ACKNOWLEDGEMENT

The existing beautiful manuscript is the result of experimenting with the magnificent dreams through true efforts initiated by Dr. N. G. Patel, former Head and Research Guide, Department of Electronics, with classical idea of new technology in the Department of Electronics. By his enterprise and skill, drive and determination he has been able to build a well-organized plan to execute the project. I feel to honour him for encouraging me to work in the direction of new embodiment of biosensing. He is the source of motivation to resolve the challenge on Biosensors to detect Urea Adulteration in Milk. He has also escorted me in difficulties. I am highly obliged.

I am pleased to express heartfelt indebtedness to and Dr. K. K. Makhija, Reader and Guide, Department of Electronics, who spared his precious time and energy for me. With his unique potentialities, capabilities and significant thinking he enriched my scientific aspects and enlighten me by his valuable guidance in all respect during the course of research work.

I take this opportunity to convey my gratitude to Prof. D. Lakshminarayana, Head, Department of Electronics, for providing me the suggestions and required facilities for research work in the Department as and when required.
Prof. Arbinda Ray, Professor, Department of Chemistry, with his scientific ability and intellectual suggestions helped me to fill the true essence in writing this manuscript. I am very much grateful to him for his cooperative spirit.

My gratitude goes specially to Prof. I. L. Kothari, Professor, Department of Biosciences, for his encouragement during the work. Special thanks are also due to Dr. K. N. Rao, Scientist I, National Dairy Development Board, Anand. Without his cooperation it would have been difficult to execute in this direction of project.

I highly appreciate Mr. U. B. Trivedi for his kind concern, effective coordination and moral boost up throughout the scientific and routine work.

It is not possible to work alone. You always need the backing and support of others. I wish to acknowledge the immense and valuable contribution made by all Staff Members in Department of Electronics, students and all my near and dear friends by freely sharing their enlightenment.

I thank all those anonymous experts from a group of Prof. K. Cammann, Institut fur Chemo und Biosensorik (ICB), Munster, Germany, who had the unenviable task in helping me directly or indirectly during my work.
I am highly indebted to

Sophisticated Instrumentation Centre for

Applied Research and Testing

SICART &

Department of Science and Technology

Government of India

New Delhi

for providing me the best facilities and financial assistance during the project work.

Best regards to Dr. C. L. Patel, Chairman, SICART-CVM.

I am grateful to Mr. C. C. Patel, Executive Director, SICART who helped me with his good advice during the course of work.

Special thanks to Prof. L. M. Manocha, Coordinator, SICART for rendering the necessary help and valuable suggestions during the study.

I wish to express my gratitude to the efficient team at SICART who responded so rapidly to facilitate my work in time and findings successfully.

Finally, I am also gratified to my parents who enriched my life by unshakable faith in the power of inner self and strong belief and to my loving little brother and sister.

HIMANSHU KAPSE