CURRICULUM VITAE

A. BUTIR-BUTIR PERIBADI ***(Personal Details)***			
Nama Penuh *(Full Name)*	Lai Oi Ming		Gelaran *(Title):* Prof. Dr.
No. MyKad / No. Pasport *(Mykad No. / Passport No.)* 680127-10-5152	Warganegara *(Citizenship)* Malaysian	Bangsa *(Race)* Chinese	Jantina *(Gender)* Female
Jawatan *(Designation)*	Lecturer	Tarikh Lahir *(Date of Birth)*	27 Jan 1968

Alamat Semasa *(Current Address)*	Jabatan/Fakulti *(Department/Faculty)*	E-mel dan URL *(E-mail Address and URL)*
Dept. of Bioprocess Technology, Faculty of Biotechnology & Biomolecular Sciences, UPM Tel: +603-8946 7520	Dept. of Bioprocess Technology, Faculty of Biotechnology & Biomolecular Sciences, UPM Tel: +603-8946 7520 Fax: +603-8946 7510	E-mail: omlai@upm.edu.my or omlai.biotech@gmail.com URL: H/P: +6012-3307735

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)*
Bachelor of Science (First Class Honours)	Universiti Kebangsaan Malaysia	1993	Enzyme Technology
Master of Science	Universiti Kebangsaan Malaysia	1995	Biochemistry
Doctor of Philosophy	Universiti Putra Malaysia	1998	Biotechnology

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					√
Chinese		√			
Lain-lain *(other):*					

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN *(Scientific experience and Specialisation)*				
Organization	*Position*	*Start Date*	*End Date*	*Expertise*
Universiti Putra Malaysia	Prof.	2011	Present	Food biotechnology, Enzyme technology, Lipid technology
Universiti Putra Malaysia	Assoc. Prof	2004	2011	Enzyme technology, Lipid technology, Structured lipids
Universiti Putra Malaysia	Lecturer	1998	2004	Enzyme technology, Lipid technology
Universiti Putra Malaysia	Tutor	1995	1998	Enzyme technology

E. PEKERJAAN ***(Employment)***				
Majikan */ Employer*	Jawatan */ Designation*	Jabatan / *Department*	Tarikh lantikan / *Start Date*	Tarikh tamat / *Date Ended*
Universiti Putra Malaysia	Prof.	Bioprocess Technology	2011	Present
Universiti Putra Malaysia	Assoc. Prof.	Bioprocess Technology	2004	2011
Universiti Putra Malaysia	Assoc. Prof.	Biotechnology	2002	2004
Universiti Putra Malaysia	Lecturer	Biotechnology	1998	2002
Universiti Putra Malaysia	Tutor	Biotechnology	1995	1998
Universiti Kebangsaan	Research Assistant	Biochemistry	1993	1995

F. ANUGERAH DAN HADIAH *(Honours and Awards)*				
Name of awards	*Title*	*Award Authority*	*Award Type*	*Year*
Academic Awards	Research Scholar	University of Georgia, USA	International	2003
	JICA Award	Japan International Cooperation Agency (JICA)	International	2000
	UPM /JPA Scholarship	JPA	National	1995
	University Gold Medal	UKM	University	1993
Non-Academic Awards	Most Successful collaborator	Sime Darby Research Centre	Industrial	2011

	Excellent Consultant Award	UPM	University	2009
	Best Invention by Woman Award	WIPO, Geneva	International	2008
	Excellent Consultant Award	UPM	University	2006
Awards of Merit	Top Research Scientist Malaysia TRSM 2012	Academy of Sciences Malaysia	National	2012
	Gold Medal PECIPTA	PECIPTA	National	2009
	Excellent Service Award 2008	UPM	University	2008
	Gold Medal, EUREKA INNOVA	INNOVA Energy, EUREKA	International	2008
	Gold Medal, BioInno	BioINNO	National	2008
	Best Invention in Health Award	ITEX	National	2008
	Incentive Patent Award	UPM	University	2007

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

1. S.K. Lo, C.P. Tan, K. Long, M.S.A. Yusoff and **O.M. Lai** (2009). Response surface modelling of 1-stearoyl-3(2)-oleoyl glycerol production in a pilot packed-bed immobilized *Rhizomucor miehei* lipase reactor. *Journal of Molecular Catalysis B: Enzymatic.* 57:136-144. **(Impact factor: 2.400)**

2. Koh, S.P., N. Ariffin, **O.M. Lai**, M.S.A. Yusoff, K. Long and C.P. Tan (2009) Oxidative stability of palm- and soybean-based medium-and-long-chain-triacylglycerol (MLCT) oil blends. *Journal of the Science of Food and Agriculture.* 89:455-462. **(Impact factor: 1.386)**

3. Chua, S.C., C. P. Tan, H. Mirhosseini, **O.M. Lai,** Long, K**.** and B.S. Baharin (2009) Optimization of ultrasound extraction condition of phospholipids from palm-pressed fiber. *Journal of Food Engineering. 92:403-409.* **(Impact factor: 2.313)**

