



Cawangan Pulau Pinang Kampus Permatang Pauh































**Patron** 

**Prof Ts. Dr Salmiah Kasolang** 

**UiTM Cawangan Pulau Pinang** 

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**Head of Centre** 

**Faculty of Chemical Engineering** 

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# RESEARCH NICHE AREA

The Faculty of Chemical Engineering at UiTMCPP is fully equipped with research facilities including technologically advanced equipment that caters for the Master of Science and Doctor of Philosophy degree program via a full research mode. The faculty's academic staffs have expertise in various research areas in the field of chemical engineering and environmental engineering. The niche area are:

Nanotechnology/Nanomaterials
Environmental Technology
Separation Technology
Green Material/Technology
Wastewater Treatment Technology
Catalysis and Reaction Engineering
Renewable Energy
Biomass conversion
Biofuels
Green Energy























## RESEARCH FACILITIES

Analysis Laboratory
Engineering Laboratory
Research Laboratory
Process Control Laboratory
Chemistry Laboratory





























## ADVANCED EQUIPMENTS

DIFFERENTIAL SCANNING CALORIMETER (DSC)

•TOTAL ORGANIC CARBON ANALYZER (TOC)

•GAS CHROMATOGRAPHY (GC) - FID/TCD

•INDUCTIVELY COUPLED OPTICAL EMISSION

SPECTROMETER (ICP-OES)

•GAS CHROMATOGRAPHY MASS SPECTROMETER (GC-MS)

•SPECTROPHOTOMETER & MICROSCOPE

•UV-VISIBLE SPECTROSCOPY (UV-VIS)

SURFACE AREA ANALYSIS (ASAP 2020)

CHEMISORPTION ANALYZER

•FOURIER TRANSFORM INFRARED SPECTROSCOPY (FTIR)

•HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

(HPLC)

SIMULTANEOUS THERMAL ANALYZER (TGA)

VERTICAL PULVERIZING MACHINE

VAPOR LIQUID EQUILIBRIUM UNIT

•CONCENTRIC TUBE HEAT EXCHANGER

THERMAL CONDUCTIVITY OF LIQUID AND GASES

**•ULTRA PURE WATER SYSTEM** 

AIR TEMPERATURE CONTROL MODULE

•LEVEL CONTROL MODULE

AIR PRESSURE CONTROL MODULE

MEMBRANE FILTRATION

ANAEROBIC DIGESTER

AEROBIC DIGESTER

VENTURI SCRUBBER
 AIR QUALITY MONITORING

•CONTINUOUS STIRRED-TANK REACTOR (CSTR)

























## RESEARCHER PROFILES































- B. Eng Chemical UTM, Malaysia
- MEng, UTM Malaysia
- PhD, USM, Malaysia



## Research interest & Expertise

 Solvent extraction, liquid membrane, adsorption, wastewater treatment, resource recovery, biofuels



#### **Publication/H-Index**

publication (SCOPUS) (SCOPUS) (SCOPUS)



#### Professional membership

- Chartered Engineer, Institute of Chemical Engineer (IChemE), UK
- Professional Engineer, Board of Engineers Malaysia (BEM)



#### Research grants



RM80K RM160K

international

internal

national



**Innovation** 

patent filed

0

copyright



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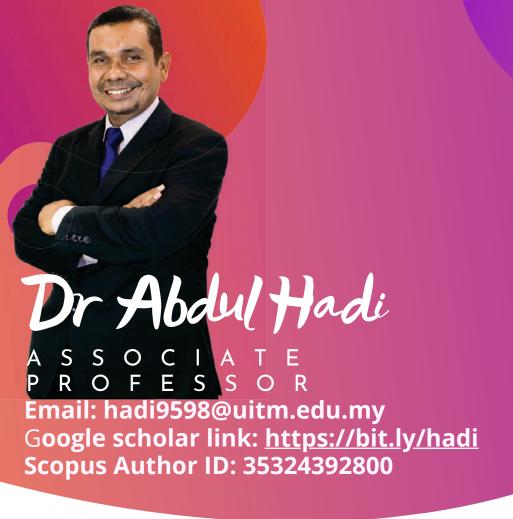
industry government international



