

## **ACADEMIC QUALIFICATIONS**

Name : KHALILAH ABDUL KHALIL  
Faculty : FACULTY of APPLIED SCIENCES, UiTM  
Pasport/MyKad No. : 720320-07-5454  
Telephone No. (Office) 03-55443886  
Cell-phone : 017-6993519  
Email [khali552@salam.uitm.edu.my](mailto:khali552@salam.uitm.edu.my) ,  
[khaliilahabdkhalil@gmail.com](mailto:khaliilahabdkhalil@gmail.com)



<b>QUALIFICATIONS, SPECIALISATION</b>	<b>AWARDING INSTITUTION, COUNTRY</b>	<b>YEAR</b>
PhD, MICROBIAL BIOTECHNOLOGY	UNI. PUTRA MALAYSIA	2012
MSc. APPLIED MOLECULAR MICROBIOLOGY	NOTTS UNI, UNITED KINGDOM	2003
DOCTOR VETERINARY MEDICINE (D.V.M)	UNI. PUTRA MALAYSIA	1998

## **POSTGRADUATE SUPERVISION**

### **MASTER (RESEARCH) SUPERVISION COMPLETED**

	<b>Students Name</b>	<b>Institutions</b>	<b>Year Enrolled</b>	<b>Year End</b>
1	Norhaslina Hashim	UiTM	2006	2011
2.	Nur Syahirah Salehuddin	UiTM	2012	2016
3	Hifa Nazirah Mohammed Yaziz	UiTM	2012	2016
4.	Nurfatihah Muhammad	UiTM	2012	2016
5.	Mizanurfakri Ghazali (Main supervisor)	UiTM	2013	2017
6.	Balqis Pisol (Co-Supervisor)	UiTM	2012	2017
7.	Aliza Mahdi	UiTM	2016	2018

### **PhD SUPERVISION COMPLETED (Includes Co-supervision)**

	<b>Students Name</b>	<b>Institutions</b>	<b>Year Enrolled</b>	<b>Year End</b>
1	Maati Ghazali	UiTM	2011	2016

### **ON-GOING POSTGRADUATE (RESEARCH) MSc SUPERVISION (Includes Co-supervision)**

	<b>Students Name</b>	<b>Institutions</b>	<b>Year Enrolled</b>	<b>Year End</b>
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1	Abdul Syahid	UiTM	2017	2019
2	Khairulnizam Zakaria	UiTM/SIRIM	2018	2021
3	Nurul Wahida Shokhimi (Main Supervisor)	UiTM	2014	2017
4	Norashikin Jumbro (Main Supervisor)	UiTM	2014	2017
5	Farzini Yushai (Main supervisor)	UiTM	2012	2017
6	Nor Azlin Safina Abdul Aziz (Co-Supervisor)	UiTM	2014	2017
7	Saidatul Shamimi Saifuddin (Co-Supervisor)	UiTM	2014	2017

#### **On-Going PhD SUPERVISION (Includes Co-supervision)**

	<b>Students Name</b>	<b>Institutions</b>	<b>Year Enrolled</b>	<b>Year End</b>
1	Hifa Nazirah Mohammed Yaziz (Main supervisor)	UiTM	2016	2019
1	Aziatul Akma binti Aziz (Co-Supervisor)	UiTM	2012	2015
2	Mohd Yamin Hj Shamsuddin (Co-Supervisor)	UPM	2013	2016
3	Noraini Mat Budari (Co-Supervisor)	UiTM	2013	2016

