CHARACTERIZATION EVALUATION AND REFINEMENT OF SOME NATURAL CLAYS IN NORTHERN THAILAND FOR PORCELAIN POTTERY

SUKDIPOWN THIANSEM

A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUTREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN CHEMISTRY

GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
MARCH 2001

CHARACTERIZATION EVALUATION AND REFINEMENT OF SOME NATURAL CLAYS IN NOTHERN THAILAND FOR PORCELAIN POTTERY

SUKDIPOWN THIANSEM

THIS DISSERTATION HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN CHEMISTRY

EXAMINING COMMITTEE

Sukon	CHAIRPERSON
Assoc. Prof. Dr. Sukon Phanichaphant	
Kanhana Karkan	MEMBER
Assoc. Prof. Dr. Kanchana Keow-kam-nerd	
Prame -	MEMBER
Assoc. Prof. Dr. Prasak Thavornyutikarn	
	MEMBER
Professor DrIng. Wolfgang Schulle	
Odim Leigola	MEMBER
Assoc. Prof. Dr. Udom Sriyotha	

4 MARCH 2001

© Copyright by the Graduate School, Chiang Mai University

ACKNOWLEDGEMENTS

The author wishes to thank Associate Prof. Dr. Kanchana Keow-Kam-Nerd, Associate Prof. Dr. Sukon Phanichaphant, and Associate Prof. Dr. Prasak Thavornyutikarn for planning his doctoral program research and valuable suggestions through out this work.

The author would like to thank the German Exchange Program (DAAD) scholarship to perform a part of research activities in Germany, the staff at Department of Silicate Technology, Freiberg University of Mining and Technology, Germany for its assistance and research facilities.

Thanks also to Dr. Gordon Hiebert for editorial assistance.

The author would like to thank his family for their support, kindness, love and financial support.

Sukdipown Thiansem