**Supervision** 

5 20

postgraduate







25

years



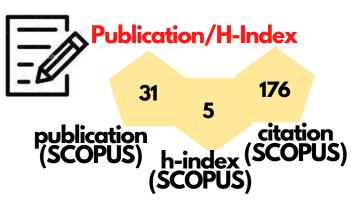
#### **Education**

- B. Eng Universitas Syiah Kuala, Indonesia
- MEng.Sc, UM Malaysia
- PhD, UM, Malaysia



## Research interest & Expertise

 Nanomaterials, Environmental Catalyst, Biodiesel & biofuel





industry government international



#### Professional membership

- Associate member, Institute of Chemical Engineer (IChemE), UK
- Member, Institute of Energy (IE), UK
- Member, MNI (Indonesia)



Research grants



RM350K

international

<sub>.</sub> internal

national



**Innovation** 

patent filed

0

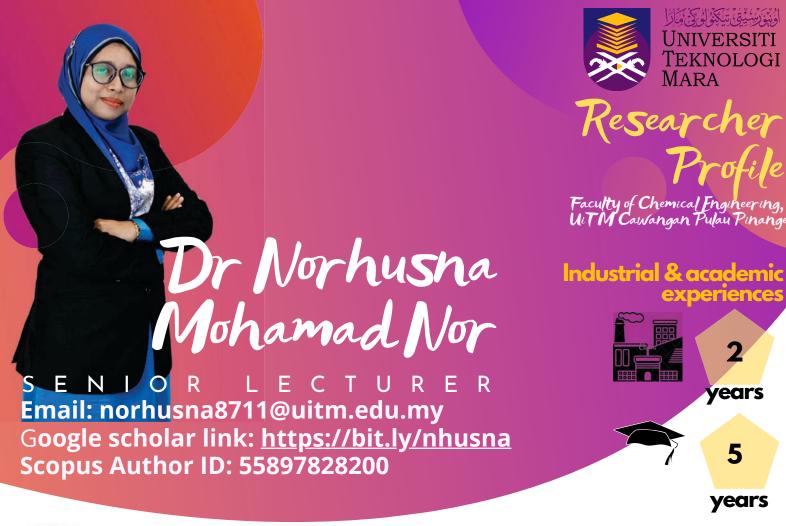
copyright



Supervision

5 | 12

postgraduate



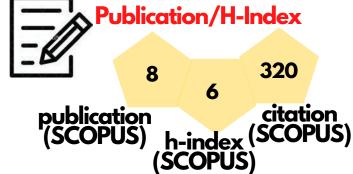


- B. Eng Chemical UTP, Malaysia
- MSc, UTP Malaysia
- PhD, USM, Malaysia



#### Research interest & Expertise

Air pollution control, Separation technology, Biomass conversion, Wastewater treatment, Nanotechnology, Materials Science





industry government international



#### Professional membership

- Associate member, Institute of Chemical Engineer (IChemE), UK
- Graduate Engineer, Board of Engineers Malaysia



#### Research grants



**RM133K** 

internal

national



international

patent filed

copyright



Supervision

12

postgraduate





- B. Eng Chemical UTP, Malaysia
- MSc, USM Malaysia
- PhD, USM, Malaysia



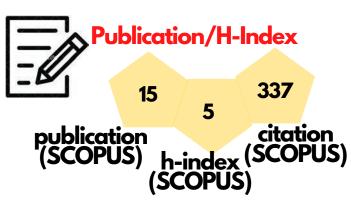
#### Professional membership

Graduate Engineer, Board of Engineers Malaysia (BEM)



#### Research interest & Expertise

 Catalysis, bio-fuel, pyrolysis, advanced oxidation process, wastewater treatment,







Research grants

international internal

national



**Innovation** 

patent filed 2

copyright

**Networking** 

government industry international



Supervision

3 5

postgraduate





- B. Eng Bioprocess UTM, Malaysia
- M.Eng, UTM Malaysia
- PhD, UMP, Malaysia



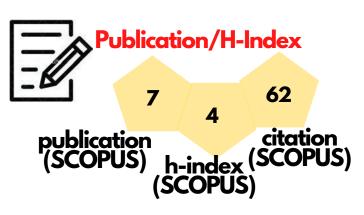
#### Professional membership

Graduate Engineer, Board of Engineers Malaysia (BFM)

