CURRICULUM VITAE

A. BUTIR-BUTIR PERIBADI ***(Personal Details)***			
Nama Penuh *(Full Name)*	EMILIA BT ABD MALEK		Gelaran *(Title): Dr*
Jawatan *(Designation* Pensyarah Kanan	Warganegara *(Citizenship)* Malaysia	Bangsa *(Race)* Melayu	Jantina *(Gender)* Perempuan

Jabatan/Fakulti *(Department/Faculty)*	E-mel dan URL *(E-mail Address and URL)*
Jabatan Kimia, Fakulti Sains, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Tel: 03-89466795 Fax: 03-89435380	E-mail: emilia@upm.edu.my

B. KELAYAKAN AKADEMIK ***(Academic Qualification)***			
Nama Sijil / Kelayakan *(Certificate / Qualification obtained)*	Nama Sekolah Institusi *(Name of School / Institution)*	Tahun *(Year obtained)*	Bidang pengkhususan *(Area of Specialization)*
Doctor of Philosophy	University of Oxford, United Kingdom	2008	Synthetic Organic Chemistry
B.Sc(Hon) Chemistry	UMIST, Manchester, United Kingdom	1998	–

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

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN *(Scientific experience and Specialisation)*				
Organization	*Position*	*Start Date*	*End Date*	*Expertise*
Nanomalaysia/ IBM	Research associate	Mac 2015	Sept 2015	Synthetic Organic Chemistry

E. PEKERJAAN ***(Employment)***				
Majikan / *Employer*	Jawatan / *Designation*	Jabatan / *Department*	Tarikh lantikan / *Start Date*	Tarikh tamat / *Date Ended*
Universiti Putra Malaysia	Pensyarah Kanan	Jabatan Kimia	4 Mac 2008	Sekarang
Universiti Putra Malaysia	Tutor	Jabatan Kimia	1 Mac 2002	3 Mac 2008
Revertex (M) Sdn. Bhd.	Chemist	Synthetic Division: R&D	1 Disember 1998	31 Disember 2001

F. ANUGERAH DAN HADIAH *(Honours and Awards)*				
Name of awards	*Title*	*Award Authority*	*Award Type*	*Year*
	Anugerah Perkhidmatan Cemerlang	UPM	Universiti	2014
Academic Awards	Anugerah Adi Pengajar Muda (peringkat Jabatan Kimia)	Fakulti Sains, UPM	Fakulti	2012
Research Awards	Chemo-enzymatic epoxidation of 1-nonene and other alkenes	PRPI 2014 (UPM)	Silver Medal	2014
	Green nano-emulsion intervention for biopesticide formulation	ITEX Malaysia 2012	Gold Medal	2012
	Natural-based mica network as nanoreactor for enzymes in chiral synthesis	PRPI 2010 (UPM)	Gold Medal	2010
	New nano-emulsion intervention for biopesticide formulation	PRPI 2010 (UPM)	Gold Medal	2010
	Stereoselactive oxidation towards galacto-configured hydroxylated lactam	PRPI 2009 (UPM)	Silver Medal	2009

G. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) *(List of publications – author (s), title, journal, volume, page and year published)*	
Journal	Yousefi, S., Bayat, S., Rahman, M.B.A., Ismail, I.S., Saki, E., Leong, S.W., **Abdulmalek, E**. Synthesis, bioactivity evaluation, and docking study of 5-aminosalicylic acid's fatty acid derivatives, *Monatshefte fur Chemie*, 146 (12), pp. 2139-2149, **2015** Yousefi, S., Bayat, S., Abdul Rahman, M.B., Ismail, I.S., Saki, E., **Abdulmalek, E**. Synthesis and in vitro bioactivity evaluation of new glucose