#### **RESEARCH FUNDINGS**

##### **NATIONAL LEVEL ACTIVE RESEARCH FUNDING (MOSTI/FRGS & Others) (Last Five Years)**

	<b>Research Project</b>	<b>Source</b>	<b>Total Funds</b>	<b>Begin Year</b>	<b>End Year</b>
1.	Autophagic cell death of colorectal cancer by exopolysaccharides from Bifidobacteria	FRGS	105,000	2017	2020
2.	The Effect Of Bpifb1 Induction On The Migration And Invasion Of Gastric Cancer Cells	FRGS	100,000.00	2016	2018
3.	Cloning And Characterization Of Cyclotides Genes From The Local Plants, Leucaena Leucocephala And Parkia Speciosa	FRGS	71,500.00	2016	2018
4.	Characterization of Extracellular Proteins Secreted by Bifidobacteria Strains that Prootes Intestinal Mucosa-Bacterial Interactions (Principle)	RACE	49,900	2014	2016
5.	Interfacial Cross-Linking Polymerization of Oil Palm Fronds Hemicellulose (Co-researcher)	FRGS	81,000	2013	2015
6.	Expression Analysis of BFIFBI in Gastric Cancer (co-researcher)	RAGS	80,000	2013	2015
7.	Probiotic potential of lactic acid bacteria isolated from soybean and chickpea tempe processing (Co-Researcher)	FRGS	81,000	2013	2015
8.	Surface-Associated Protein of <i>Bifidobacteria pseudocatenulatum</i> strains adhere to mucin and fibronectin (Principle)	FRGS	90,000	2013	2015

9.	Encapsulation of Hydrophobic Food Bioactive in Edible Fabricated Starch-Based Microparticles (Co-Researcher)	ERGS	129,000	2013	2016
10. 9	Hydrolysis Effect on Oil Palm Fronds (OPF) Hemicellulose by Two Enzymes Mixtures (Co-Researcher)	ERGS	78,000	2012	2015

#### INDUSTRIAL RESEARCH FUNDING INCLUDING CONTRACT RESEARCH (Last Five Years)

	Research Project	Source	Total Funds	Begin Year	End Year
1	Microbiologically Influenced Corrosion (Mic) Study On Pipeline Materials	UTP	61,600.00	2015	2016

#### INTERNAL GRANTS

	Research Project	Total Funds	Begin Year	End Year
1	Expression Analysis of BFIFBI in Gastric Cancer	60,000	2013	2015
2	Interfacial Cross-Linking Polymerization of Oil Palm Fronds Hemicellulose (Co-researcher)	60,000	2013	2015
3	Stability and Viability of Encapsulated Probiotic Bacteria with Aloe vera Gel in Alginate (Principle)	32,000	2012	2014
4	Isolation and Identification of Probiotic from Breast fed and Formulated Milk Infant Feces ( Co-Researcher)	32,000	2012	2014
5	Isolation of Lactic Acid Bacteria from Processing Stage of Tempe (Co-Researcher)	50,000	2013	2015
6	Production of Biosurfactant from Frying Oil Waste Using Thermophilic and Halotolerant Bacteria (Co-Researcher)	32,000	2012	2014
7	Optimization for Efficient Production of Polyhydroxyalkanoates and rhamnolipids by <i>Pseudomonas aeruginosa</i> using Response surface Methodology	32,000	2012	2014
8	Characterisation of Lactic Acid Bacteria Isolated from Soybean Tempe for Probiotic Purposes	50,000	2012	2014

#### PUBLICATIONS

#### PUBLICATIONS

##### 2018

1. Syahir Habib, Siti Aqlima Ahmad, Wan Lutfi Wan Johari, Mohd Yunus Abd Shukor, Siti Aisyah Alias, **Khalilah Abdul Khalil**, Nur Adeela Yasid (2018). Evaluation of conventional and response surface level optimisation of n-dodecane (n-C12) mineralisation by psychrotolerant strains isolated from pristine soil at Southern Victoria Island, Antarctica. *Microbial Cell Factories*, 17:44.

