

# CURRICULUM VITAE



A. BUTIR-BUTIR PERIBADI ( <i>Personal Details</i> )			
Nama Penuh ( <i>Full Name</i> )	<b>Nor Khaizura Mahmud @ Ab Rashid</b>		Gelaran ( <i>Title</i> ): <b>Assoc. Prof. Dr.</b>
Jawatan ( <i>Designation</i> )	<b>Associate Professor</b>	Tarikh Lahir ( <i>Date of Birth</i> )	<b>27 May 1981</b>

Alamat Semasa ( <i>Current Address</i> )	Jabatan/Fakulti ( <i>Department/Faculty</i> )	E-mel dan URL ( <i>E-mail Address and URL</i> )	
<b>Bandar Tasik Kesuma 43700 Beranang, Selangor</b>	<b>Jabatan Sains Makanan Fakulti Sains dan Teknologi Makanan  Tel: 03 89468375</b>	<b>norkhaizura@upm.edu.my</b>	

B. KELAYAKAN AKADEMIK ( <i>Academic Qualification</i> )			
Nama Sijil / Kelayakan ( <i>Certificate / Qualification obtained</i> )	Nama Sekolah Institusi ( <i>Name of School / Institution</i> )	Tahun ( <i>Year obtained</i> )	Bidang pengkhususan ( <i>Area of Specialization</i> )
<b>Doctor of Philosophy</b>	<b>Massey University</b>	<b>2013</b>	<b>Food Microbiology</b>
<b>Master Science</b>	<b>Universiti Putra Malaysia</b>	<b>2008</b>	<b>Food Microbiology and Food Safety</b>
<b>Bachelor</b>	<b>Universiti Putra Malaysia</b>	<b>2003</b>	<b>Food Science and Technology</b>

C. KEMAHIRAN BAHASA ( <i>Language Proficiency</i> )					
Bahasa / <i>Language</i>	Lemah <i>Poor (1)</i>	Sederhana <i>Moderate (2)</i>	Baik <i>Good (3)</i>	Amat Baik <i>Very good (4)</i>	Cemerlang <i>Excellent (5)</i>
<b>English</b>					√
<b>Bahasa Melayu</b>					√

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN ( <i>Scientific experience and Specialisation</i> )				
<i>Organization</i>	<i>Position</i>	<i>Start Date</i>	<i>End Date</i>	<i>Expertise</i>
<b>Food Safety and Quality Division, Ministry of Health Malaysia</b>	<b>Jawatankuasa Kerja Pakar Mikrobiologi (JKKPM)</b>	<b>2015</b>	<b>Present</b>	<b>Food Microbiology</b>
<b>Malaysian Society For Microbiology</b>	<b>Member</b>	<b>2018</b>	<b>Present</b>	<b>Food Microbiology</b>

New Zealand Microbiological Society (NZMS)	Member	2012	Present	Food Microbiology
Food Safety Research Centre (FOSREC), Universiti Putra Malaysia	Researcher	2013	2016	Food Safety (Food Microbiology)

#### E. PEKERJAAN (*Employment*)

Majikan / <i>Employer</i>	Jawatan / <i>Designation</i>	Jabatan / <i>Department</i>	Tarikh lantikan / <i>Start Date</i>	Tarikh tamat / <i>Date Ended</i>
Universiti Putra Malaysia	Associate Profesor	Department of Food Science	Jun 2019	Present
Universiti Putra Malaysia	Senior Lecturer	Department of Food Science	Jun 2013	May 2019
Universiti Putra Malaysia	Tutor	Department of Food Science	Aug 2003	Jun 2013
A.Clouet & Co (KL) Sdn Bhd	Internship	Department of Quality Assurance	Nov 2001	June 2002

#### F. ANUGERAH DAN HADIAH (*Honours and Awards*)

Name of awards	Title	Award Authority	Award Type	Year
<i>Academic Awards</i>	Skim Latihan Akademik Bumiputra (SLAB)	Ministry of Higher Education	National	2004-2007 & 2009-2013
	Hadiah Ramly Mokni	Faculty of Food Science and Technology	Faculty	2003
	Membership of Golden Key International Honour Society	Golden Key International Honour Society	International	2001
<i>Non-Academic Awards</i>	Excellent Service Certificate	Universiti Putra Malaysia	University	2016, 2017
	I'm Scientist, Get me out of here (Winner)	Akademi Sains Malaysia	National	2014