	and xylitol ester derivatives of 5-aminosalicylic acid, *RSC Advances*, 5 (118), pp. 97295-97307,**2015** **Abdulmalek, E**., Arumugam, M., Mizan, H.N., Abdul Rahman, M.B., Basri, M., Salleh, A.B. Chemoenzymatic Epoxidation of Alkenes and Reusability Study of the Phenylacetic Acid,*The Scientific World Journal*, 2014, art. no. 756418, **2014** Jumbri, K., Abdul Rahman, M.B., **Abdulmalek, E**., Ahmad, H., Micaelo, N.M. An insight into structure and stability of DNA in ionic liquids from molecular dynamics simulation and experimental studies *Physical Chemistry Chemical Physics,* 16 (27), pp. 14036-14046, **2014** Omar, E.M., Rahman, M.B.A., **Abdulmalek, E**., Tejo, B.A., Ni, B., Headley, A.D. Optimization of microwave-assisted Michael addition reaction catalyzed by L-proline in ionic liquid medium using response surface methodology *Synthetic Communications*, 44 (3), pp. 381-398, **2014** Bayat, S., Tejo, B.A., Salleh, A.B., **Abdulmalek, E**., Normi, Y.M., Abdul Rahman, M.B. Asymmetric michael reaction catalyzed by mimicked peptides *Catalysis Letters*, 144 (2), pp. 222-228, **2014** Saminathan, M., Tan, H.Y., Sieo, C.C., Abdullah, N., Wong, C.M.V.L., **Abdulmalek, E**., Ho, Y.W. Polymerization degrees, molecular weights and protein-binding affinities of condensed tannin fractions from a leucaena leucocephala hybrid, *Molecules,* 19 (6), pp. 7990-8010. **2014** Yusof, R., **Abdulmalek, E**., Sirat, K., Rahman, M.B.A. Tetrabutylammonium bromide (TBABr)-Based deep eutectic solvents (DESs) and their physical properties *Molecules*, 19 (6), pp. 8011-8026. **2014** Bayat, S., **Abdulmalek, E**., Tejo, B.A., Salleh, A.B., Normi, Y.M., Rahman, M.B.A. Novel octapeptide as an asymmetric catalyst for michael reaction in aqueous media *Synthetic Communications*, 43 (23), pp. 3130-3140. **2013** Bayat, S., Tejo, B.A., **Abdulmalek, E**., Yahya, N.M., Salleh, A.B., Abdul Rahman, M.B. Enantioselectivity investigation of short polar peptides with different positions in the Michael reaction Synthetic Communications, 43 (20), pp. 2725-2732, **2013** Rahman, M.B.A., Krishnan, D., Haron, J., Tejo, B.A., **Abdulmalek, E.,** Salleh, A.B., Basri, M. Lipase-catalyzed amino sugar derivative in tri-solvent mixture *Asian Journal of Chemistry*, 25 (6), pp. 3014-3018, **2013** **Abdulmalek, E.;** Arumugam, M.; Basri, M.; Rahman, M. Optimization of Lipase-Mediated Synthesis of 1-Nonene Oxide Using Phenylacetic Acid and Hydrogen Peroxide. *Int. J. Mol. Sci*., 13(10), 13140-13149, **2012** Rahman, M.B.A., Arumugam, M., Khairuddin, N.S.K., **Abdulmalek, E**., Basri, M., Salleh, A.B. Microwave assisted enzymatic synthesis of fatty acid sugar ester in ionic liquid-tert-butanol biphasic solvent system, *Asian Journal of Chemistry*, 24 (11), pp. 5058-5062**, 2012** Alrub, M.A., Basri, M., **Malek, E.A**., Alang Ahmad, S.A., Salleh, A.B., Abdul Rahman, M.B. Lipase catalysed synthesis of N-trans-feruloyltyramine and a quantitative HPLC-UV method for analysis Biocatalysis and Biotransformation, 30 (4), pp. 385-390**, 2012** Zainol, S.; Basri, M.; Basri, H.; Shamsuddin, A.; Abdul-Gani, S.; Karjiban, R.;