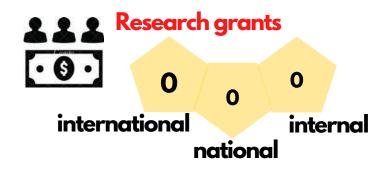


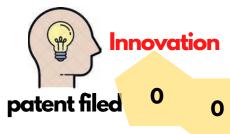
## Research interest & Expertise

Bioprocess engineering, Ensyme technology, bioconversion



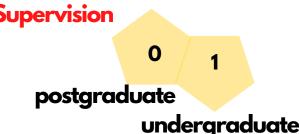
**Networking** 





copyright









- M.Sc, USM Malaysia
- PhD, USM, Malaysia

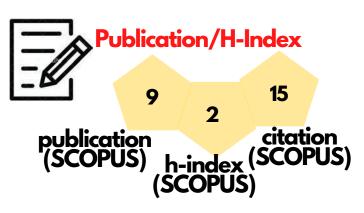


Professional Chemist (ChM), Institut Kimia



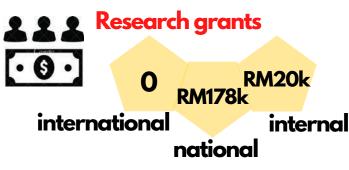
#### Research interest & **Expertise**

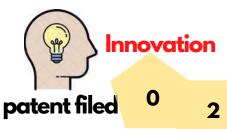
Nanomaterials, Wastewater treatment, Catalysis





Malaysia (IKM)





copyright



industry government international



Supervision

1 20 postgraduate undergraduate



Dr Nor Aida Zubir

ENIOR LECTUR

Email: noraida709@uitm.edu.my

Google scholar link: https://bit.ly/aidazubir

Scopus Author ID: 10639009700



Researcher Profile

Faculty of Chemical Engineering, UiTM Cawangan Pulau Pinange

Industrial & academic



years



years



#### **Education**

- B. Eng Chemical UTM, Malaysia
- M.Sc, UTM Malaysia
- PhD, Univ of Queensland, Australi



#### Professional membership

- Graduate Engineer, Board of Engineers Malaysia
- Associate Member, Institute of Chemical Engineer (IChemE), UK;



#### Research interest & **Expertise**

Catalysis, Fenton-like reaction, heterogeneous catalyst, graphene oxide based nanocomposites, nanocomposites, advanced oxidation process, wastewater treatment, membrane.



618 citation publication h-index (SCOPUS) (SCOPUS)

Research grants



international

internal

national



**Innovation** 

patent filed

5

copyright



industry government international



Supervision

10

postgraduate





- B. Eng Chemical UKM, Malaysia
- M.Sc, UTP Malaysia
- PhD, UiTM



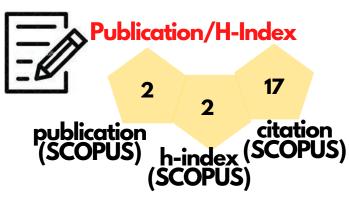
#### Professional membership

Graduate Engineer, Board of Engineers Malaysia (BEM)



## Research interest & Expertise

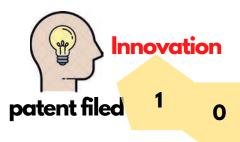
Catalytic reaction, CO2 conversion, environmental engineering



Research grants

O RM82k

international internal national



copyright

**Networking** 

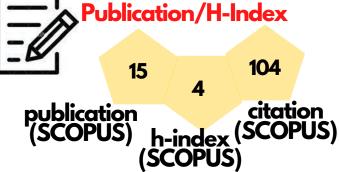
1 0 0 industry government international



0 8

postgraduate undergraduate







**Networking** 

industry government international

international internal



copyright



0 20

postgraduate



TEKNOLOGI Researcher Profile

UNIVERSITI

Faculty of Chemical Engineering, UiTM Cawangan Pulau Pinange

Industrial & academic



years

years



Email: norfariza5031@uitm.edu.my Google scholar link: <a href="https://bit.ly/fariza">https://bit.ly/fariza</a> **Scopus Author ID: 57207979570** 



