



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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التوثيق الإلكتروني والميكروفيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Cairo University

Optimizing the production of metakaolin based geopolymer concrete under ambient temperature

By

Ahmed Abdelaleim Abdelaleim Elhadidy

A Thesis Submitted to the
Faculty of Engineering at Cairo University
In Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE
In
Structural Engineering

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Title of Thesis:

Optimizing the production of metakaolin based geopolymer concrete under ambient temperature

Key Words:

Geopolymer; Kaolin; Metakaolin; Ambient temperature; alkali activated cement

Summary:

This research thesis studies the effect of using different heating temperatures as a thermal treatment of kaolin on the reactivity of treated particles in producing alkali activated cement. The effect of different activator modulus was also studied as well as the percentage of Na_2O of binder weight and different water to binder ratio.

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

Name: Ahmed Abdelaleim Abdelaleim Elhadidy

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Dedication

**To My Dad, Mum & My Uncle, My Family,
My leaders that has a great effect on my life,
All my love to you.**

Acknowledgments

IN THE NAME OF ALLAH, THE MOST GRACIOUS AND THE MOST MERCIFUL

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