#### G. SENARAI PENERBITAN (*List of publications*)

##### *Journals*

Khalid, N. I., Saulaiman, U. S., Nasiruddin, N. A., Hatdran, M. M., Ab Aziz, N., **Nor Khaizura, M. A. R.**, . . . Sobri, S. (2019). Integrating cleaning studies with industrial practice: Case study of an effective cleaning program for a frozen meat patties SME factory. *Journal of Cleaner Production*, 235, 688-700. doi:10.1016/j.jclepro.2019.06.317

Chang, W. S., Rukayadi, Y., **Nor-Khaizura, M. A. R.**, Najwa, M. S., Kuan, C. H., Malcolm, T. T. H., . . . Son, R. (2019). Step-wise risk assessment of vibrio vulnificus infection associated with the consumption of cockles. *Food Research*, 3(5), 587-596. doi:10.26656/fr.2017.3(5).102

Norlia, M., Jinap, S., **Nor-Khaizura, M. A. R.**, Radu, S., Chin, C. K., Samsudin, N. I. P., & Farawahida, A. H. (2019). Molecular characterisation of aflatoxigenic and non-aflatoxigenic strains of aspergillus section

flavi isolated from imported peanuts along the supply chain in malaysia. *Toxins*, 11(9) doi:10.3390/toxins11090501

John, J. M., Jinap, S., Hanani, Z. A. N., **Nor-Khaizura, M. A. R.**, & Samsudin, N. I. P. (2019). The effects of different packaging materials, temperatures and water activities to control aflatoxin B1 production by *aspergillus flavus* and *A. parasiticus* in stored peanuts. *Journal of Food Science and Technology*, 56(6), 3145-3150. doi:10.1007/s13197-019-03652-6

**Nor-Khaizura M-A-R**, Flint SH, McCarthy OJ, Palmer JS, Golding M (2019) Modelling the effect of fermentation temperature and time on starter culture growth, acidification and firmness in made-in-transit yoghurt, *LWT*, 106, 113-121. doi:10.1016/j.lwt.2019.02.027

Nordin, Y., Kwan, S. Y., Chang, W. S., Loo, Y. Y., Tan, C. W., Mohd Fadzil, S. N., **Nor-Khaizura, M. A. R.** . . . Son, R. (2019). Evaluation of bacteriological quality of locally produced raw and pasteurised milk in selangor, malaysia. *Food Research*, 3(3), 208-212. doi:10.26656/fr.2017.3(3).235

Hanani, Z. A. N., Yee, F. C., & **Nor-Khaizura, M. A. R.** (2019). Effect of pomegranate (*punica granatum L.*) peel powder on the antioxidant and antimicrobial properties of fish gelatin films as active packaging. *Food Hydrocolloids*, 89, 253-259. doi:10.1016/j.foodhyd.2018.10.007

Nur Liyana, N., **Nor-Khaizura, M. A. R.**, & Ismail-Fitry, M. R. (2019). Effect of substituting tapioca starch with various high protein legume flours on the physicochemical and sensory properties of keropok lekor (malaysian fish sausage). *Food Research*, 3(1), 40-48. doi:10.26656/fr.2017.3(1).217

Kwan, S. Y., Chang, W. S., Loo, Y. Y., Nordin, Y., Tan, C. W., Kuan, C. H., **Nor-Khaizura, M. A. R.** . . . Son, R. (2019). Prevalence and antibiotic profile of shiga-toxin producing *escherichia coli* and *escherichia coli* O157: H7 in beef and buffalo. *Food Research*, 3(1), 28-39. doi:10.26656/fr.2017.3(1).218

Samsudin, N. I. P., Roslan, N. A., **Nor-Khaizura, M. A. R.**, & Hasan, H. (2019). Shelf life extension of ambient-stored banana cake using banana powder. *International Food Research Journal*, 26(1), 305-312.

