#### GREEN SYNTHESIS OF 1,2,3-TRIAZOLES AND APPLICATION OF THEIR PALLADIUM *N*-HETEROCYCLIC CARBENE COMPLEXES AS CATALYST AND ANTICANCER AGENTS

Thesis submitted to University of Calicut in partial fulfillment of the requirements for the award of the Degree of

#### **Doctor of Philosophy in**

Chemistry

By

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Under the guidance of

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25-10-2019

## **CERTIFICATE**

I hereby certify that, this is the revised version of the thesis entitled "Green synthesis of 1,2,3-triazoles and application of their Palladium N-heterocyclic carbene complexes as catalyst and anticancer agents" submitted by Ms. Drishya Sasidharan guidance after incorporating under my the necessary corrections/suggestions made by the adjudicators.

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### **CERTIFICATE**

This is to certify that the thesis entitled "Green synthesis of 1,2,3-triazoles and application of their Palladium N-heterocyclic carbene complexes as catalyst and anticancer agents" is an authentic record of research work carried out by Ms. Drishya Sasidharan under my 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** (Supervising Teacher)

#### ACKNOWLEDGEMENT

First and foremost, I thank Almighty God who is with me throughout my life.

I am extremely happy to acknowledge my sincere gratitude to my supervising guide *Dr. Paulson Mathew*, Associate Professor, Dept. of Chemistry, St. Thomas' College for teaching, training and inspiring me to excel. His expertise, skilled guidance, patience and whole-hearted support have helped me tremendously throughout my research. I express my heartfelt thanks for his enlightened discussions on both theoretical and experimental aspects of the research work. I would not have reached to this point without his generous assistance. I have been the fortunate beneficiary of extensive supervision by such as experienced and talented person his innovative ideas, inevitable suggestions and timely advice have made this work worth its luster. I take this opportunity to extend my overwhelming thanks to my guide for his creative and constructive feedback.

I am highly obliged to *Dr. Ignatius Antony*, Principal, St.Thomas' College, former Principal *Dr. P.O. Jenson* and the management for permitting me to carry out my research work in this esteemed institution.

I am grateful to *Dr. Joby Thomas. K*, Head of the department of Chemistry, St.Thomas' College for his scholarly comments and constant encouragement which have been of immense help to me in maintaining the excellence of my work. I express my genuine gratitude for his care and support.

I convey my sincere thanks to Dr. K.L Joy, Dr. C.L. Joshy, Dr. Sunil Jose. T, Dr. Jency Thomas, Dr. Jinish Antony. M, Ms. Reeja Johnson, Dr. Joseph Joly V. L, Mr. Aji. C. V and Sr. Jisha Joseph, professors of Dept of Chemistry for the help and support extended to me during my work.

A special word of thanks to all my friends especially *Research scholars* who were always willing to help and give their best suggestions throughout the study.

I also express my sincere gratitude to *STIC-CUSAT*, *IIRBS-M.G UNIVERSITY*, *SAIF-IIT BOMBAY*, *XRD UNIT-ST.THOMAS' COLLEGE*, *THRISSUR* for providing analytical data. I express my sincere gratitude to *Dr. Ramadasan Kuttan, Research Director, Amala Cancer Research Centre* for providing facilities to conduct cytotoxicity studies and *Dr. C.R Meera, Assistant professor* and *Head, Department of Microbiology, St. Marys' College, Thrissur* for conducting antibacterial and antifungal studies.

I sincerely acknowledge the help rendered by all the *Non-teaching staffs* of Department of Chemistry, St. Thomas' College

Finally, I am forever indebted to my *Family* for their understanding, support and encouragement when it was most required.

I consider it my privilege to acknowledge and shall remain indebted to each and every one by their rich and varied contribution has enabled my study in every little way, however small or big contribution may be.

With heartfelt gratitude

Drishya Sasidharan

#### **DECLARATION**

I hereby declare that the thesis entitled "Green synthesis of 1,2,3-triazoles and application of their palladium *N*- heterocyclic carbene complexes as catalyst and anticancer agents" is the outcome of original research work undertaken and carried out by me at St. Thomas College, Thrissur, Kerala, under the guidance of

**Dr. Paulson Mathew,** Associate Professor, St. Thomas' College. I also declare that the material presented in this thesis is original and does not form the basis for the award of any other degree, diploma or other similar titles of any other university.

Drishya Sasidharan

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# One child, one teacher, one pen and one book can change the world Malala Yousafzai

# To My Husband

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