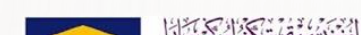


Name of RIG/Centre :  
**MEMBRANE TECHNOLOGY**

CoRe :  
**FRONTIER MATERIALS AND INDUSTRIAL APPLICATION**

Faculty:  
**FACULTY OF CHEMICAL ENGINEERING**

# Background of Members



**DR. NUR HIDAYATI BINTI OTHMAN**

FKK, UiTM Shah Alam

PhD (Chemical Engineering), ICL

*Membrane processes for wastewater treatment and gas purification, fuel cell, nanomaterials, catalysis.*



**DR. LIM YING PEI**

FKK, UiTM Shah Alam

PhD (Chemical Engineering), UKM

*Membrane separation, Wastewater Treatment, Photocatalysis*



**DR. NORIN ZAMIAH KASSIM**

FKK, UiTM Shah Alam

PhD (Mass Transfer-Oleochemicals), UiTM

*Production of novel materials, Fabrication of thin film composite membrane for permeation and separation process, Integrated complexation method for heavy metal removal.*



**ASDARINA BINTI YAHYA**

FKK, UiTM Shah Alam

Master of Engineering (Chemical), UMP

*Ultrasonic membrane technology for wastewater treatment and separation*



**DR. NORHIDAYAH IDERIS**

FKK, UiTM Shah Alam

PhD (Chemical Engineering), USM

*Membrane technology (adsorptive polymeric membrane), biosensor (immunoassay), advanced materials and separation and purification technology*



**MEOR MUHAMMAD HAFIZ BIN SHAH BUDDIN**

FKK, UiTM Shah Alam

Master of Science (Chemical Engineering), USM

*Membrane technology for wastewater treatment and separation*

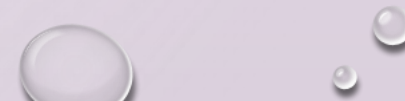


**PM DR. RAMLAH MOHD TAJUDDIN**

FKA, UiTM Shah Alam

PhD (Civil Engineering), UTM

*Wastewater, Membranes, Land Fill, Leachate*



# List of Research Grants

BIL	NAMA PENYELIDIK UTAMA	NAMA PROJEK	JENIS	AGENSI PEMBIAYA	TARIKH MULA	TARIKH TAMAT	STATUS	JUMLAH PEMBIAYAAN (RM)
1	Nur Hidayati Othman	Adsorption Mechanism and Kinetic Behaviour Of Fe <sub>3</sub> O <sub>4</sub> -Magnetic Graphene (Fe <sub>3</sub> O <sub>4</sub> -Mg) Nanocomposite	Geran	FRGS, KPT	2017	2019	AKTIF	99,250.00
2	Nur Hidayati Othman	Surface-Modified Micro-Structured Lanthanum Strontium Cobalt Ferrite (LSCF) Hollow Fibre Membrane by Using Metal Oxide Catalyst for Improvement of Surface Activity	Geran	RAGS, KPT	2015	2017	TAMAT	53,000.00
3	Norin Zamiah Kassim Shaari	Formulation of A Thin Film Composite With A Hybrid Membrane As The Barrier Layer For Heavy Metal Removal	Geran	FRGS, KPT	2014	2016	TAMAT	74,180.00
4	Norin Zamiah Kassim Shaari	Formulation of integral chitosan polysulfone membrane that reflects the integrated complexation process for mercury removal	Geran	Bestari Perdana, UiTM	2018	2019	AKTIF	30,000.00
5	Lim Ying Pei	Charge transport mechanism of EGFR mutation in lung cancer and plasmonic Au sensitized TiO <sub>2</sub> nanotubes	Geran	FRGS, KPT	2017	2019	AKTIF	91,372.00
6	Norhidayah Ideris	Comprehensive Study on Membrane Characteristics for Protein Immobilization: A Comparison Between Polymeric Membranes	Geran	Lestari, KPT	2016	2018	AKTIF	20,000.00
7	Lim Ying Pei	Preparation of Hybrid CuO/TiO <sub>2</sub> Photocatalyst Responsive Towards Visible Light	Geran	Lestari, KPT	2017	2019	AKTIF	20,000.00

