

CURRICULUM VITAE



A. BUTIR-BUTIR PERIBADI (<i>Personal Details</i>)			
Nama Penuh (<i>Full Name</i>)	Nur Fadhilah Khairil Mokhtar		Gelaran (<i>Title</i>): Dr
No. MyKad / No. Pasport (<i>Mykad No. / Passport No.</i>)	Warganegara (<i>Citizenship</i>)	Bangsa (<i>Race</i>)	Jantina (<i>Gender</i>):
870517-05-5354	Malaysia	Melayu	Perempuan
Jawatan (<i>Designation</i>)	Pegawai Penyelidik (Q52)	Tarikh Lahir (<i>Date of Birth</i>)	17 Mei 1987

Alamat Semasa (<i>Current Address</i>)	Jabatan/Fakulti (<i>Department/Faculty</i>)	E-mel dan URL (<i>E-mail Address and URL</i>)
Institut Penyelidikan Produk Halal, Putra Infoport, Universiti Putra Malaysia, 43400 Serdang, Selangor Tel:	Laboratori Penyelidikan Sains Halal, Institut Penyelidikan Produk Halal, Putra Infoport, Universiti Putra Malaysia, 43400 Serdang, Selangor Tel: 03 89471836 Fax: 0389419734	E-mail: nuradhilah@upm.edu.my fadhilah132230@gmail.com URL: - H/P: 0122824834

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>)
Bachelor Sc (Biotechnology)	Universiti Putra Malaysia	2008	Molecular Biology
Doctor of Philosophy (Science)	Universiti Putra Malaysia	2021	Genetic Engineering and Molecular Biology

C. KEMAHIRAN BAHASA (Language Proficiency)					
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>
English				/	
Bahasa Melayu					/
Chinese					
Lain-lain (<i>other</i>):					

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN (Scientific experience and Specialisation)				
<i>Organization</i>	<i>Position</i>	<i>Start Date</i>	<i>End Date</i>	<i>Expertise</i>
Felda Biotechnology Centre	Industrial Trainee	April 2007	May 2007	Mini project on 'Screening of microsatellite marker of <i>Elaies guineensis Jacq</i> '
Faculty of Biotechnology and Biomolecular Sciences	Student	July 2007	April 2008	Final year project on 'PCR amplification and cloning of gene coding for cell wall binding protein in <i>Pediococcus acidilactici</i> UB6'. Nucleotide sequence of the novel gene coding for cell wall binding protein has been deposited in the NCBI GenBank database.
Halal Products Research Institute, UPM	Research Officer	February 2009	-	Forensic DNA Genetic Engineering Molecular Biology Techniques

E. PEKERJAAN (<i>Employment</i>)				
<i>Majikan / Employer</i>	<i>Jawatan / Designation</i>	<i>Jabatan / Department</i>	<i>Tarikh lantikan / Start Date</i>	<i>Tarikh tamat / Date Ended</i>
Universiti Putra Malaysia	Research Officer	Halal Products Research Institute	Feb 2009	Current
Faculty of Biotechnology and Biomolecular Sciences	Research Assistant	Dep. of Cell and Molecular Biology	Mei 2008	Jan 2009

F. ANUGERAH DAN HADIAH (<i>Honours and Awards</i>)				
<i>Name of awards</i>	<i>Title</i>	<i>Award Authority</i>	<i>Award Type</i>	<i>Year</i>
<i>Academic Awards</i>				
<i>Non-Academic Awards</i>	PRPI'2010 UPM PRPI'2011 UPM		Gold Medal Gold Medal	2010 2011
<i>Awards of Merit</i>				

G. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) (<i>List of publications – author (s), title, journal, volume, page and year published</i>)	
<i>Journal</i>	<ol style="list-style-type: none"> 1) Che Man, Y.B*, Shuhaimi, M., Khairil Mokhtar, N.F., Rumaisa, N., Sazili, A.Q. (2012). Porcine-specific polymerase chain reaction based on mitochondrial D-loop gene for identification of pork in raw meat. <i>International Journal of Food Properties</i>, 15:134-144 2) Yusop, M.H.M., Shuhaimi, M*, Che Man, Y.B., Khairil Mokhtar, N.F. (2012) Detection of raw pork targeting porcine-specific mitochondrial cytochrome b gene by molecular beacon probe real-time polymerase chain reaction. <i>Food Analytical Methods</i>. 5:422-429 3) Mohamad, N.A., El Sheikha, A.F., Mustafa, S*, and Mokhtar, N.F.K. (2013) Comparison of gene nature used in real-time PCR for porcine identification and quantification: A review. <i>Food Research International</i>. 50: 330-338 4) Sarah, S.A., Karsani, S.A., Amin, I., Mokhtar, N.F.K., Sazili, A.Q.

