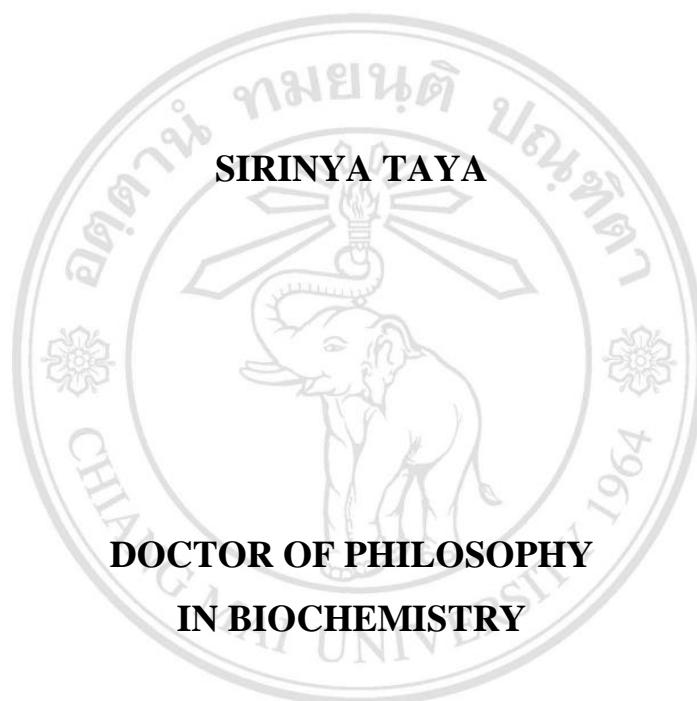


**CHEMOPREVENTIVE MECHANISMS OF *Spirogyra neglecta*
DURING EARLY STAGES OF COLORECTAL
CARCINOGENESIS IN RATS**



**DOCTOR OF PHILOSOPHY
IN BIOCHEMISTRY**

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**GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
NOVEMBER 2016**

**CHEMOPREVENTIVE MECHANISMS OF *Spirogyra neglecta*
DURING EARLY STAGES OF COLORECTAL
CARCINOGENESIS IN RATS**



**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF**

**DOCTOR OF PHILOSOPHY
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SIRINYA TAYA

THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN BIOCHEMISTRY

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4 November 2016

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ACKNOWLEDGEMENT

I would like to express my sincere gratitude to my advisor, Asst. Prof. Dr. Rawiwan Wongpoomchai and co-advisors, Asst. Prof. Dr. Teera Chewonarin and Asst. Prof. Dr. Peeraphan Pothacharoen for their constant guidance, patience, motivation and encouragement. I am also grateful to Prof. Dr. Hideki Wanibuchi, Assoc. Prof. Dr. Min Gi and Dr. Anna Kakehashi at Department of Molecular Pathology, Osaka City University Graduate School of Medicine, Japan for their guidance and immense knowledge. I would like to express my gratitude to Asst. Prof. Dr. Chartchai Khanongnuch, Division of Biotechnology, School of Agro-Industry, Faculty of Agro-Industry, Chiang Mai University and Dr. Utoomporn Surayot, Department of Marine Food Science and Technology, Gangneung-Wonju National University, Republic of Korea for their valuable advice and suggestion on determination of monosaccharide composition by TLC and HPLC techniques. I recognize that the research would not have been possible without the financial support of National Research Council of Thailand (NRCT) and the Faculty of Medicine Research Fund, Chiang Mai University, which offered me a scholarship for graduate studies. My sincere thanks also go to Japanese Association of University Women (JAUW) for financial support to do research in Japan.

I would like to thank the Department of Biochemistry, Laboratory Animal House and Instrumental Center for Medicine Research, Faculty of Medicine, and Chiang Mai University for facilities. A very special thank goes out to my family for the support though my entire life. Finally, I must also thank my friends and colleagues in my laboratory for their encouragement and help.

Sirinya Taya