4. K.L. Nyam, Tan, C.P, Che Man, Y. **Lai, O.M**. and Long, K. (2009) Physicochemical properties of Kalahari melon seed oil following extractions using solvent and aqueous enzymatic methods. *International Journal of Food Science Technology*. 44:694-701. **(Impact factor:1.172)**

5. K.L. Nyam, Tan, C.P, **Lai, O.M**., Long, K. and Che Man, Y (2009) Physicochemical properties and bioactive compounds of selected seed oils. *LWT-Food Science and Technology*. 42:1396-1403. **(Impact factor:2.114)**

6. Ling-Zhi Cheong, Norlelawati Arifin, Seong-Koon Lo, Chin-Ping Tan, Kamariah Long, Mohd. Suria Affandi Yusoff and **Oi-Ming Lai** (2009) Physicochemical, textural and viscoelastic properties of palm diacylglycerol bakery margarine during storage. *Journal of American **Oil Chemists' Society*.* **86:723-731.** (Impact factor: 1.803)

7. Leong, W.F., Y.B. Che Man, **O.M. Lai**, K. Long, M. Misran and C.P. Tan (2009) Optimisation of processing parameters for the preparation of phytosterol microemulsions by the solvent displacement method. *Journal of Agriculture and Food Chemistry.* 57:8426-8433. (Impact factor: 2.469)

8. Phebe, D., Chew, M.K., Suraini, A.A., **Lai, O.M.** and Janna, O.A. (2009) Red-fleshed pitaya (*Hylocereus polyrhizus*) fruit colour and betacyanin content depend on maturity. *International Food Research Journal*. 16:233-242.

9. Tung Nguyen, C.T., Son, R., Raha, A.R., **Lai, O.M**. and Clemente Michael, W.V.L. (2009) Comparison of DNA extraction efficiencies using various methods for the detection of genetically modified organisms (GMOs). *International Food Research Journal*. 16:21-30.

10. K.L. Nyam, Tan, C.P, **O.M. Lai,** Long, K. and Y.B. Che Man (2009) Enzyme-assisted aqueoeus extraction of

Kalahari melon seed oil: Optimization using response surface methodology. *Journal of American Oil Chemists' Society*. 86:1235-1240 **(Impact factor: 1.803)**

11. Koh, S.P., N. Ariffin, **O.M. Lai**, M.S.A. Yusoff, K. Long and C.P. Tan (2009) Thermal and viscosity properties of medium-and-long-chain-triacylglycerol (MLCT) blends. *Journal of Food Lipid.*16:569-588. **(Impact factor: 1.070)**

12. N. Ariffin, Cheong, L.Z., Koh, S.P., K. Long, C.P. Tan, M.S.A. Yusoff, Idris, N., S.K. Lo. and **O.M. Lai.** (2010) Relationship between textural properties and sensory qualities of cookies made from medium-and long-chain triacylglycerol (MLCT)-enriched margarines. *Journal of the Science of Food and Agriculture.* 90:943-948. **(Impact factor: 1.386)**

13. Koh, S.P., C.P. Tan, **O.M. Lai**, N. Ariffin, M.S.A Yusoff and K. Long (2010) Enzymatic synthesis of medium-and-long-chain-triacylglycerols (MLCT): Optimization of process parameters using response surface methodology. *Food Bioprocess Technology*. 3:288-299. **(Impact factor: 2.238)**

14. K.L. Nyam, Tan, C.P, Roselina Karim, **O.M. Lai**, Long, K. and Che Man, Y (2010) Extraction of tocopherol-enriched oils from Kalahari melon and roselle seeds by supercritical fluid extraction (SFE-CO2). *Food Chemistry*. 119:1278-1283. **(Impact factor: 3.146)**

15. K.L. Nyam, Tan, C.P, **O.M. Lai,** Long, K. and Y.B. Che Man (2010) Optimization of supercritical fluid extraction of phytosterol from roselle seeds with a central composite design model. *Food and Bioproducts Processing.*88:239-246. **(Impact factor: 0.952)**

16. N. Ariffin, Cheong, L.Z., Koh, S.P., K. Long, C.P. Tan, M.S.A. Yusoff, Idris, N., S.K. Lo. and **O.M. Lai.** (2010) Physicochemical properties and sensory attributes of medium-and long-chain triacylglycerols (MLCT)-enriched bakery shortening. *Food and Bioprocess Technology.* 4:587-596. **(Impact factor: 2.238)**

17. N. Ariffin, Cheong, L.Z., Koh, S.P., K. Long, C.P. Tan, M.S.A. Yusoff, Idris, N., S.K. Lo. and **O.M. Lai.** (2010) Modeling and optimization of Lipozyme RM1M catalysed-esterification of medium- and long-chain triacylglycerol (MLCT) using response surface methodology. *Food Bioprocess Technology.* 5:216-225. **(Impact factor: 3.256)**

18. Ling-Zhi Cheong, Norlelawati Arifin, Seong-Koon Lo, Chin-Ping Tan, Kamariah Long, Mohd. Suria Affandi Yusoff and **Oi-Ming Lai** (2010) Physicochemical, textural and viscoelastic properties of palm diacylglycerol bakery shortening during storage. *Journal of the Science of Food and Agriculture.* 90:2310-2317. **(Impact factor: 1.386)**