#### **Education**

- BEng, U of Minnesota, U.S.A
- M.Sc, UTM, Malaysia
- PhD, UPM, Malaysia



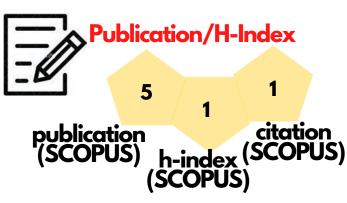
#### Professional membership

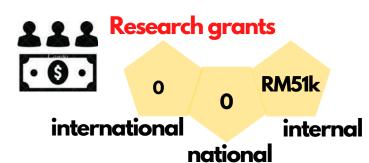
Graduate Engineer, Board of Engineers Malaysia

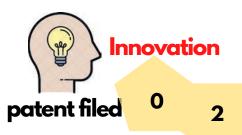


#### Research interest & Expertise

Phytochemistry, Extraction of natural products, Drying of natural product







Supervision

copyright

**Networking** 

1 13

postgraduate undergraduate

industry

government international



**Scopus Author ID: 6508164838** 



### Researcher Profile

Faculty of Chemical Engineering, UiTM Cawangan Pulau Pinange

Industrial & academic





years



#### Education

- BEng, Chemical UTP, Malaysia
- M.Sc, USM, Malaysia
- PhD, USM, Malaysia



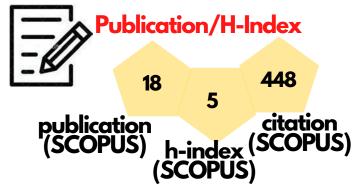
#### Professional membership

Graduate Engineer, Board of Engineers Malaysia (BEM)

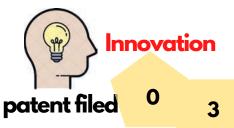


#### Research interest & **Expertise**

Fenton-like reaction. Photo-Fenton reaction, Electro-Fenton reaction Heterogeneous catalysis. Adsorption Wastewater treatment







copyright



government industry international



postgraduate





- MEng, Univ of Birmingham, UK
- M.Sc, UTM, Malaysia
- PhD, UiTM, Malaysia



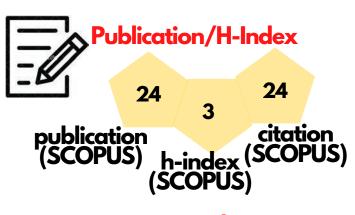
#### Professional membership

- Graduate Engineer, Board of Engineers Malaysia (BEM)
- Associate member, Institute of Chemical Engineer (IChemE), UK



