



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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جامعة عين شمس

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MONA MAGHRABY



Cairo University

THE FEASIBILITY OF MULTIPLE WASTE TO ENERGY THERMOCHEMICAL CONVERSION TECHNOLOGIES USING STATISTICAL ANALYSIS (RAPID ASSESSMENT)

By

Kareem Hossam Ahmed Mokhtar Abdelnaby Hamad

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
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in
Interdisciplinary M.Sc. - Green Processes

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Under the Supervision of

Prof. Dr. Mohamed Hanafy

Dr. Ahmad Wafiq

Professor of Chemical Engineering
Chemical Engineering department
Faculty of Engineering, Cairo University

Lecturer
Chemical Engineering Department
Faculty of Engineering, Cairo university

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Approved by the
Examining Committee

Prof. Dr. Mohamed Hanafy, Thesis Main Advisor

Prof. Dr. Magdi Abadir, Internal Examiner

Prof. Dr. Abdelghani Mohamed Gamal Abulnour, External Examiner
- Emeritus Research Professor in National Research Center (NRC)

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
2020

Engineer's Name: Kareem Hossam Ahmed Mokhtar Abdelnaby Hamad
Date of Birth: 10 /1/1994
Nationality: Egyptian
E-mail: Kareem.eaeat@gmail.com
Phone: 01111611399
Address: 12 Alferdos, al taka street, Nasr city
Registration Date: 1/10/ 2016
Awarding Date: .../.../2020.
Degree: Master
Department: Interdisciplinary M.Sc – Green Processes



Supervisors:

Prof. Mohamed Hanafy
Dr. Ahmad Wafiq

Examiners:

Prof. Abdelghani Mohamed Gamal Abulnour (External examiner) -
Emeritus research professor in national research center
Prof. Magdi Abadir (Internal examiner)
Prof. Mohamed Hanafy (Thesis main advisor)

Title of Thesis:

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ASSESSMENT)

Key Words:

Thermochemical techniques; Waste management; Statistical modeling; Pyrolysis;
Gasification

Summary:

Converting waste to energy is one of the major concerns nowadays, in this research a statistical model is built to represent three different thermochemical conversion techniques with high confidence level and low error. The studied processes are slow pyrolysis, fast pyrolysis, and gasification. A rapid assessment can be made by either researchers or companies to know the best process to be used to get the best yield of products from the waste, so the waste is converted from a source of pollution to a source of benefit and profit.

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: Kareem Hossam Ahmed Mokhtar

Date: /..../...

Signature:

Acknowledgments

First of all, I would like to thank god for what I have reached so far, secondly there are some people who I appreciate their help and I would not have reached what I have reached without their support, effort and guidance.

I would like to express my sincere gratitude to my supervisors Prof. Dr. Mohamed Hanafy for his support and his knowledge that he transferred to me throughout previous years, and Dr. Ahmed Wafiq for the continuous support of my master study and research, for his patience, motivation, enthusiasm, immense knowledge, his guidance and time that helped me in all the time of research and writing of this thesis. I could not have imagined having a better advisor and mentor.

Besides my advisors, I would like to thank Prof. Dr. Fatma Ashour, Prof. Dr. Mai Ehab, Prof. Dr. Reem Ettouny and Prof Dr. Magdi Abadir for their encouragement, guidance, and insightful comments.

My sincere thanks also go to my family: my parents Dr. Hossam and Dr. Hala for their continuous support, encouragement, time and effort they provided me to reach my current situation. My brother Ahmed for his support and the help he provided me whenever needed. My gorgeous fiancée Amal for the support, effort, revision, and for being by my side throughout the whole process. My beautiful family, I do owe you.

Lastly, I would like to thank Mr. Mahmoud, Mr. Khamess, Mrs. Abeer, Mrs. Amira, and Mrs. Nashwa for their support and sincere help throughout the process.

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