Norlia, M., **Nor-Khaizura, M.A.R.**, Selamat, J., Abu Bakar, F., Radu, S., Chin, C.K. (2018) Evaluation of aflatoxin and *Aspergillus* sp. contamination in raw peanuts and peanut-based products along the supply chain in Malaysia, *Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment*, 35 (9), 1787-1802.

Nur Hanani, Z. A., Aelma Husna, A. B., Nurul Syahida, S., **Nor Khaizura, M. A. B.**, & Jamilah, B. (2018). Effect of different fruit peels on the functional properties of gelatin/polyethylene bilayer films for active packaging. *Food Packaging and Shelf Life*, 18, 201-211. doi:10.1016/j.fpsl.2018.11.004

Khalid, N. I., Sulaiman, S., Ab Aziz, N., Taip, F. S., Sobri, S., & **Nor-Khaizura, M. A. R.** (2018). Electrolyzed water as a green cleaner: Chemical and physical characterization at different electrolyzing parameters. *Food Research*, 2(6), 512-519. doi:10.26656/fr.2017.2(6).107

**Nor-Khaizura, M. A. R.**, Flint, S. H. (2018) Made-in-transit in yoghurt processing: a review of basic concepts and technological implications, *International Journal of Food Studies*, 7(2), 117-135.

**Nor-Khaizura, M. A. R.**, Flint, S. H., McCarthy, O. J., Tay, S. W., & Grigor, J. (2018). Sensory Descriptive Profiling and Consumer Acceptance of Made-in-transit (MIT) Set Yoghurt. *Journal of Food Research*, 7(3), 82-90.

Loo, Y.Y., Rukayadi, Y., **Nor-Khaizura, M.-A.-R.**, Kuan, C.H., Chieng, B.W., Nishibuchi, M., Radu, S. (2018) In Vitro antimicrobial activity of green synthesized silver nanoparticles against selected Gram-negative foodborne pathogens, *Frontiers in Microbiology*, 9 (JUL), art. no. 1555.

Norlia, M., Jinap, S., **Nor-Khaizura, M.A.R.**, Son, R., Chin, C.K., Sardjono (2018) Polyphasic approach to the identification and characterization of aflatoxigenic strains of *Aspergillus* section Flavi isolated from peanuts and peanut-based products marketed in Malaysia, *International Journal of Food Microbiology*, 282, pp. 9-15.

Mahyudin NA, Mat Daud NIH, **Ab Rashid NKM**, Muhialdin BJ, Saari N, Noordin WN. (2018) Bacterial attachment and biofilm formation on stainless steel surface and their in vitro inhibition by marine fungal extracts, *Journal of Food Safety*, 38:e12456.

Ahmad, N. A, Mohamad-Rohamad, M. A., Ismail-Fitry, M. R., Mahyudin, N. A., **Nor-Khaizura, M. A. R** (2018) Effect of Serving Time on Microbiological Quality of Food Served (Chicken Dish and Rice) During Wedding Banquet, *Journal of Science and Technology*, Vol. 10 No. 2, p. 92-98.

Khadra, Y. M., Nurul Shafiqah Atikah, M. K., Nurul Nadia, A. A., Shukri, R., **Nor-Khaizura, M. A. R.** (2018) Physicochemical and Microbiological Quality of Selected Commercial and Traditional Honey in Klang Valley Market, Malaysia, *Journal of Science and Technology*, Vol. 10 No. 2 (2018) p. 71-76.

Siti Norashikin, A., **M.A.R. Nor-Khaizura**, Wan Zunairah, W.I. (2018) Microbiological Quality and Safety of Unfinished UHT Milk at Storage Time-Temperature Abuse. *International Journal Current Microbiology and Applied Sciences* 7(03): 2278-2296. doi: <https://doi.org/10.20546/ijcmas.2018.703.268>

Rocky, V. R. , Zawani, C. J., Wan Zunairah, W. I., Nor Afizah, M., Nur Hanani, Z. A., Ismail-Fitry, M. R., **Nor-Khaizura, M. A. R.** (2017) Effect of Chlorinated Water and Sodium Tripolyphosphate Spray Washing on Bacterial Numbers and Quality of Quail Carcasses, *Journal of Science and Technology*, Vol. 9 No. 4 pp. 50-55.