## Research interest & Expertise

Bioprocess engineering Biocatalysts





Research grants



RM25k

international

internal

national



**Innovation** 

patent filed

3

copyright



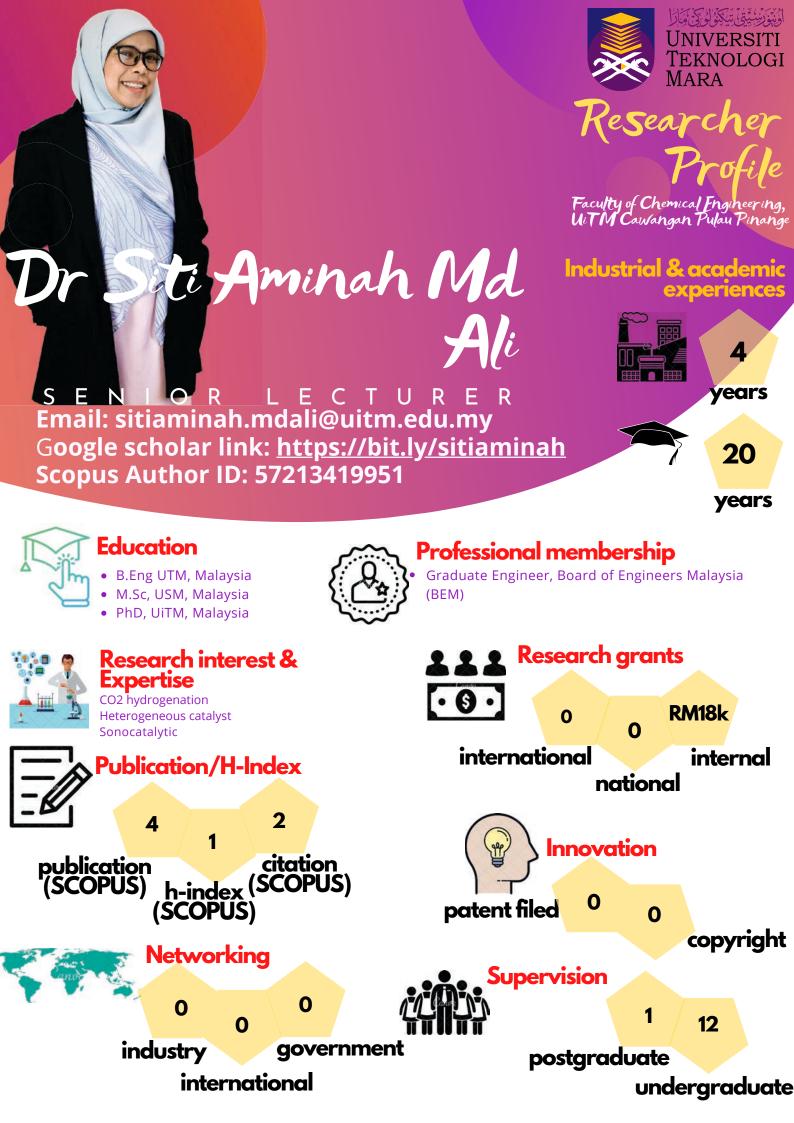
2 1 industry government international



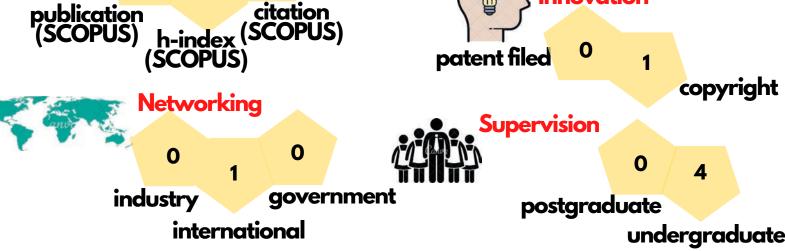
Supervision

3 / 14

postgraduate











- B. Eng Chemical UTM, Malaysia
- MSc, UiTM Malaysia



### Professional membership

- Graduate member, Institute of Engineers Malaysia (IEM)
- Graduate Engineer, Board of Engineers Malaysia



publication

#### Research interest & Expertise

**Publication/H-Index** 

 Reaction kinetics, Catalysis, Oleochemical technology, Chemical reaction engineering



Research grants



RM20K

international national

internal



**Innovation** 

patent filed

0

copyright



0

h-index (SCOPUS) (SCOPUS)

industry government international

58

citation



Supervision

2 32

postgraduate



Google scholar link: https://bit.ly/mazahar



### Researcher Profile

Faculty of Chemical Engineering, UiTM Cawangan Pulau Pinange

Industrial & academic experiences



years



10

years



#### **Education**

• B. Sc Chemical Eng Univ. of Arizona, Tuscon, USA

**Scopus Author ID: 57193811025** 

MSc, UTM Malaysia



#### Research interest & Expertise

**Publication/H-Index** 

 Separation, Process Safety, Industrial Gas System

#### Professional membership

- Professional Engineer with Practicing Certificate Board of Engineers Malaysia (BEM),
- Corporate Member Institute of Engineers, Malaysia (IEM), Chartered Engineer - Institute of Chemical Engineer (IChemE) & Engineering Council (UK),
- Gas Engineering Supervisor Energy Commission Malaysia



Research grants



international

internal

national



**Innovation** 

patent filed

2

copyright

**Vetworking** 

publication (SCOPUS)

h-index (SCOPUS)

industry government international

32

Supervision

12

postgraduate



UNIVERSITI TEKNOLOGI Researcher Profi

Faculty of Chemical Engin<mark>eering,</mark> UiTM Cawangan Pulau Pinange

Industrial & academic experiences

## Faraziehan Senusi

LECTURER

Email: faraziehan@uitm.edu.my

Google scholar link: https://bit.ly/faraziehan

**Scopus Author ID: 57193811025** 



years



10

years



#### **Education**

- B. Eng Chemical USM, Malaysia
- MSc, USM Malaysia



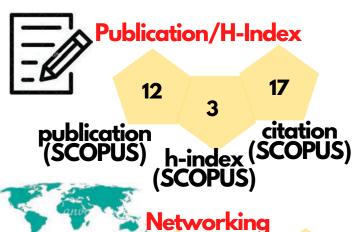
#### Professional membership

- Graduate Engineer Board of Engineers Malaysia
- Associate member Institute of Chemical Engineer (IChemE)

