ACKNOWLEDGEMENT

The author expresses his most sincere gratitude to all his respected teachers in the Department of Applied Chemistry and Chemistry, Aligarh Muslim University, Aligarh for their help, guidance, inspiration and cooperation during the course of post graduate and doctorate work. A particular word of gratitude is due to Late Dr. J.P. Singhal, Reader, Department of Applied Chemistry, Faculty of Engineering and Technology, Aligarh Muslim University, Aligarh, who had always been source of inspiration and encouragement. The help cooperation and encouragement rendered by senior colleagues, Professor Abrar M. Khan, F.N.A., Professor S.K. Saxena, Professor S.R. Ahmed, Professor K.G. Varshney, Prof. S.U. Khan and Professor J.P. Rawat, is gratefully acknowledged. This work would not have been possible without a sincere and dedicated research team the author had in this endeavour. The contribution, help of each such member of the team deserves special gratitude. The author would have liked to acknowledge the help of each and every individual in the team personally, but the space does not permit.

Last but not the least the support funds granted by Indian Council of Agricultural Research, Council of Scientific and Industrial Research, and University Grants Commission, New Delhi are gratefully acknowledged without which this aim would have not been achieved.

Finally, the author is highly indebted to his family members and relatives who always encouraged and gave full moral support to him in his academic pursuits and remained by his side at the time of distress. His mother, wife and children deserve a special appreciation for the sacrifice of their emotional sentiments as the author could not have shared many pleasant moments with them because of his involvement in the work and other duties assigned.

(Dr. Rishi Pal Singh)