- (2014) A proteomic based assessment on changes in myofibrillar proteins of goat longissimus muscle as affected by heat treatments. *The Journal of Animal and Plant Sciences*. 24(2): 406-412
- 5) Mohamad, N.A., Mustafa, S*, El Sheikha, A.F., **Mokhtar, N.F.K.**, Amin, I., Ali, M.E. (2015) Modification of gelatin-DNA interaction for optimized DNA extraction from gelatin and gelatin capsule. *Journal of the Science of Food and Agriculture*. DOI: 10.1002/jsfa.7482
- 6) **Mokhtar, N.F.K***, Raha, A.R., Amalia, M.H., Mustafa, S. (2016) Collagen binding ability of bacterial isolated from pig and cow small intestine. *Sains Malaysiana* 45(3): 411–416.
- 7) Rosman, N.N., **Mokhtar, N.F.K.**, Ali, M.E., Mustafa, S*. (2016) Inhibitory Effect of Chocolate Components Toward Lard Detection in Chocolate Using Real Time PCR. *International Journal of Food Properties* 19 (11), 2587-2595
- 8) SA Sarah, SA Karsani, **NFK Mokhtar**, AQ Sazili, I Amin (2013) Differences in thermostable actin profile of goat meat as observed in two-dimensional gel electrophoresis (2DE). *International Food Research Journal* 20 (2)
- 9) El Sheikha, A. F., **Mokhtar, N.F.K.**, Ceesay, A., Dhilia, U.L., Nurulfiza, M.I., and Shuhaimi, M*. (2017) Authentication technologies using DNA-based approaches for meats and halal meats determination. *Food Biotechnology* 31(4)281-315
- 10) Nhari, R.M.H.R., **Mokhtar, N.F.K.**, Hanish, I., Hamid, M*, Rashidi, M.A.A.M., Shahidan, N.M. (2018) Monoclonal antibody-based enzyme immunoassay for detection of porcine plasma in fish surimi. *Food Additives and Contaminants Part A*. 35(5):807-817
- 11) Mohamad, N.A., Mustafa, S., **Mokhtar, N.F.K***, El Sheikha, A.F., Molecular beacon-based real-time PCR method for detection of porcine DNA in gelatin and gelatin capsules. (2018) *Journal of the Science of Food and Agriculture* 98(12):4570-4577
- 12) Tasrip, N. A., **Khairil Mokhtar, N. F.**, Hanapi, U. K., Abdul Manaf, Y. N., Ali, M. E., Cheah, Y. K., Mustafa, S. and Mohd Desa, M. N. (2019) Loop mediated isothermal amplification; a review on its application and strategy in animal species authentication of meat-based food products. *International Food Research Journal* 26(1)

- 13) Abd-Gani, S.S., Mustafa, S., Mohd Desa, M.N., **Khairil Mokhtar, N.F.**, Hanapi, U.K., Zakaria, Z. Yahaya, N., Wan Sulaiman, W.M.A. (2018) Detection of porcine adulteration in cosmetic cream formulation via TaqMan Probe Real-time Polymerase Chain Reaction. *International Journal of Engineering and Technology* 7(4.14) 112-115
- 14) **NF Khairil Mokhtar***, AF El Sheikha, NI Azmi, S Mustafa (2020) Potential authentication of various meat-based products using simple and efficient DNA extraction method. *Journal of the Science of Food and Agriculture* 100 (4), 1687-1693
- 15) RMH Raja Nhari, AN Muhammad Zailani, **NF Khairil Mokhtar, I Hanish.** (2020) Detection of porcine pepsin in model cheese using polyclonal antibody-based ELISA. *Food Additives & Contaminants: Part A*, 37(4):561-567
- 16) Qamar Zia, Mohammad Alawami, **Nur Fadhilah Khairil Mokhtar,** Raja Mohd Hafidz Raja Nhari, Irwan Hanish. (2020) Current analytical methods for porcine identification in meat and meat products. *Food Chemistry* 324 (126664)
- 17) **NF Khairil Mokhtar,** I Hanish, A Mohd Hashim, A Zulkarnain, (2020) The discovery of new antilisterial proteins from *Paenibacillus polymyxa* Kp10 via genome mining and mass spectrometry. *Frontiers in Microbiology.* 11, 960
- 18) N Sajali, SC Wong, S Abu Bakar, **NF Khairil Mokhtar,** YN Manaf, et al. (2021) Analytical approaches of meat authentication in food. *International Journal of Food Science & Technology* 56 (4), 1535-1543
- 19) NI Azizan, **NFK Mokhtar***, S Arshad, SN Sharin, N Mohamad, S Mustafa, et al (2021) Detection of lard adulteration in wheat biscuits using chemometrics-assisted GCMS and random forest. *Food Analytical Methods* 14 (11), 2276-2287
- 20) NA Tasrip, MN Mohd Desa, **NF Khairil Mokhtar,** N Sajali, A Mohd Hashim, et al (2021) Rapid porcine detection in gelatin-based highly processed products using loop mediated isothermal amplification. *Journal of Food Science and Technology* 58 (12), 4504-4513
- 21) **NFK Mokhtar***, AM Hashim, S Abbasiliasi, A Zulkarnain, RMH Raja Nhari, et al (2021) Physicochemical stability of antilisterial