BIL	NAMA PENYELIDIK UTAMA	NAMA PROJEK	JENIS	AGENSI PEMBIAYA	TARIKH MULA	TARIKH TAMAT	STATUS	JUMLAH PEMBIAYAAN (RM)
8	Meor Muhammad Hafiz Bin Shah Buddin	Elucidating the Behaviour and Mechanism of Water-in-Oil-in-Water (W/O/W) Emulsion Stability for Emulsion Liquid Membrane	Geran	FRGS, KPT	2017	2017	AKTIF	97,000.00
9	Asdarina binti Yahya	Kinetics And Mechanisms Of Ultrasonic Membrane An Aerobic System (Umas) For Membrane Fouling Control	Geran	FRGS, KPT	2014	2017	TAMAT	117,900
10	Asdarina binti Yahya	Edible Coating Incorporated With Turmeric Oil As Antimicrobial Agent	Geran	Lestari, UiTM	2016	2018	AKTIF	20,000
11	Ramlah Mohd Tajuddin	Orchestrated Polymer Research Group (Opor)	Geran	REI	2015	2018	AKTIF	35,000
12	Ramlah Mohd Tajuddin	Enhancing The Kenaf Productivity Through Product	Geran	Private	2015	2017	AKTIF	200,000
13	Ramlah Mohd Tajuddin	Electrocoagulation In Removing Heavy Metals And Nutrients In Landfill Leachate	Geran	LESTARI	2016	2018	AKTIF	20,000
14	Ramlah Mohd Tajuddin	Optimisation Of Methane Production From Food Waste By An Anaerobic Digestion	Geran	GIP	2016	2018	AKTIF	35,000
<b>JUMLAH TERKUMPUL</b>								<b>912,702.00</b>

# List of Postgraduates (Research)

BIL	NAMA PENYELIA	STATUS PENYELIAAN	NAMA PELAJAR	TAHUN KEMASUKAN	TAHUN TAMAT PENGAJIAN	PERINGKAT PENGAJIAN
1	Nur Hidayati Othman	Penyelia Utama	'Ainun Sailah Sihar	2015	2018	Masters
2	Nur Hidayati Othman	Penyelia Utama	Nurul Fattin Diana Junaidi	2016	2018	Masters
3	Nur Hidayati Othman	Penyelia Utama	Siti Samihah Binti Mahmood	2014	2018	Masters
4	Nur Hidayati Othman	Penyelia Utama	Azwan bin Harun	2015	2018	Masters
5	Nur Hidayati Othman	Penyelia Utama	Najihah binti Jamil	2016	2018	PhD
6	Nur Hidayati Othman	Penyelia Bersama	Mohamad Fiqri Zainuddin	2016	2018	Masters
7	Nur Hidayati Othman	Penyelia Bersama	Salinda Ab Ghani	2016	2019	PhD
8	Norin Zamiah Kassim	Penyelia Utama	Nurul Aida Sulaiman	2014	2018	Masters
9	Norhidayah Ideris	Penyelia Bersama	Ilyani Ismail	2016	2018	Masters
10	Meor Muhammad Hafiz Bin Shah Buddin	Penyelia Bersama	Nur Dina Zaulkiflee	2017		Masters
11	Asdarina binti Yahya	Penyelia Bersama	Nur Fathin Amirah Shafie	2015	2017	masters
12	Asdarina binti Yahya	Penyelia Bersama	Ummu Qurratulaini Mansor	2015	2018	masters



BIL	NAMA PENYELIA	STATUS PENYELIAAN	NAMA PELAJAR	FAKULTI	TAHUN KEMASUKAN	TAHUN TAMAT PENGAJIAN	PERINGKAT PENGAJIAN
13	Ramlah Mohd Tajuddin	Penyelia Utama	Azman Bin Ismail	FKA	2015	2019	PhD
14	Ramlah Mohd Tajuddin	Penyelia Utama	Raja Baharudin Bin Raja Mamat	FKA	2015	2019	PhD
15	Ramlah Mohd Tajuddin	Penyelia Utama	Khairul Anam Bin Moktar	FKA	2014	2018	PhD
16	Ramlah Mohd Tajuddin	Penyelia Utama	Hamizah Binti Mokhtar	FKA	2013	2018	PhD
17	Ramlah Mohd Tajuddin	Penyelia Utama	Noor Saadah Binti Abdul Hamid	FKA	2014	2018	PhD
18	Ramlah Mohd Tajuddin	Penyelia Utama	Wan Suriati Binti Mazlan	FKA	2014	2018	PhD
19	Ramlah Mohd Tajuddin	Penyelia Utama	Siti Aisyah Binti Ghazali	FKA	2012	2018	PhD
20	Ramlah Mohd Tajuddin	Penyelia Utama	Nur Atikah Ahmad Latiffi	UTHM FKAAS		2018	PhD
21	Ramlah Mohd Tajuddin	Penyelia Utama	Sharifah Binti Abdullah	FKA	2011	2017	PhD
22	Ramlah Mohd Tajuddin	Penyelia Utama	Taha Ali Ben Musa	FKA	2009	2017	PhD
23	Ramlah Mohd Tajuddin	Penyelia Bersama	Norin Zamiah Kassim	FKK		2015	PhD
24	Ramlah Mohd Tajuddin	Penyelia Utama	Tengku Noor Syuhada Binti Tuan Soh	FKA	2014	2018	MSc
25	Ramlah Mohd Tajuddin	Penyelia Utama	Mohd Nazrin Bin Othman	FKA	2011	2014	MSc
26	Ramlah Mohd Tajuddin	Penyelia Utama	Nor Munirah Binti Abdullah	FKA	2011	2013	MSc

