

ACKNOWLEDGEMENT

It is my immense pleasure to express my gratitude towards my guide, Prof. S. S. Katyare. His help, stimulating suggestions and encouragement has helped me in all the time of my research. I would like to thank him for making me grow and develop a scientific attitude. He has always showered his knowledge, provided a motivating, enthusiastic, and critical atmosphere during the many discussions we had. It would not have been possible for me to achieve my scientific endeavor without his constant guidance and support. It was a great pleasure for me to conduct this thesis under his supervision.

I would like to thank our ex Heads of the Department, Prof. Tara Mehta and Prof. S. D. Telang, who had provided me with all the scientific and departmental facilities and enabling me to finish my research work without any inconvenience.

This work would not have been possible without the support of Mr. Suresh Nate, who has provided me with the essential animal resource for carrying out my experiments successfully.

It would not be fair if I don't express my gratitude towards my friend and colleague, Jignesh Pandya, without whom this long tenure of research work would not have been so enjoyable and memorable. He has always been there to help and support me as well as indulged in enthusiastic discussions throughout my research work.

My former colleague Dr. Kunjan Dave has supported me in my research work. I want to thank him for the initial training of the techniques that I have used for completing my thesis.

Special thanks to the two Patels, Samir and Bhavesh with whom I have carried out a part of my research work.

Further I would also like to thank my labmates Sophiya, Radha, Munjal, Sudha, Hiren and Minal who have supported and advised me throughout my tenure in the lab and created a very friendly and lively environment to work in.

My friends and colleagues Keyur, Dharmendra and Siddharth have always extended their help whenever I needed. I want to thank them for their help, support and assistance that helped me in completing my thesis writing.

I would also like to thank my colleagues and friends Vihas, Jyoti, Lakshmpriya, Anil, Vikas and Prashant for providing me with kind support and encouragement.

I would like to acknowledge CSIR for funding the work and providing me the financial support while carrying out my research work.

My acknowledgement will not be enough if I don't thank God, my parents and family who made it a possibility for me to reach where I am today.

Subhash D. Katewa