

Research and PG Department of Chemistry ST.THOMAS COLLEGE (Autonomous)

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(Affiliated to University of Calicut, NAAC with A** Grade and College with Potential for Excellence)

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Dr. Paulson Mathew, M.Phil, Ph.D, MBA Professor & Head

09/03/2023

CERTIFICATE

I hereby certify that, this is the revised version of the thesis entitled "Synthesis, characterisation and applications of some nitrogen and sulphur based heterocycles" submitted by Smt. Siji T. B. under my guidance and supervision after incorporating the necessary corrections/suggestions made by the adjudicators.

Dr. Paulson Mathew

(Research supervisor)



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Dr. Paulson Mathew, M.Phil, Ph.D, MBA Professor & Head 20/12/2022

CERTIFICATE

This is to certify that, the thesis entitled "Synthesis, characterisation and applications of some nitrogen and sulphur based heterocycles" is an authentic record of the research work carried out by Smt. Siji T. B. under my guidance and supervision in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Chemistry of University of Calicut and further that no part thereof has been presented before for any other degree.

Dr. Paulson Mathew

(Research supervisor)

DECLARATION

I hereby declare that, the thesis entitled "Synthesis, characterisation and applications of some nitrogen and sulphur based heterocycles" submitted to the University of Calicut in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Chemistry is a bonafide research work done by me under the supervision of Dr. Paulson Mathew, Professor and Head, Department of chemistry, St. Thomas College (Autonomus), Thrissur, Kerala.

I further declare that this thesis has not previously formed the basis of any degree, diploma or any other similar title.

20/12/2022

Siji T. B.

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Dedicated to

The Fullness of the Divine Infinite Vacuum