Nur Syifa', J., Kahsalya Devi, R., Dhuha Saeed, A., Mahyudin, N. A., **Nor-Khaizura, M. A. R.** (2017) Isolation of Bacteria from Psophocarpus Tetragonolobus (Winged Bean) and Biofilm Formation, *Journal of Science and Technology*, Vol. 9 No. 4 pp. 96-101.

Farawahida, A.H., Jinap, S., **Nor-Khaizura, M.A.R.**, Samsudin, N.I.P. (2017) Reduction of Aspergillus spp. and aflatoxins in peanut sauce processing by oil-less frying of chilli powder and retort processing, *Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment*, 34 (12), pp. 2242-2250.

Ili Balqis, A.M., **Nor Khaizura, M.A.R.**, Russly, A.R., Nur Hanani, Z.A. (2017) Effects of plasticizers on the physicochemical properties of kappa-carrageenan films extracted from Eucheuma cottonii, *International Journal of Biological Macromolecules*, 103, pp. 721-732.

Chin, Y.-Z., Velu, S., Abu Bakar, F., **Nor-Khaizura, M.-A.-R.** (2016) Characterization and the influence of milk solids-not-fat on the bacteriocin produced by Lactococcus lactis subsp. lactis S20 isolated from Chinese sauerkraut, a traditional fermented vegetable, *Annals of Microbiology*, 66 (2), pp. 673-684.

Vitalis, R.E., **Nor-Khaizura, M.A.R.**, Son, R. (2016) Actor network theory in food safety, *International Food Research Journal*, 23 (6), pp. 2319-2325.

Vitalis, R.E., Regidor, D., III, Hareesh, K.K., Nishibuchi, M., **Nor-Khaizura, M.A.R.**, Son, R. (2016) Methicillin-resistant Staphylococcus aureus strains isolated from human and environmental surfaces in a research laboratory, *International Food Research Journal*, 23 (6), pp. 2710-2713.

**Nor-Khaizura, M. A. R.**, C. Y. Teoh, R. Sukor, and M. Nor-Ainy (2016) A case study on knowledge of hygiene among food handlers in Foodservice Complex, Universiti Putra Malaysia Hospitality and Tourism 2015. Oct 2015 , 295 -299

M. Nor-Ainy, R. Nurul Ain, R. Sukor, and **M. A. R. Nor-Khaizura** (2016) A qualitative study on hand hygiene knowledge and practices among food handlers in selected kindergartens in Selangor, Hospitality and Tourism 2015. Oct 2015 , 279 -283

R. Sukor, G. Balachandran, **M. A. R. Nor-Khaizura**, and M. Nor-Ainy (2016) A case study on good hygiene practices in traditionally operating catering service: Warisan Baiduri Sdn. Bhd., Hospitality and Tourism 2015. Oct 2015 , 289 -293

**Nor-Khaizura M-A-R**, Flint SH, McCarthy OJ, Palmer JS, Golding M, Jaworska A (2014). Designing Processing and Fermentation Conditions for Long Life Set Yoghurt for Made-in-Transit (MIT) Product. *Journal of Food Processing Engineering* (37), 19-26.

**Nor-Khaizura M-A-R**, Flint SH (2013) Made-in-transit foods. *NZIFST Food Journal*, 18.

**Nor-Khaizura M-A-R**, Flint SH, McCarthy OJ, Palmer JS, Golding M, Jaworska A (2012). Development of made-in-transit set culture yoghurt: effect of increasing the concentration of reconstituted skim milk as the milk base. *International Journal of Food Science & Technology* 47 (3):579-584. doi:10.1111/j.1365-2621.2011.02880.x

**Nor Khaizura, M.A.R.**, Loh, S.W., Zaiton, H., Jamilah, B., Rusul, G. (2010) Quantification of coliform and *Escherichia coli* in Keropok lekor (Malaysian fish product) during processing, *Journal of Applied Sciences Research*, 6 (11), pp. 1651-1655.