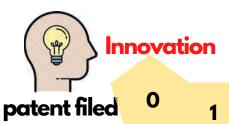


#### Research interest & Expertise

Wastewater Treatment; Separation Technology; Membrane Separation, Adsorption



Research grants • 6 RM30K international internal national



copyright



Supervision

0 15

postgraduate

undergraduate

0 industry government

international





### Researcher Profi

Faculty of Chemical Engin<mark>eering,</mark> UiTM Cawangan Pulau Pinange

Industrial & academic experiences

## Rasyidah Alrozi

OR LECTURER

445

citation

Email: rasyidah.alrozi@uitm.edu.my

Google scholar link: <a href="https://bit.ly/rasyidah\_alrozi">https://bit.ly/rasyidah\_alrozi</a>

**Scopus Author ID: 36611370700** 



years



years



#### Education

- B. Eng Chemical USM, Malaysia
- MSc, USM Malaysia



#### Professional membership

- Graduate Engineer Board of Engineers Malaysia
- Graduate member Institute of Engineers Malaysia (IEM)



publication

#### Research interest & **Expertise**

**Publication/H-Index** 

Adsorption, heteregenous catalyst



Research grants

international internal national



**Innovation** 

patent filed 3

copyright

**Networking** 

industry

(SCOPUS)

(SCOPUS) h-index (SCOPUS)

government international

Supervision

1 10

postgraduate



international

postgraduate





### Researcher Profi

Faculty of Chemical Engineering, UiTM Cawangan Pulau Pinange

Industrial & academic experiences

## Siti Fatimah Abdul Halim S E N I O R L E C T U R E R



years

Email: ctfatimah.ahalim@uitm.edu.my Google scholar link: https://bit.ly/sitifatimah Scopus Author ID: 24831445800



11

years



#### **Education**

- B. Eng Chemical USM, Malaysia
- MSc, USM Malaysia



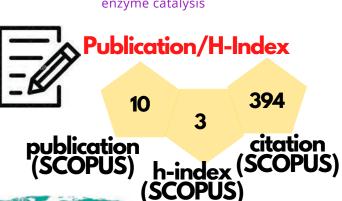
#### Professional membership

Graduate Engineer - Board of Engineers Malaysia (BEM)



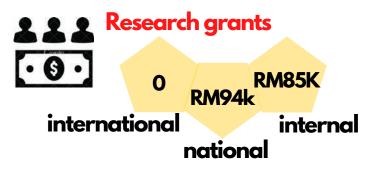
#### Research interest & Expertise

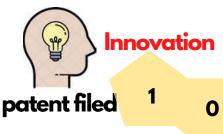
Separation process, wastewater treatment, liquid membrane, biofuel, enzyme catalysis



**Networking** 

0 industry government international





copyright



Supervision

0 20 postgraduate undergraduate





Universiti Teknologi Mara Researcher Profile

Faculty of Chemical Engineering, UiTM Cawangan Pulau Pinange

Industrial & academic experiences



oars

years



**12** 

years

Google scholar link: <a href="https://bit.ly/alwani">https://bit.ly/alwani</a>
Scopus Author ID: 55597133100

#### **Education**

- BEng UiTM, Malaysia
- MSc, USM Malaysia



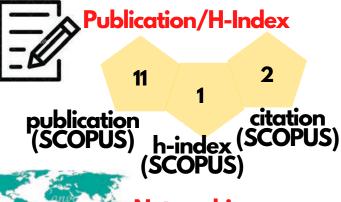
#### **Professional membership**

Graduate Member, Board of Engineers, Malaysia Graduate Member, IEM, Malaysia



## Research interest & Expertise

Artificial Neural Network Modelling Biofuel Nanotechnology Catalysis



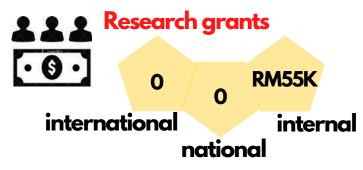
(SCOPUS)

