The background of the page features a large, faint watermark of the Chiang Mai University seal. The seal is circular and contains an elephant in the center, with a crown on its head. The text "CHIANG MAI UNIVERSITY 1964" is written around the bottom inner edge of the seal. At the top, there is Thai text: "มหาวิทยาลัยเชียงใหม่" (Mahavithayalai Chiang Mai University) and "บัณฑิตวิทยาลัย" (Graduate School).

**SYNTHESIS AND STUDY OF BIOLOGICAL ACTIVITIES  
OF LINEAR AND CYCLIC C-10 NON-ACETAL  
ARTEMISININ PSEUDO PEPTIDE  
NUCLEIC ACID OLIGOMERS**

**SUPANNEE POTHONGKAM**

**DOCTOR OF PHILOSOPHY  
IN CHEMISTRY**

**THE GRADUATE SCHOOL**

**CHIANG MAI UNIVERSITY**

**MARCH 2012**

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A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY  
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THIS THESIS HAS BEEN APPROVED  
TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS  
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IN CHEMISTRY

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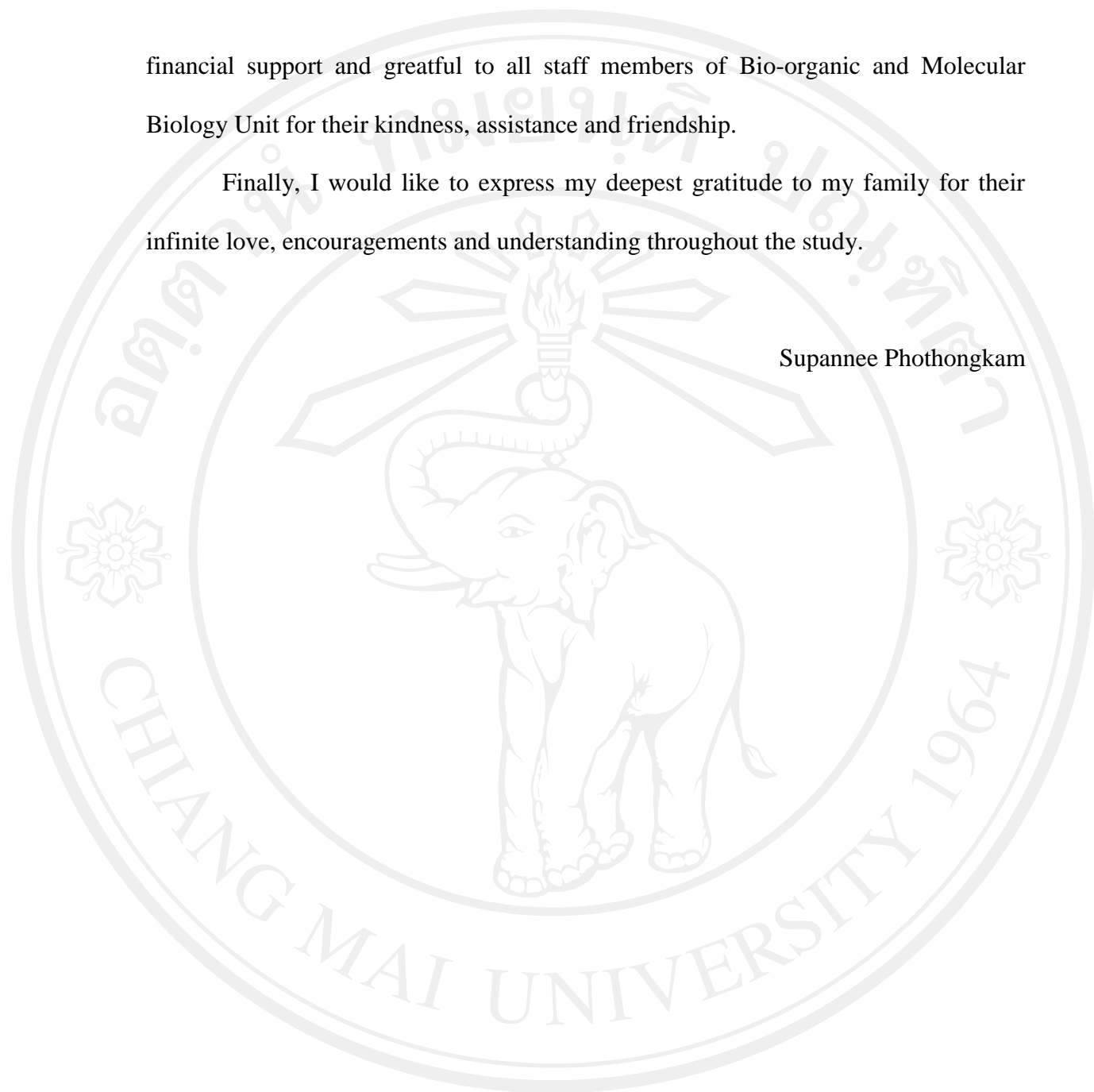
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