**Nor-Khaizura, M.A.R.**, Zaiton, H., Jamilah, B., Gulam Rusul, R.A. (2009) Microbiological quality of keropok lekor during processing, *International Food Research Journal*, 16 (2), pp. 215-223.

**Nor-Khaizura, M.A.R.**, Zaiton, H., Jamilah, B., Rusul, R.A.G., Ismail-Fitry, M.R. (2009) Histamine and histamine-forming bacteria in keropok lekor (Malaysian fish sausage) during processing, *Food Science and Technology Research*, 15 (4), pp. 395-402.

### ***Proceedings***

Rocky, V. R., Zawani, C. J., Wan Zunairah, W. I., Nor Afizah, M., Nur Hanani, Z. A., Ismail-Fitry, M. R., **Nor-Khaizura, M. A. R.** (2017) Effect of Chlorinated Water and Sodium Tripolyphosphate Spray Washing on Bacterial Numbers and Quality of Quail Carcasses, 3<sup>rd</sup> International Conference on the Application of Science and Mathematics, 24-25 October 2017. (Oral presentation)

Khadra, Y. M., Nurul, N. A. A., and **Nor-Khaizura, M. A. R.** (2017) Physicochemical and Microbiological Quality of selected Commercial and Traditional Honey in Klang Valley market, Malaysia, 3<sup>rd</sup> International Conference on the Application of Science and Mathematics, 24-25 October 2017. (Oral presentation)

**Nor-Khaizura, M. A. R.**, Mohd Ayob, M. R, Nor Aisyah, A., Ismail-Fitry, M. R. (2017) Effect of Serving Time on Microbiological Quality of Chicken and Rice During Wedding Banquet, 3<sup>rd</sup> International Conference on the Application of Science and Mathematics, 24-25 October 2017. (Oral presentation)

Nur Syifa', J., Kahsalya Devi, R. and **Nor-Khaizura, M. A. R** (2017) Isolation of Bacteria from *Psophocarpus Tetragonolobus* (Winged Bean) and Biofilm Formation, 3<sup>rd</sup> International Conference on the Application of Science and Mathematics, 24-25 October 2017. (Oral presentation)

**Nor-Khaizura M. A. R.**, Ahmad, N. A., Ahmad Zainal, A. S., Mahyudin, N. A. (2017) Microbiological Quality of Municipal Tap Water and Filtered Drinking Water in Serdang, Selangor, Proceeding International Food Research Conference, 25-27 July 2017. (Poster presentation)

Nor Aisyah Ahmad, M. Nor-Ainy and **M. A. R. Nor-Khaizura** (2016) Effect of Serving Time on Microbiological Quality of Food Served During Wedding Banquet, 4th Asia-Pacific International Food Safety Conference, Penang, Malaysia, 11-13 October 2016. (Poster presentation)

Zawani Che Zaafar, M. Nor-Ainy and **M. A. R. Nor-Khaizura** (2016) Microbiological Analysis of Aerobic Microbial Population & *Pseudomonas* Spp. Of Meat Fillets at Room and Refrigerated Temperature Storage, Malaysian Society for Microbiology Postgraduate Seminar (MSMPS2016), 24 August 2016. (Poster presentation)

Khadra Yusoff and **M. A. R. Nor-Khaizura** (2016) Physicochemical and Microbiological Quality of commercial and Traditional Honey in Klang Valley, Malaysian Society for Microbiology Postgraduate Seminar (MSMPS2016), 24 August 2016. (Poster presentation)

Nor Aisyah Ahmad and **M. A. R. Nor-Khaizura** (2016) Effect of Serving Time on Microbiological Quality of Food Served During Wedding Banquet, Malaysian Society for Microbiology Postgraduate Seminar (MSMPS2016), 24 August 2016. (Poster presentation)

**Nor-Khaizura M-A-R**, Flint SH, McCarthy OJ, Palmer JS, Golding M (2012). The Effect of Fortification and Heat Treatment on the Texture of Set Culture Yoghurt as a Made-in-Transit Product. New Zealand Institute Food Science and Technology (NZIFST) Conference 2012, Claudelands Events Centre, Hamilton, 26-28 June 2012. (Oral and poster presentation)