2. Tanbir Ahmad, Amin Ismail, Siti A Ahmad, **Khalilah A Khalil**, Leo T Kee, Elmutaz A Awad, Kazeem D Adeyemi, Awis Q Sazili (2018). Autolysis of bovine skin, its endogenous proteases, protease inhibitors and their effects on quality characteristics of extracted gelatin. *Food Chemistry*, pp 1-4.
3. Tanbir Ahmad, Amin Ismail, Siti Aqlima Ahmad, **Khalilah Abdul Khalil**, Elmutaz Atta Awad, Teik Kee Leo, Jurhamid C Imlan, Awis Qurni Sazili (2018). Characterization Of Gelatin From Bovine Skin Extracted Using Ultrasound Subsequent To Bromelain Pretreatment. *Food Hydrocolloids*, 80 (264-273).
4. Tanbir Ahmad, Amin Ismail, Siti A Ahmad, **Khalilah A Khalil**, Teik K Leo, Elmutaz A Awad, Jurhamid C Imlan, Awis Q Sazili (2018). Effects of Ultrasound Assisted Extraction in Conjugation with Aid of Actinidin on the Molecular and Physicochemical Properties of Bovine Hide Gelatin. *Molecules*, 23(4), 730.
5. Motharasan Manogaran, Mohd Yunus Shukor, Nur Adeela Yasid, **Khalilah Abdul Khalil**, Siti Aqlima Ahmad (2018). Optimisation of culture composition for glyphosate degradation by *Burkholderia vietnamiensis* strain AQ5-12. *3 Biotech*, 8(2), 108.
6. A Amizon, S Sabiha Hanim, WO Wan Siti Atikah, **AK Khalilah**, TzM Tengku Elida, Nurul Fatimah (2018). Screening and Isolation of Locally Thermophilic Facultative Anaerobe Bacteria for Biosurfactant Production. *Bioresources Technology in Sustainable Agriculture*, 131-144.
7. Syamimi Wahida Mohamad Ismail, Farrah Aini Dahalan, Ammar Zakaria, Ali Yeon Mad Shakaff, Siti Aqlima Ahmad, Mohd Yunus Abd Shukor, Mohd Khalizan Sabullah, **Khalilah Abdul Khalil**, Mohd Faizal Ab Jalil (2018). The acute toxicity of the metaldehyde on the climbing perch, *E3S Web of Conferences*, 34, 20-31.
8. Azlina Mat Saad, Farrah Aini Dahalan, Naimah Ibrahim, Sara Yasina Yusuf, Siti Aqlima Ahmad, **Khalilah Abdul Khalil** (2018). Settling properties of aerobic granular sludge (AGS) and aerobic granular sludge molasses (AGSM). *E3S Web of Conferences*, 34, 20-22.
9. **Khalilah, A.K.**, Rosfarizan, M., Arbakariya, A., Yazid, A.M., Aklima, S.A., Farrah, A.D., Shuhaimi, M. (2015). Encapsulation of *Bifidobacterium pseudocatenulatum* G4 with Bovine gelatin- genipin-sodium alginate matrices: Optimization approach using Face Centered Composite Design (FCCD) (Under review)
10. **Khalilah Abdul Khalil**, Maslinda Musa, Siti Aqlima Ahmad- Shuhaimi Mustafa (2017). Organic Acids And Carbon Profiles By *Bifidobacteria pseudocatenulatum* G4 During Cultivation In Low Concentrations Of Milk Medium. *The Asian Journal of Microbiology* (accepted)
11. Mizanurfakhri Ghazali , **Khalilah Abdul Khalil** , Maslinda Musa , Mazatulikhma Mat Zain , Siti Aqlima Ahmad , Farrah Aini Dahalan (2015). Screening of pH and time for *Bifidobacterium pseudocatenulatum* KAKii to adhere on Human Enterocyte-like Caco-2 Cell Lines. *Saudi Journal of Biological Sciences*. (review in progress).
12. **Khalilah, A.K.**, Nur Syahirah, S., Anida, Y., Hifa Nazirah, M.Y., Ahmad, S.A. (2015). Survivability and Release Activity of Chitosan Coated Co-encapsulated *L. plantarum* NBRC 3070 with Aloe vera beads during Low Temperature Storage in Pineapple Juice. *Advance Journal of Food Science and Technology* (review in progress)
13. Hifa Nazirah Mohammed Yaziz, **Khalilah Abdul Khalil**, Tengku Elida Tengku Zainal Mulok, Nur Syahirah Salehuddin (2015). Optimization of *Aloe Vera* Medium with Different Carbon and Nitrogen Sources for *Lactobacillus Plantarum* NBRC 3070 Cultivation using Response Surface Methodology (RSM). *Malaysia Journal of Microbiology* (review in progress)

