

**ISOLATION OF SOLUBILIZING MICROORGANISMS FROM
LANDFILL SOIL**

SITI NOR AMIRA BINTI ROSLI

**BACHELOR OF CHEMICAL ENGINEERING
UNIVERSITI MALAYSIA PAHANG**

**ISOLATION OF SOLUBILIZING MICROORGANISMS FROM
LANDFILL SOIL**

SITI NOR AMIRA BINTI ROSLI

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SUPERVISOR'S DECLARATION

We hereby declare that we have checked this thesis and in our opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Bachelor of Chemical Engineering.

Signature :
Name of main supervisor : DR. NASRATUN BINTI MASNGUT
Position : SENIOR LECTURER
Date : JANUARY 2017

STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree

Signature :
Name : SITI NOR AMIRA BINTI ROSLI
ID Number : KE13042
Date : JANUARY 2017

Dedicated to my beloved family and supervisor.

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LIST OF SYMBOLS

D	Diameter of clear zone
d	Diameter of isolate
D/d	Ratio of diameter of clear zone to diameter of hole plus isolate
x	Concentration of glucose/xylose/protein
y	Absorbance

LIST OF ABBREVIATIONS

CMC	Carboxymethyl cellulose
DF	Dilution factor
DNS	Dinitrosalicylic acid
LFG	Landfill gas
MSW	Municipal solid waste
OD	Optical density
rpm	Revolution per minute
Sdn Bhd	Sendirian Berhad
sp	Species
uv-vis	Ultraviolet-visible
wt/wt	weight per weight