**Nor-Khaizura M-A-R**, Flint SH, McCarthy OJ, Palmer JS, Golding M (2012). Development and Predictive Modelling of Set Yoghurt as a Made-in-Transit (MIT) Product. Food Symposium 2012, Institute of Food, Nutrition and Human Health, Massey University, Palmerston North, 16 November 2012. (Oral presentation)

**Nor-Khaizura M-A-R**, Flint SH, McCarthy OJ, Palmer JS, Golding M (2011). Screening of yoghurt fermentation conditions to develop "made-in-transit" product. NZBIO Conference 2010, Sky City Convention Centre, Auckland, 22-24 March 2010. (Poster presentation)

**Nor-Khaizura M-A-R**, Flint SH, McCarthy OJ, Palmer JS, Golding M (2011). Development of Primary and Secondary Models for Growth of Starter Culture on Made-in-Transit (MIT) Set Yoghurt. New Zealand Microbiology Society (NZMS) Conference 2011, Convention Center, Palmerston North, 26-28 November 2011. (Oral presentation)

**Nor Khaizura M.A.R.**, Zaiton H., Jamilah B., Gulam R. (2007) Total aerobic counts and indicator bacteria during processing of *keropok lekor* (Malaysian fish sausage). 10<sup>th</sup> ASEAN Food Conference 2007, August 21-23, Kuala Lumpur, Malaysia.

**Nor Khaizura M.A.R.**, Zaiton H., Gulam Rusul R.A., Jamilah B. (2006) Evaluation of processing parameters towards a better quality of *keropok lekor*, 5<sup>th</sup> Food Science and Technology Seminar, Malaysia Institute of Food Technology (MIFT).

**Nor Khaizura M.A.R.**, Zaiton H., Gulam Rusul R.A., Jamilah B. (2006) Post processing treatment to extend the shelf life of *keropok lekor*, Exhibition of Invention, Research and Innovation, University Putra Malaysia (Winner-Bronze).

**Nor Khaizura M.A.R.**, Zaiton H., Gulam Rusul R.A., Jamilah B. (2005) Contamination pattern of *keropok lekor* during processing, 4<sup>th</sup> Food Science and Technology Seminar, Malaysia Institute of Food Technology (MIFT).

**Nor Khaizura M.A.R.**, Zaiton H., Gulam Rusul R.A., Jamilah B. (2005) Evaluation of microbiological quality of *keropok lekor* at different stages of processing, Exhibition of Invention, Research and Innovation, University Putra Malaysia.

### ***Other publications***

#### ***Technical report:***

**Nor-Khaizura, M. A. R.**, Nor Ainy, Mahyudin, *Centralized Kitchen: A solution or an Option for Safe Food in Food Service Industries* Technical Report, Majlis Amanah Rakyat dan Kementerian Kesihatan Malaysia, National, 2015

**Classified report:**

Ismail-Fitry, M.R., Nur Hanani Z. A., Wan Zunairah, NorAfizah, **Nor-Khaizura, M.A.R.**, *Development of Standard Operation Procedure (SOP) and Ingredients Re-Formulation for the Extension of Frozen Quail (Burung Puyuh) Shelf Life* Classified Report, Surada Jaya Sdn. Bhd., National, 2017

Wan Zunairah, **Nor-Khaizura, M.A.R.**, Nur Hanani Z. A., NorAfizah, *Development of vegetable-enriched noodle* Classified Report, Barakah Mukmin Food Industries Plt, National, 2017

Wan Zunairah, **Nor-Khaizura, M.A.R.**, Nur Hanani Z. A., NorAfizah, *Final report PPRN-UPM-Aneka Restu: Development of instant and shelf-stable crab noodle paste* Classified Report, Universiti Putra Malaysia, National, 2017

Wan Zunairah, **Nor-Khaizura, M.A.R.**, Nur Hanani Z. A., NorAfizah, *Final report PPRN-UPM-Aneka Restu: Improvement of shelf-life and quality attributes of date cake and frozen durian crepe*, Classified Report, Aneka Restu Bakery Cake and Kraft, National, 2017