## 2017

1. Tanbir Ahmad, Amin Ismail, Siti Aqlima Ahmad, **Khalilah A Khalil**, Yogesh Kumar, Kazeem D Adeyemi, Awis Q Sazili (2017). Advances On The Role Of Process Variables Affecting Gelatin Yield And Characteristics With Special Reference To Enzymatic Extraction: A Review. *Food Hydrocolloids*, Volume 63, February 2017, Pages 85–96.
2. Siti Aqlima Ahmad, Nor Aripin Shamaan, Mohd Arif Syed, Ariff Khalid, Nor Arina Ab Rahman, **Khalilah Abdul Khalil**, Farrah Aini Dahalan, Mohd Yunus Shukor (2017). Meta-cleavage pathway of phenol degradation by *Acinetobacter*. *Rendiconti Lincei March 2017*, Volume 28, Issue 1, pp 1–9
3. Nur Syahirah Sallehudin, Anida Yusof, Hifa Nazirah Mohd Yazid, Siti Aqlima Ahmad, **Khalilah Abdul Khalil** (2017). Release Activity of Encapsulated *Lactobacillus plantarum* NBRC 3070 in Optimum Alginate -

Aloe vera Matrices during Simulated Gastric Fluid (SGF) and Simulated Intestinal Fluid (SIF) Exposure. Asian Journal of Applied Sciences, 5(2), p 383-388.

## 2016.

1. Ibrahim Yusuf, Siti Aqlima Ahmad, Lai Yee Phang, Mohd Arif Syed, Nor Aripin Shamaan, **Khalilah Abdul Khalil**, Farrah Aini Dahalan, Mohd Yunus Shukor (2016). Keratinase production and biodegradation of polluted secondary chicken feather wastes by a newly isolated multi heavy metal tolerant bacterium- *Alcaligenes* sp. AQ05-001. Journal of Environmental Management . Volume 183, Part 1, 1 December 2016, Pages 182–195.
2. NM Budari, MF Ali, KHK Hamid, **KA Khalil**, M Musa (2016). Disruption by Low Intensity Ultrasound for Bacterial Disinfection. InCIEC 2015: Proceedings of the International Civil and Infrastructure Engineering Conference,
3. Nawawi, Norazah Mohammad; Ahmad, Siti Aqlima; Shukor, Mohd Yunus; Syed, Mohd Arif; **Khalil, Khalilah Abdul** (2016). Statistical Optimisation For Improvement Of Phenol Degradation By *Rhodococcus* Sp. Nam 81. Ournal Of Environmental Biology; May 2016: 443-451.
4. Kabiru Ibrahim Karamba, Siti Aqlima Ahma, Azham Zulkarnain, Mohd Arif Syed, **Khalilah Abdul Khalil**, Nor Aripin Shamaan, Farrah Aini Dahalan, Mohd Yunus Shukor (2016). Optimisation of biodegradation conditions for cyanide removal by *Serratia marcescens* strain AQ07 using one-factor-at-a-time technique and response surface methodology. Rendiconti Lincei, September 2016, Volume 27, Issue 3, pp 533–545
5. Sabiha Hanim Saleh, Siti Normah Mohd Damanhuri Shah, **Khalilah Abdul Khalil**, Aishah Bujang (2016). XYLOLIGOSACCHARIDES PRODUCTION FROM OIL PALM FROND BY *Trichoderma Longibrachiatum* XYLANASE. Malaysian Journal Of Analytical Sciences, Vol 20No 3(2016): 525 -530

