

**SINGLE AND BINARY ADSORPTIONS OF
CADMIUM(II) AND ZINC(II) IONS
ON LEONARDITE**

APIRADEE TERDPUTTAKUN

DOCTOR OF PHILOSOPHY

IN CHEMISTRY

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**GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
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**A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY 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 FOR THE DEGREE OF
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