**Magazine:**

**Nor-Khaizura, M.A.R.**, *BAKTERIA Musuh atau Sahabat?* Dewan Masyarakat, Oktober, 42-43, 2015

<b>H. PROJEK PENYELIDIKAN TERDAHULU (Past Research Project)</b>					
<b>Project No.</b>	<b>Project Title</b>	<b>Role</b>	<b>Year</b>	<b>Source of fund</b>	<b>Status</b>
Massey University Postgraduate Scheme	Development and predictive modeling of set yoghurt as made-in-transit yoghurt	Researcher (PhD Student)	2009	Massey University	Completed
GP-IPB/2013/9425401	Identification and characterization of aflatoxins critical points along the peanut supply chain	Principal Investigator	2013	Universiti Putra Malaysia (UPM)	Completed
FRGS/2/2013	Antimicrobial Properties of Bacteriocins from Lactic Acid Bacteria Isolated from local fermented fish	Co-researcher	2013	Ministry of Higher Education (MOHE)	Completed
GP-IPM/2014/9434100	Microbiological quality of food served during wedding banquet	Principal Investigator	2014	Universiti Putra Malaysia (UPM)	Completed
FRGS/1/2015/ST 03/UPM/02/4	Survival of enterotoxigenic Staphylococcus aureus on solid surfaces and potential strategies for developing effective cleaning to prevent food contamination	Co-researcher	2015	Ministry of Higher Education (MOHE)	Completed
Public-Private Research Network (PPRN)	Development of Standard Operation Procedure (SOP) and Ingredients re-formulation for the extension of frozen quail shelf life	Principal Investigator	2016	Ministry of Higher Education (MOHE) and industry	Completed

FRGS/1/2016/ST G03/UPM/02/9	Kinetic modelling of aerobic microbial population and Pseudomonas spp for shelf life prediction of meat fillet under isothermal and dynamic temperature conditions	Principal Investigator	2016	Ministry of Higher Education (MOHE)	Completed
GP-IPS/2016/9488200	Antimicrobial of various type of honey and its application on fresh chicken meat	Principal Investigator	2016	Universiti Putra Malaysia (UPM)	Completed
GP-IPS/2016/9488300	Assessment the effect of natural radiation on biofilm formation, a transcriptome and proteomic profile study at Csra pathway	Principal Investigator	2016	Universiti Putra Malaysia (UPM)	Completed
UPM/700-2/1/TRGS/5535704	Antibiotics residue of goats milk in central region of Malaysia and development of microbial indicator for screening residual antibiotics in goats milk	Co-researcher	2016	Ministry of Higher Education (MOHE)	Ongoing
UPM/Geran Putra	Revealing the antimicrobial properties of sugarcane molasses and the bacteriostatic mechanisms towards foodborne pathogen	Principal Investigator	2018	Universiti Putra Malaysia (UPM)	Ongoing
UPM/IPS	Inactivation Of Spores Forming Spoilage Bacteria In Tropical Fruit Juice By High Pressure Processing	Co-researcher	2018	Universiti Putra Malaysia (UPM)	Ongoing
UPM/Geran Putra Berimpak	Impregnation Effect Of Graphene Oxide And Glutaraldehyde On The Functional Properties Of Gelatin Nanocomposite Films	Co-researcher	2018	Universiti Putra Malaysia (UPM)	Ongoing
UPM/IPS	Efficacy Of Combination Cleaning Treatment Of Two Electrolyzed Water (Alkaline Electrolyzed Water And Acidic Electrolyzed Water) To Clean Hard Surfaces Which Covered By Bacrerial Contaminated Food Fouling Deposit	Co-researcher	2018	Universiti Putra Malaysia (UPM)	Ongoing



<b>SUPERVISION</b>			
<b>Degree</b>	<b>Role</b>	<b>Completed</b>	<b>Ongoing</b>
Ph.D	Supervisor	1	
	Co-Supervisor	6	4
MSc.	Supervisor	2	5
	Co-Supervisor	7	5
MoFS (Master of Food Safety and Quality Assurance)	Supervisor	10	1
	Co-Supervisor		
BSTM (Bachelor of Food Science and Technology)	Supervisor	15	5
	Co-Supervisor	3	