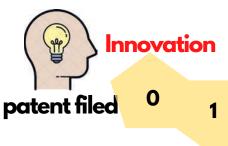
Networking

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industry

government

international



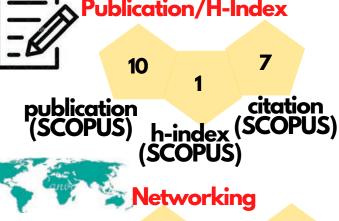


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copyright

ostgraduate undergraduate





0 0 government industry international

patent filed 5 copyright

Supervision 0 8 postgraduate undergraduate



UNIVERSITI **TEKNOLOGI** Researcher Profi

Faculty of Chemical Engineering, UiTM Cawangan Pulau Pinange

Industrial & academic experiences

## Mohd Jumain Jalil

Email: mjumain0686@uitm.edu.my Google scholar link: https://bit.ly/jumain **Scopus Author ID: 56188537200** 





years



#### Education

- BEng UTM, Malaysia
- MSc, UiTM Malaysia



#### Professional membership

Graduate Member, Board of Engineers, Malaysia



#### Research interest & Expertise

Oleochemical Chemical reaction Modelling Wastewater treatment





#### **Publication/H-Index**

13 citation publication (SCOPUS) h-index (SCOPUS)



patent filed 2

copyright

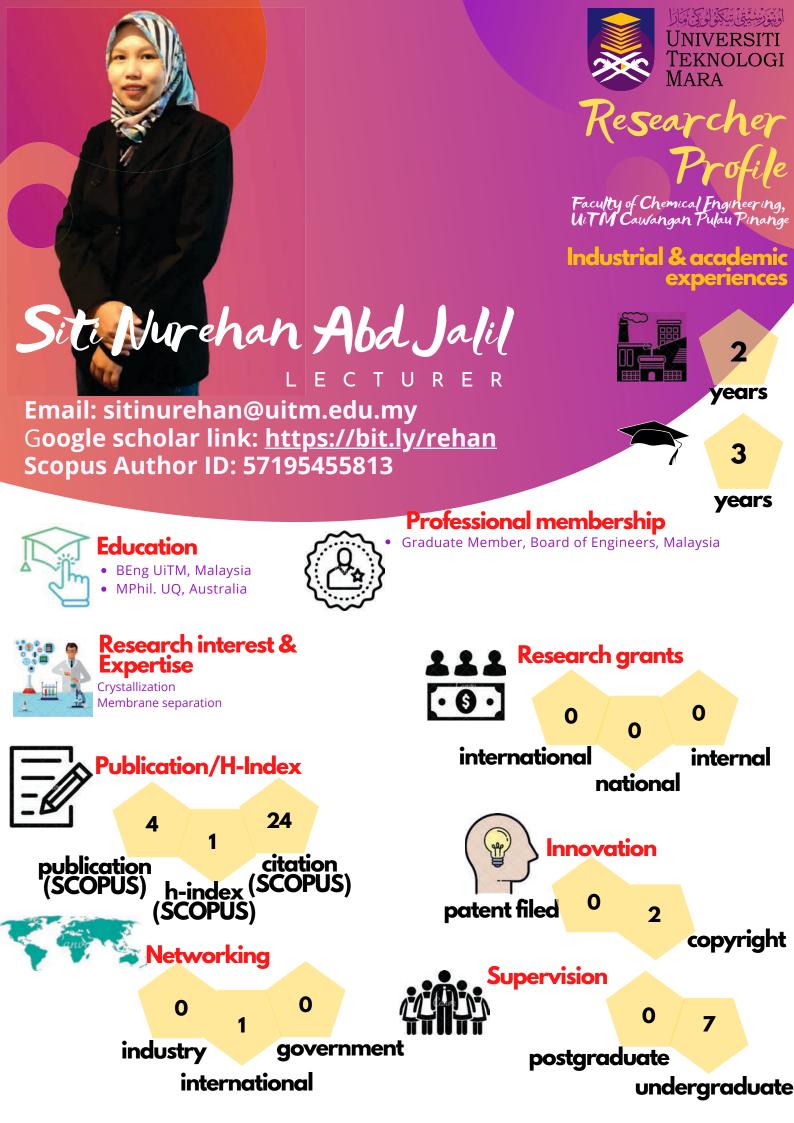
**Vetworking** 

0 government industry international

42

**Supervision** 

0 12 postgraduate















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