بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

MONA MAGHRABY

INVESTIGATING THE EFFICIENCY OF AN INNOVATIVE GEOPOLYMER COMPOSITES AS REPAIRING MATERIAL SUBJECTED TO HIGH TEMPERATURE

By

Ahmed Saleh Abdalla Moaly

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:

Investigating The Efficiency Of An Innovative Geopolymer Composites As Repairing Material Subjected To High Temperature.

Key Words:

Geopolymer Composites;Repair;Effeciency;High Temperature

Summary:

This Research investigates the effeciency of An innovative Geopolymer composites as repairing materials subjected to high temperature as an ulternative to epoxy resigns exists in the market.To reach the research goals special tests were designed to study the effeciency of three innovative geopolymer composites to fill the crackes and enhancing the bond between steel and concrete through indirect tensile test and flexural test after exposing the samples to 300 degree c for 2 hrs. The research illustrates that these composites have a high performance compareel with epoxy.The researcher recommends an extensive developments for the tested composites and to test the composites under higher tempertures.

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: Date:

Signature:

Dedication

To My Father & Mother,

The reason of what I become today,

The source of my success,

Thank you for your love, Support and Care.

To My wife, My Sisters, My Brother & My Children

Thank you for your love, Support and Care.

To My Great Professor

Mohamed I. Serag

All my deep respect to you for teaching me,

supporting me, inspiring me and for your deep

effect on my way of thinking and on my life.

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