Development of an Environmentally Benign Inhibitor and studies of the Synergistic Inhibition Effect between L serine and Zinc salt for Carbon Steel Corrosion in Aqueous Solution

A project report submitted for partial

fulfillment of the requirement for the

degree of

MASTER OF SCIENCE IN CHEMISTRY

BY

Ms.R.Prithika
(2019MSCC22)

FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A' Grade by NAAC (3rd Cycle)

College with Potential for Excellence (2004-2019)

74th Rank in India Ranking 2020 (NIRF) by MHRD

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CERTIFICATE

Certified that the thesis **"Development of an Environmentally Benign Inhibitor and studies of the Synergistic Inhibition Effect between L-Serine and Zinc salt for Carbon Steel Corrosion in Aqueous Solution"**. Submitted by **R. PRITHIKA , Reg.No. 2019MSCC22** at Fatima college (Autonomous) , Madurai, Tamil Nadu, is a record of research work carried out by her for the Degree of Master of Science in Chemistry under my guidance during the period from 20.01.2021- 10.03.2021. This thesis is an original work of the candidate and to the best of my knowledge has not been submitted, in part or in full, for any Diploma, Degree, Associate ship, Fellowship or other similar titles in this or any other university. No portion of the thesis is a reproduction from any other source, published or unpublished, without acknowledgement.

Place : Dindigul

Date : 15.04.2021 **(Dr.A.Sahaya Raja)**

BONAFIDE CERTIFICATE

This is to certify that the project work entitled **Development of an Environmentally Benign Inhibitor and studies of the Synergistic Inhibition Effect between L serine and Zinc salt for Carbon Steel Corrosion in Aqueous Solution** submitted to Fatima College (Autonomous), Madurai in partial fulfilment for the award of the degree of Master of Science in Chemistry is a Bonafide record of the work carried out at by **Ms. R.Prithika (Reg.No. 2019MSCC22)**, during the period of 20.01.2021 – 10.03.2021 of her study in department of Chemistry, Fatima College, Madurai- 625 018.

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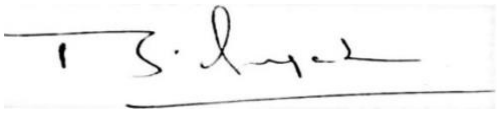

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DECLARATION

I hereby declare that this project work entitled ' **Development of an Environmentally Benign Inhibitor and studies of the Synergistic Inhibition Effect between L serine and Zinc salt for Carbon Steel Corrosion in Aqueous Solution** ' has been originally carried out by me in PG Chemistry department laboratory during the academic year 2020-2021, under the guidance of **Dr.A.Sahaya Raja**, M.Sc.,M.Phil.,B.Ed.,Ph.D.,, G.T.N. Arts College (Autonomous), Dindigul and this work or any part of this has not been submitted elsewhere for any other degree.

R. Prithika

Place: Madurai — Signature of the Candidate

Date: 15.04.2021 — **(R.PRITHIKA)**

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