



**THESIS APPROVAL**  
**GRADUATE SCHOOL, KASETSART UNIVERSITY**

Master of Science (Chemistry)

DEGREE

Physical Chemistry

FIELD


Chemistry

DEPARTMENT

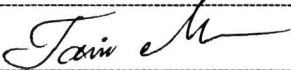
**TITLE:** The Protein Framework and Solvent Effect on the Energetics of the Acylation Step in Butyrylcholinesterase-catalyzed Hydrolysis of Cocaine: An Electronic Embedding Method

**NAME:** Mr. Narongsak Arayalert

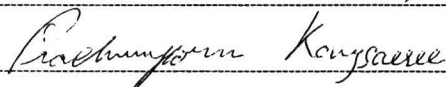
**THIS THESIS HAS BEEN ACCEPTED BY**

  
\_\_\_\_\_  
( Professor Jumras Limtrakul, Ph.D. )

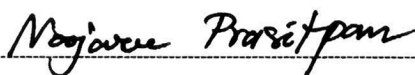
THESIS ADVISOR

  
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**APPROVED BY THE GRADUATE SCHOOL ON** 5 June 2009

  
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( Associate Professor Vinai Arkongharn, M.A. )

DEAN