

**THEORETICAL STUDIES OF EXCITED-STATE PROTON
TRANSFER REACTIONS OF 7-AZAINDOLE WITH
WATER, AMMONIA AND WATER-
AMMONIA CLUSTERS**

KHANITTHA KERDPOL

**MASTER OF SCIENCE
IN CHEMISTRY**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
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KHANITTHA KERDPOL

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

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KHANITTHA KERDPOL

THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE
IN CHEMISTRY

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