

## ACKNOWLEDGEMENTS

I would like to express my grateful thank to Assoc. Prof. Lerluck Chitradon, my supervisor for offering the opportunity to study in the doctoral degree with the support of Royal Golden Jubilee Ph.D. program under her supervision and guidance. Sincere thanks and gratitude also are due for her valuable advice on experimental work, writing the thesis, papers published and also for her kindness and encouragement. Her tough advice and her strong push on me encouraged me to learn a lot both in academic and those benefit to my future work.

Respectful thank to Prof. Christopher Bucke, which is now an Emeritus Professor of University of Westminster, UK, my co-advisor, for offering the opportunity to do the research in United Kingdom. Thank him very much for his kind supervision and guidance during my research in United Kingdom, and his valuable suggestions for publication and writing the thesis. Respectful thank to Prof. Tajalli Keshavarz, Department of Applied and Molecular Biosciences, University of Westminster, UK, who has been very kind accept me to work in his laboratory and laboratory facilities for my research visit during my stay August, 2005-April, 2006.

Sincere gratitude is also given to Assoc. Prof. Ngampong Kongkathip and Dr. Saeree Jareonkitmongkol, my co-advisors, for their kindness and encourages me with their useful discussion on my work. Appreciate thanks to Dr. Savitr Trakulnalermchai, for her kindness on ITS4 sequence analysis. I also thank the laboratory of Applied Microbiology, Tohoku University, in particular, Dr. Naoki Abe, for his kind help and facilities on 18S rDNA and N-terminal analysis. I would like to thank Dr. Roberto Parra, Department of Applied and Molecular Biosciences, University of Westminster, UK, for his kind helping me design the experiment using Statistical Experimental Design and for his assistance on the data analysis.

Acknowledge to the Royal Golden Jubilee Ph.D. Program under the Thailand Research Fund that granted to Assoc. Prof. Lerluck Chitradon for research support.

Churapa Teerapatsakul

August 2007