

**IDENTIFICATION OF LOCAL STRUCTURES IN SOME  
FERROELECTRIC OXIDE COMPOUNDS BY X-RAY  
ABSORPTION SPECTRUM ANALYSIS**

**KANOKWAN KANCHIANG**

**DOCTOR OF PHILOSOPHY  
IN APPLIED PHYSICS**

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**GRADUATE SCHOOL  
CHIANG MAI UNIVERSITY  
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**KANOKWAN KANCIANG**

**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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Kanokwan Kanchiang

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