## 2015

1. Nurul Wahida Shokhimi, **Khalilah Abdul Khalil**, Shuhaimi Mustafa, Farzini Yusha, Mizanurfakhri Ghazali, Mazatulikhma Mat Zain and Maslinda Musa (2015). Optimization of Time and pH Condition for Cell Autoaggregation of *Bifidobacterium pseudocatenulatum* KAKii Using FCCD-Response Surface Methodology. *Journal of Pure and Applied Microbiology*, Volume 9 (3), page 1-7.
2. Siti Aqlima Ahmad, Mohd Yunus Shukor, Nor Aripin Shamaan, Nor Arina Ab Rahman1, Farrah Aini Dahalan, **Khalilah Abdul Khalil**, Mohd Arif Syed Effects of Pesticides and Respiratory Inhibitors on Phenol Degradation by *Acinetobacter* sp. strain AQ5NOL Immobilized in Gellan Gum. *Journal of Pure and Applied Microbiology* Volume 9 No. Special Edition May. 2015 Page No. 489-495.
3. Balqis P., Noriham, A., **Khalilah A.K.**, Lilis, N. (2015). Natural population of lactic acid bacteria from different stages of traditional Malaysian tempe production: Isolation and identification. *Malaysian Journal of Microbiology*, Mei 2015 (Accepted).
4. Farrah, A.D., Norhayati, A, Ali, Y, Gustaf, O, Myzairah, H., M. Fadhil, M. Din, Aqlima, S.A, **Khalilah A.K.**, Aznah N. A, Zainura, Z, N, Zaini, U (2015). A proposed aerobic granules size development scheme for aerobic granulation process. *Bioresource Technology*, Volume 181, April 2015, Pages 291–296 .<http://dx.doi.org/10.1016/j.biortech.2015.01.062>
5. Kabiru Salihu Karamba, Mohd Yunus Shukor, Mohd Arif Syed, Azham Zulkarnain, Nur Adeela Yasid, Ariff Khalid, **Khalilah Abd Khalil**, Siti Aqlima Ahmad (2015). Isolation, Screening and Characterization of cyanide-degrading *Serratia marcescens* strain aq07. *Journal of Chemical and Pharmaceutical Sciences*, Volume 8, Issue 2, pages 401-406. ISSN: 0974-2115
6. Nursabrina Mohd Hayat, Nor Aripin Shaman, Mohd Yunus Shukor, Mohd Khalizan Sabullah, Mohd Arif Syed, Arif Khalid, Farrah Aini Dahalan, **Khalilah Abdul Khalil**, Siti Aqlima Ahmad (2015). Chlorinase-

based biosensor using *Lates calcifer* (Asian Seabass) brain for detection of heavy metals. *Journal of Chemical and Pharmaceutical Sciences*, Volume 8, Issue 2, pages 376-381. ISSN: 0974-2115

7. Salihi Ibrahim, Mohd Yunus Shukor, **Khalilah Abdul Khalil**, Mohd Izuan Effendi Halmi, Mohd Arif Syed, Siti Aqlima Ahmad (2015). Application of Response Surface Methodology for Optimising Caffeine-Degrading Parameters by *Leifsonia* sp. Strain SIU. *Journal of Environmental Biology*, Volume 36 (5), pages 1215-1221. ISSN: 2394-0379
8. Raden Maizatul Aimi Mohd Azam, **Khalilah Abd Khalil**, Noor Hana Hussain, Hamidah Mohd Saman (2015). An optimization of autogenous healing mortar by alginate-encapsulated *Geobacillus Stearothermophilus* (2015). Proceedings of the International Civil and Infrastructure Engineering Conference 2015.

