DEDICATED TO MY PARENTS

NANO SIZED S₈ AS AN EFFICIENT CATALYST FOR THE SYNTHESIS OF 1-AMIDOALKYL-2-NAPHTHOLS

Carried out in

DEPARTMENT OF CHEMICAL SCIENCES TEZPUR UNIVERSITY

(Napaam)

Under the guidance of

Dr. Ashim J. Thakur Associate Professor Department of Chemical Sciences Tezpur University, Napam-784028 Tezpur, (Sonitpur), Assam



तेजपुर विश्वविद्यालय (केंद्रीय विश्वविद्यालय)

नपाम, तेजपुर - 784 028, असम, भारत

TEZPUR UNIVERSITY

(A Central University) Napaam, Tezpur - 784 028, Assam, India

CERTIFICATE

This is to certify that the project work entitled "*Nano Sized S₈ As An Efficient Catalyst For The Synthesis Of 1-Amidoalkyl-2-Naphthols*" performed by Madhurjya Borah in the Department of Chemical Sciences, Tezpur University, embodies the original work done by him in the partial fulfillment of the requirements for the award of the Degree of Masters of Science, Tezpur University. The project meets all the requirements of a M.Sc. project work.

Further, it is to certify that the project has not been submitted for any purposes elsewhere.

Arroy

Prof. Niranjan Karak (Head, Department of Chemical Sciences)

Place:

Date:



TEZPUR UNIVERSITY (A Central University Established by an Act of Parliament) NAPAAM, TEZPUR-784 028 DISTRICT : SONITPUR :: ASSAM :: INDIA e-mail:adm@agnigarh.tezu.ernet.in

08th May 2012

TO WHOM IT MAY CONCERN

This is to certify that Mr. Madhurjya Borah, a M. Sc. 4th semester student in the Department of Chemical Sciences, Tezpur University has successfully completed his project work on "Nano sized S_8 as an efficient catalyst for the synthesis of 1-Amidoalkyl-2-Naphthols". The work presented in this dissertation is a bonafide work of Mr. Borah and has been submitted to the Dept. of Chemical Sciences, Tezpur University for the partial fulfillment of degree of M. Sc. in Chemical Sciences. The work has not been submitted to any other degree or diploma of this or any other university/ institution other than mentioned.

He bears a good moral character. I wish him success in life.

DECLARATION BY THE CANDIDATE

This is to declare that I have carried out the M.Sc. project entitled "*Nano Sized S*₈ As An Efficient Catalyst For The Synthesis Of 1-Amidoalkyl-2-Naphthols" under the guidance of Dr.Ashim Jyoti Thakur, Associate Professor, organic chemistry in the Department of Chemical Sciences, Tezpur University for the partial fulfillment of the degree in Master of Science in Chemical Sciences. The report embodied accounts for my own findings and have not been submitted previously anywhere for any degree whatsoever by either me or anyone else.

Date: 8th May, 12

(Yaddinggo Bond

Madhurjya Borah



To Dr. Ashim Jyoti Thakur, Associate Professor of organic chemistry at Tezpur University, thank you for being such a wonderful advisor. It definitely has been an honor and a privilege working under your direction. You allowed me to work independently and forced me to step out of my comfort zone and apply my own knowledge of chemistry to further my skills. I have learned so much from you.

I would like to thank the Head of the Department, Prof. Niranjan Karak, for giving me the opportunity to undertake this project work, give me an exposure to various chemical methods and techniques.

I am also indebted to Mr. Vijay Kumar Das (Research scholar), who guided and helped me in the successful completion of the project. I am highly indebted to him for his constant support, inspiration and guidance throughout the project work.

My deep sense of gratitude goes to my lab mates, senior Dhruba da, Lakhi da and Kiran for helping me throughout the project duration. My special thanks go to Pangkita ba for her kind help in carrying out BET analysis.

Last but not the least, I would like to thank my parents, friends, well wishers and Tezpur University fraternity for constant encouragement and kind help all through the project work.

May, 08

Modery go Baroc

(Madhurjya Borah)