREDITED WITH 'A⁺⁺' GRADE BY NACC (4th Cycle)
(CGPA: 3.61) in the fourth cycle
MADURAI-625018.

BONAFIDE CERTIFICATE

This is to certify that this internship project report entitled “ELEMENTAL ANALYSIS OF ANCIENT POTTERIES OF TAMIL NADU BY TOTAL REFLECTION X-RAY FLUORESCENCE TECHNIQUE” was submitted to Department of Physics, Fatima College (Autonomous), Madurai, is a bonafide record of work done by “ Ms. B. AKSHA ZEN” under my supervision from 06-05-2024 to 24-05-2024.



Dr. A. Sheela Vimala Rani

Head and Associate Professor,

Research Centre of Physics,

Fatima College,

Madurai-625018.


Signature of supervisor

(Dr. A. Chandrasekaran)
Dr.A.ChandraSekaran,M.Sc.,M.Phil.,Ph.D.,PGDCA.,
Assistant Professor
Department of Physics
SSN College of Engineering
Kalavakkam - 603 110.


Signature of HOD

(Dr. S. M. M Kennedy)
Dr. S. MASILLA MOSES KENNEDY
Professor and Head
Department of Physics
SSN College of Engineering
Kalavakkam -603 110

DECLARATION

I do hereby declare that this dissertation entitled "**ELEMENTAL ANALYSIS OF ANCIENT POTTERIES OF TAMIL NADU BY TOTAL REFLECTION X-RAY FLUORESCENCE TECHNIQUE**" was carried out by **B. AKSHA ZEN** (Reg. No: 2023MSCP03) submitted to the Department of Physics, Fatima College, Madurai in partial fulfillment of the requirements for the award of **MASTER OF SCIENCE** in **PHYSICS**, during the academic year, 2024 – 2025.

Place: Madurai

Date:



B. AKSHA ZEN

(2023MSCP03)

ACKNOWLEDGEMENT

“GLORY TO GOD ALMIGHTY WHO GIVES US THE VICTORY”

We are grateful to **Dr. Sr. G. CELINE SAHAYA MARY**, Principal, Fatima College, Madurai, for permitting us to carry out our internship at Department of Physics, Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Kalavakkam-603110 and also, I would like to thank **Dr. Sr. M. FRANCISCA FLORA**, Secretary, Fatima College, Madurai for her prayers and blessings.

I thank **Dr. A. SHEELA VIMALA RANI**, Head, Research Centre of Physics, Fatima College, Madurai, for her constant support and encouragement in the successful completion of this internship work.

I would like to express my special thanks of gratitude to the Principal **Prof. V.E. ANNAMALAI** as well as our vice Principal **Prof. S. RADHA** who gave me the golden opportunity to do this wonderful project in Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Chennai-603110.

I would like to express my sincere thanks to **Prof. S.M.M. Kennedy**, Head, Department of Physics, Sri Sivasubramaniya Nadar College of Engineering (Autonomous), for his valuable guidance and support in completing my internship project.

I am greatly indebted to **Dr. A. CHANDRASEKARAN**, Assistant Professor, Department of Physics, Department of Physics, Sri Sivasubramaniya Nadar College of Engineering (Autonomous), Kalavakkam-603110 for his constant support and supervision throughout the internship work and for initiating my interest in research.

I thank, **Mr. V. SATHISH**, **Ms. A. TAMILARASI**, **Ms. S. KARTHIKAYINI**, **Ms. G. POONGODI** Research Scholars, Department of Physics, Sri Sivasubramaniya Nadar College of Engineering (Autonomous), for their constant support throughout this internship work.

I thank my beloved parents **Mr. R. BENSAM** and **Mrs. B. VIJILA** for their motivation during this internship and friends for their valuable support.

(B. AKSHA ZEN)

RADIATION PHYSICS LABORATORY

RUN BY

**SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING
(AUTONOMOUS)**

Dr. A. Chandrasekaran

Date: 01.08.2024

Assistant Professor

CERTIFICATE

This is to certify that **B. Aksha Zen (2023MSCP03)**, Research Centre of Physics, Fatima College (Affiliated to Madurai Kamaraj University), Madurai has successfully completed her Internship under the guidance of **Dr. A. CHANDRASEKARAN**, Assistant Professor, Department of Physics, Sri Siva Subramaniya Nadar College of Engineering (Autonomous), Kalavakkam. She worked on the title "**ELEMENTAL ANALYSIS OF ANCIENT POTTERIES OF TAMIL NADU BY TOTAL REFLECTION X-RAY FLUORESCENCE TECHNIQUE**" in Radiation Physics Laboratory, Sri Sivasubramaniya Nadar college of engineering (Chennai) during the period of 06-05-2024 to 24-05-2024.

MARKS OBTAINED: 57/60



Supervisor

**Dr.A.ChandraSekaran, M.Sc., M.Phil., Ph.D., PGDCA,
Assistant Professor
Department of Physics
SSN College of Engineering
Kalavakkam - 603 110.**