	Abdul-Malek, E. Formulation Optimization of a Palm-Based Nanoemulsion System Containing Levodopa. *Int. J. Mol. Sci*., 13(10), 13049-13064, **2012** Rosley, R., Basri, M., Gani, S. S. A., **Abdulmalek, E**., Rahman, M. B. A., Salleh, A. B., Siraj, S. S. Enzymatic esterification of river catfish (mystus nemurus) fatty acids to enrich ω-3 polyunsaturated fatty acids. *Asian Journal of Chemistry, 24*(6), 2679-2684, **2012** Abdul Rahman, M. B., Jumbri, K., Mohd Ali Hanafiah, N. A., **Abdulmalek, E**., Tejo, B. A., Basri, M., & Salleh, A. B. Enzymatic esterification of fatty acid esters by tetraethylammonium amino acid ionic liquids-coated candida rugosa lipase. *Journal of Molecular Catalysis B: Enzymatic, 79*, 61-65, **2012**. **Abdulmalek, E;** Mohd. Saupi, H. S.; Tejo, B. A.; Mahiran Basri, Salleh, A. B.; Rahman, R.N.Z.R.A. and Abdul Rahman, M. B. Improved Enzymatic Synthesis of Galactose Oleate Ester in Ionic Liquid, *Journal of Molecular Catalysis B: Enzymatic* 76, 37 -43, **2012** Zaidan, U.H., Abdul Rahman, M.B., Othman, S.S., Basri, M., **Abdulmalek, E**., Abdul Rahman, R.N.Z.R., Salleh, A.B. Biocatalytic production of lactose ester catalysed by mica-based immobilised lipase, Food Chemistry, 131(1), pp. 199-205, **2012** Zaidan, U.H., Rahman, M.B.A., Othman, S.S., Basri, M., **Abdulmalek, E.**, Rahman, R.N.Z.R.A., Salleh, A.B. Kinetic behaviour of free lipase and mica-based immobilized lipase catalyzing the synthesis of sugar esters Bioscience, Biotechnology and Biochemistry 75 (8), pp. 1446-1450, **2011** Abdul Rahman, M. B.; Jumbri, A.; Basri, M.; **Abdulmalek, E**.; Sirat, K.; Salleh, A. B. Synthesis and physico-chemical properties of new tetraethylammonium-based amino acid chiral ionic liquids. *Molecules*, 15, 2388-2397, **2010** Adnani, A; Basri, M; **Malek, E. A**.; Salleh, A. B., Abdul Rahman, M. B.; Chaibakshah, N. Optimization of lipase catalyzed synthesis of xylitol ester by Taguchi robust design method. *Industrial Crops and Products*, 31, 2, 350-356, **2010** Robertson, J.; **Abdulmalek, E**. Concerning directed oxidation and transacylation during a general approach to hydroxylated lactams. *Tetrahedron Letters*, 50, 3516 – 3518, **2009**
Books/Monographs	Tiada
Chapter in book	Tiada
Proceedings	**Abdulmalek, E**.; Arumugam, M.; Abdul Rahman, M.B.; Basri, M. Salleh, A.B. Chemoenzymatic Epoxidation of Alkenes and Reusability Study of the Lipase and Phenylacetic Acid, *5th Structural Biology Colloquium*, **2013** **Abdulmalek, E**.; Mohd. Saupi, H.S.; Tejo B. A.; Basri, M.; Salleh, A.B.; Rahman, R.N.Z.R.A.; Abdul Rahman, M.B. Reusability of Ionic Liquid in Enzymatic Synthesis of Galactose Oleate Ester, *International Seminar on Mathematics and Natural Sciences* **2013** **Abdulmalek, E.,** Zulkefli, S., Rahman, M.B.A Swelling and Dissolution of Oil Palm Trunk Fibre in Deep Eutectic Solvents, *Second National Symposium in Organic Synthesis* **2012** **Abdulmalek, E.,** Arumugam, M., Rahman, M.B.A., Basri, M. Chemo-

	enzymatic Epoxidation of 1-Nonene and Simple GC-MS SIM Method for Rapid Screening, *Second National Symposium in Organic Synthesis* **2012** **Abdulmalek, E**., Mohd. Saupi, H.S., Tejo B. A., Basri, M., Salleh, A.B., Rahman, M.B.A. Fast Enzymatic Synthesis of Galactose Oleate Ester in Ionic Liquid, *International Conference on Natural Product* **2011** **Abdulmalek, E**., Mohd. Saupi, H.S., Tejo, B. A., Basri, M., Salleh, A.B., Rahman, M.B.A., Reusability of Ionic Liquid in Lipase Catalyzed Galactose Oleate Ester Synthesis, *Regional Fundamental Science Congress* **2011** **Abdulmalek, E**.; Robertson, J. The Use of Methionine Sulfilimine for the Preparation of Vinylglycine Derivatives, *16th Malaysian Chemical Congress* **2010** **Abdulmalek, E**.; Robertson, J. Facile Synthesis of Vinylglycine Derivatives via Methionine Sulfilimines, *Fundamental Science Congress* **2010** **Abdulmalek, E**.; Robertson, J. Synthesis of Nagstatin and its Analogues, *Second International Conference and Workshops on Basic and Applied Sciences & Regional Annual Fundamental Science Seminar 2009*
Other publications	
Computer software	

H. PROJEK PENYELIDIKAN TERDAHULU *(Past Research Project)*

Project No.	*Project Title*	*Role*	*Year*	*Source of fund*	*Status*
9490100	Synthesis of novel organic electroluminescent materials for highly efficient organic light emitting diode	Project leader	2016	IPS - UPM	On-going
9474300	Immobilization of Thermoalkaliphilic T1 lipase of Geobacillus sp. Strain T1 on Layered Doublle Hydroxides for Chemo-enzymatic Epoxidation of Alkenes and other organic reaction	Project leader	2016	IPS - UPM	On-going
5524423	A study of the effect of multifunctional hetero ligands derived from carbazates and dithiocarbazates in transition metal complexes on heterogeneous catalysis	Member	2013	FRGS-KPM	On-going
5527054	Synthesis of fatty acid sugar ester via enzymatic catalysis	Project leader	2011	ERGS-KPT	Closed
5523958	Investigation into Enantioselectivity of Chemoenzymatic Epoxidation of Alkenes and Amino Acids and Peptides as Alternative Asymmetric Catalyst	Project leader	2010	FRGS-KPT	Closed
5487734	Designer Biocatalyst for Sustainable Processes in the Conversion of Renewable Raw Materials to	Member	2009	MOSTI	Closed

	Platform Chemicals				
91626	Enzymatic Synthesis of Fatty Acid Sugar Ester in Ionic Liquid	Project leader	2009	UPM-RUGS	Closed