## 2014

1. **Khalilah, A.K.**, Shuhaimi, M., Rosfarizan, M., Arbakariya, A., Yazid, A.M., Yamin, S. (2014). Optimization of Milk-Based Medium for Efficient Cultivation of *Bifidobacterium pseudocatenulatum* G4 Using Face Central Composite Design-Response Surface Methodology, *BioMed Research International*, 787989, 10 pages, <http://dx.doi.org/10.1155/2014/787989>.
2. Balqis Pisol; Lilis Nuraida; Noriham Abdullah; Suliantari; **Khalilah Abdul Khalil** (2014). Isolation and Characterization of Lactic Acid Bacteria from Indonesia Soybean Tempe (2014-03-18). **URI:** <http://repository.ipb.ac.id/handle/123456789/68352>
3. AA Gami , Yunus, M.G , **Khalilah A.K** , Farrah A.D , Ariff K.. Aqlima A (2014). Phenol and its toxicity. *Journal of Environmental Microbiology and Toxicology* (2014), Vol. 2, No. 1, 11-24

## 2013

1. Nazirah, M.Y., Nur Syahirah, S ., Tengku Elida, T.M., Rohana, M.N., **Khalilah, A.K.** (2013). Screening of *Aloe vera* medium with different carbon and nitrogen sources For *Lactobacillus acidophilus* cultivation using fractional factorial design (FFD). *System Engineering and Technology* (ICSET), 2013 *IEEE 3<sup>rd</sup>*, 10.1109/ICSEngT.2013.6650140, pp 43-47
2. Nur Syahirah, S., Anida, Y., Nazirah, M.Y., **Khalilah, A.K.** (2013). Optimization of aloe vera and alginate as encapsulating matrices for *Lactobacillus acidophilus* using FCCD- RSM approach. *System Engineering and Technology* (ICSET), 2013 *IEEE3<sup>rd</sup>*, 10.1109/ICSEngT.2013.6650141, pp 48-52

## 2012

1. **Khalilah, A.K.**, Shuhaimi, M., Rosfarizan, M., Arbakariya, A., Yazid, A.M. (2012). Optimization of fish gelatin-alginate-genipin as encapsulating matrices for probiotic application using FCCD-RSM.. *IEEE Symposium in Humanities, Sciences and Engineering Research*, 645-650
2. Yamin, S., Shuhaimi, M., Arbakariya, A., Fatimah, A.B., **Khalilah, A.K.**, Anas, O., Yazid, A.M. (2012). Effect of *Ganoderma lucidum* polysaccharides on the growth of *Bifidobacterium* spp as assessed using Real-time PCR. *International Food Research Journal*, 19(3):1199-1206.

## 2010

1. Halal bioencapsule and method thereof. **Khalilah, A.K.**, Shuhaimi, M., Rosfarizan, M., Arbakariya, A., Yazid, A.M. (PI 2010001376). *Patent Filling* (2010).

## **ACHIEVEMENTS / AWARDS:**

- Gold Medal, Melaka International Intellectual Exposition (Miiex 2016), Autonomous Healing Mortal Using Alginate-Encapsulated *Geobacillus Stearothermophilus*. 7<sup>th</sup> -8<sup>th</sup> December 2016, Melaka.
- Gold Medal I-Idea Melaka 2013: Hemicellulose Microcapsule From Oil Palm Fronds, 28-30<sup>th</sup> May 2013, Malacca, Malaysia.
- Silver Medal Iidex 2013: Halal Bioencapsule Using Fish Gelatin-Alginate-Aloe Vera Matrices For Probiotic Git Delivery, 15<sup>th</sup> -17<sup>th</sup> March 2013, Datc, Uitm Shah Alam.
- Silver Medalist Biomalaysia 2010: Bovine Gelatin Matrix For Probiotic Encapsulation Matrix, 20-24<sup>th</sup> Nov 2010, Malaysian Association Of Research Scientist (Mars), Pwtc, Kuala Lumpur.
- Gold Medal Invention, Research And Innovation Exhibition 2010: Halal Bioencapsules, 20-20<sup>nd</sup> July 2010, Universiti Putra Malaysia.
- Best Poster Presenter ,Islab 2010: Optimization Of Low Skim Milk Concentration Medium For *B.pseudocatenulatum* G4 Cultivation Using Fccd-Rsm, 25-27<sup>th</sup> July 2010, Faculty Of Medicine And Health Sciences, Universiti Putra Malaysia