BIL	NAMA PENYELIA	STATUS PENYELIAAN	NAMA PELAJAR	FAKULTI	TAHUN KEMASUKAN	TAHUN TAMAT PENGAJIAN	PERINGKAT PENGAJIAN
27	Ramlah Mohd Tajuddin	Penyelia Utama	Nabilah Huda Binti Abdul Halim	FKA	2011	2013	MSc
28	Ramlah Mohd Tajuddin	Penyelia Utama	Jamaiatul Lailah Binti Mohd Jais	FKA	2009	2013	MSc
29	Ramlah Mohd Tajuddin	Penyelia Utama	Nurul Ain Binti Salim	FKA	2009	2016	MSc
30	Ramlah Mohd Tajuddin	Penyelia Bersama	Maisarah Binti Abd Ghani	FKA	2016	2019	MSc
31	Ramlah Mohd Tajuddin	Penyelia Bersama	Mohd Za Im Bin Mohd Nor	FKA	2015	2019	MSc
32	Ramlah Mohd Tajuddin	Penyelia Bersama	Munyati Bt Mohammed	FKA	2013	2018	MSc
33	Ramlah Mohd Tajuddin	Penyelia Bersama	Faridah Binti Mohd Razelan	FKA	2015	2019	MSc
34	Ramlah Mohd Tajuddin	Penyelia Bersama	Nik Nurfadzlin Binti Nik Azizan	FKA	2015	2018	MSc

# Niche Area and Relevance of RIG

- To carry out **fundamental and applied research** related to the **membrane-based separations** for various applications
- To **discover** and **fabricate new membrane materials and designs**, and further **develop fundamental understanding** of the **relationship** between the **membrane structure** and its **characteristic separation** properties.
- To carry out **design study** by **modifying the membrane structure** and **morphology** (blending, thin film deposition and in-situ functionalization) with an aim to search for **optimal trade-offs**, to solve the requirements of high flux and selectivity.

# Organizational Chart

**PENAUNG**  
PROFESOR EMERITUS DATO'  
DR. HASSAN BIN SAID

**PENASIHAT 1**  
PROF. DR NORAZAH ABD RAHMAN

**PENASIHAT 2**  
PM DR JUNAIDAH JAI

**KETUA**  
DR. NUR HIDAYATI OTHMAN  
(Ceramic membrane reactor and gas separation)

## PENASIHAT PENYELIDIKAN LUAR

1. Prof. Datuk Dr. Ahmad Fauzi Ismail (UTM)
2. Prof. Dato' Ir. Dr. Abdul Wahab Mohammad (UKM)
3. Prof. Dr. Abdul Latif Ahmad (USM)
4. Prof. Kang Li (Imperial College London)

DR. LIM YING PEI  
(Photocatalytic membrane)

DR. NORIN ZAMIAH KASSIM  
(Thin film coating)

MEOR MUHAMMAD HAFIZ BIN SHAH BUDDIN  
(Liquid membrane)

DR. NORHIDAYAH IDERIS  
(Membrane sensor)

SETIAUSAHA ASDARINA YAHYA  
(Ultrasonic membrane)

PM DR. RAMLAH MOHD TAJUDDIN  
(Polymeric membrane)

PEMBANTU PENYELIDIK  
PELAJAR PASCASISWAZAH

PEMBANTU PENYELIDIK  
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PELAJAR PASCASISWAZAH

# RIG Research Roadmap (5/10 yrs)