	<p>proteins from <i>P. polymyxa</i> Kp10 as potential food biopreservative. <i>International Journal of Food Science & Technology</i> 56 (12), 6549-6558</p> <p>22) UNM Asri, NFK Mokhtar*, RMHR Nhari, MH Yuswan, AM Hashim, et al (2021) Mass spectrometry determination of potential species-specific peptide markers in commercial seasoning cubes. <i>Journal of Food Composition and Analysis</i> 104, 104193</p> <p>23) NHZ Baharin, NFK Mokhtar, MNM Desa, B Gopalsamy, NNM Zaki, et al (2021) The characteristics and roles of antimicrobial peptides as potential treatment for antibiotic-resistant pathogens: a review. <i>PeerJ</i> 9, e12193</p> <p>*Corresponding Author</p>
<i>Other publications</i>	<p>1) Patent Filing entitled, 'Porcine Detection and Methods Thereof', Application No: PI 2010 700044</p> <p>2) Patent Filing entitled 'Method and kit to detect porcine in food or nonfood items by isothermal amplification technique'. Filing No: PI 2017702029. Licensing to ChlorosLab Sdn Bhd in 2017.</p>
<i>Computer software</i>	<p>1) Bioedit Software</p> <p>2) Microsoft Visio</p>

H. PROJEK PENYELIDIKAN TERDAHULU (<i>Past Research Project</i>)					
<i>Project No.</i>	<i>Project Title</i>	<i>Role</i>	<i>Year</i>	<i>Source of fund</i>	<i>Status</i>
05-01-09-0639RU	Halal verification technique development: TaqMan real-time polymerase chain reaction (PCR) assay for specific detection of pork and its derivatives	Project Leader	2009	RUGS	Completed
59827	Molecular beacon real time PCR assay targeting chromosomal and mitochondrial-encoded gene for quantification of porcine DNA in highly processed products	Research Member	2012	FRGS	Completed
02-02-12-2037RU	Development of porcine collagen detection technique: bimolecular fluorescence complementation (BiFC) of green fluorescent protein using specific binding of protein to porcine collagen	Project Leader	2012	RUGS	Completed
05-01-04-SF113	Development of halal food authentication technique: screening and characterization of thermostable species-specific protein in porcine	Research Member	2009	eScience Fund	Completed
n/a	Penyelidikan isu kefatwaan: kuantiti dan stabiliti DNA babi di dalam produk makanan diproses	Research Member	2012	Majlis Fatwa Kebangsaan	Completed
GP-IBT/2013/9409100	Isotopic composition and DNA barcoding for tracing the origin of halalal toyyiban foodstuffs	Research Member	2013	GP-IPB	Completed
n/a	DNA extraction and porcine detection by using conventional and real time PCR for fat and oil	Research Member	2017	Malaysian Halal Analysis Centre	Completed

9553900	Development of novel porcine-specific DNA aptamer for rapid authentication of porcine meat and its derivatives	Research	2018	9553900	Completed
GP-IPM/2017/9539400	Development of DNA extraction kit for lard-containing flour-based bakery products	Project Leader	2017	GP-IPM	Completed
9571800	Development of expression vector for high throughput expression of recombinant bacteriocin from <i>Pediococcus acidilactici</i> Kp10 in <i>Escherichia coli</i>	Research Member	2017	GP	Completed
9508400	Molecular characterization and determination of antiviral properties of putative antimicrobial peptides from <i>Pediococcus acidilactici</i> Kp10	Research Member	2016	GP-IPM	Completed
FRGS2017-1	Mechanistic study of antimicrobial peptides from locally isolated lactic acid bacteria against antibiotic-resistant pathogens	Research Member	2017	FRGS	Completed
9648100	Validation and certification for pre-commercialization of LAMP porcine detection kit	Project Leader	2018	GPPI	Completed
6380033	Discovery of porcine-specific microRNA marker for halal meat authentication	Research Member	2019	International Private Fund	Completed
FRGS/1/2021/STG01/UPM/02/7	Characterization of antimicrobial peptide from <i>Paenibacillus polymyxa</i> Kp10 and elucidation of its antimicrobial and antibiofilm mechanistic role against Methicillin-resistant <i>Staphylococcus aureus</i> and <i>Klebsiella pneumoniae</i>	Research Member	2021	FRGS	On-going

