

**ESTROGENIC AND OSTEOBLAST MINERALIZATION
EFFECT OF *Vanilla siamensis* Rolfe ex Downie EXTRACT**

PHENPHICHAR WANACHANTARARAK

**DOCTOR OF PHILOSOPHY
IN CHEMISTRY**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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**THE GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
AUGUST 2012**

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**A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
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THIS THESIS HAS BEEN APPROVED
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