

**DYNAMIC HYSTERESIS BEHAVIORS IN SOME
FERROELECTRIC MATERIALS**



NATTHAPONG WONGDAMNERN

**DOCTOR OF PHILOSOPHY
IN MATERIALS SCIENCE**

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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**THE GRADUATE SCHOOL
CHIANG MAI UNIVERSITY**

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FERROELECTRIC MATERIALS**

NATTHAPONG WONGDAMNERN

**A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN MATERIALS SCIENCE**

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THIS THESIS HAS BEEN APPROVED
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