19. Ng. S.P., C.P. Tan, **O.M. Lai**, K. Long and H. Mirrhosseni (2010) Extraction and characterization of dietary fiber from coconut residue. *J. Food Agric & Environ*. 8:172-177. **(Impact factor: 0.349)**

20. Ling-Zhi Cheong, Norlelawati Arifin, Seong-Koon Lo, Chin-Ping Tan, Kamariah Long, Mohd. Suria Affandi Yusoff and **Oi-Ming Lai** (2011) Baking performance of palm diacylglycerol bakery fats and sensory evaluation of baked products. *European Journal of Lipid Science and Technology.* 113:253-261. **(Impact factor: 1.831)**

21. K.L. Nyam, Tan, C.P, **O.M. Lai,** Long, K. and Y.B. Che Man (2011) Optimization of supercritical CO2 extraction of phytosterol-enriched oil from Kalahari melon seeds. *Food and Bioprocess Technology.*4:1432-1441 **(Impact factor: 3.576).**

22. Amir Hoessein Saberi, **Lai Oi Ming** and Mat Sahri Miskandar (2011) Melting and solidification properties of palm-based diacylglycerol, palm kernel olein and sunflower oil in the preparation of palm-based diacylgycerol-enriched soft tub margarine. *Food and Bioprocess Technol. (Accepted)* **(Impact factor: 3.576)**

23. Amir Hoessein Saberi, **Lai Oi Ming** and Jorge Fernando Toro-Vasquez (2011) Crystallization kinetics of palm oil in blends with palm-based diacylgycerol. *Food Research International.* 44:425-435 **(Impact factor: 2.414)**

24. Koh, S.P.,Long, K., Tan, C.P., Yusoff, M.S.A., **Lai, O.M.** and Arifin (2011) The use of enzymatically synthesized medium- and long-chain triacylglycerols (MLCT) oil blends in food applications. *International Food Research Journal*. 18(1):355-366

25. Anahita Khoramnia, **O.M. Lai,** Afshin Ebrahimpour, Carynn Josue Tanduba, Tan Siow Voon and Suriati Mukhlis (2010) Thermostable lipase from a newly isolated *Staphylococcus xylosus* strain: Process optimization and characterization using RSM and ANN. *Electronic Journal of Biotechnology.* September 2010, vol. 13, no. 5. http://dx.doi.org/10.2225/vol13-issue5-fulltext-22. **(Impact factor: 0.928).**

26. Amir Hoessein Saberi, Beh Boon Kee, **Lai Oi Ming** and Mat Sahri Miskandar (2011) Physical properties of palm-based diacylglycerol and palm-based oils in the preparation of shelf-stable margarine. *European Journal of Lipid Science and Technology.* 113:627-636 **(Impact factor: 1.831)**

27. Amir Hoessein Saberi, Tan Chin Ping and **Lai Oi Ming** (2011) Physico-Chemical Properties of Various Palm-Based Diacylglycerol Oils in Comparison with Their Corresponding Palm-Based Oils. *Food Chem.* 127:1031-1038 **(Impact factor: 3.146)**

28. Koh, S.P., N. Ariffin, C.P. Tan, M.S.A. Yusoff, K. Long and **O.M. Lai.** (2011) Deep frying performance of enzymatically synthesised palm-based medium-and-long-chain-triacylglycerol. *Food Bioprocess Technology.* 4(1):124-135 **(Impact factor: 3.576)**

29. Amir Hoessein Saberi, Tan Chin Ping and **Lai Oi Ming** (2011) Phase Behavior of Palm Oil in Blends with Palm-Based Diacylglycerol. *J. Am. Oil Chem. Soc*. 88:1857-1865 **(Impact factor: 1.504)**

30. Wai Fun, Leong, Yaakob Che Man, **Oi Ming Lai**, Kamariah Long, Mitsutoshi Nakajima and Chin Ping Tan (2011) Effect of sucrose fatty acid esters on the particle characteristics and flow properties of phytosterol nanodispersions. *J. Food Engineering*. 104:63-69. **(Impact factor: 2.313)**

31. Wai-Fun Leong, Kok-Whey Cheong, **Oi-Ming Lai**, Kamariah Long, Yaakob B. Che Man, Misni Misran and Chin-Ping Tan (2011) Response surface modeling of processing parameters for the preparation of phytosterol nanodispersions using an emulsification-evaporation technique. *Journal of the American Oil Chemists' Society*. 88:717-725 ***(*Impact factor: 1.803)**

32. Leong, W.F., **O.M. Lai**, K. Long, Y.B. Che Man, M. Misran and C.P. Tan (2011) Preparation and Characterization of Water-Soluble Phytosterol Nanodispersions, *Food Chemistry*. 129:77-83 **(Impact factor: 3.146)**

33. Anahita Khoramnia, Afshin Ebrahimpour, Boon Kee Beh and **Oi Ming Lai** (2011) Production of a solvent, detergent and thermo-tolerant lipase by a newly isolated *Acinetobacter sp*. in submerged and solid state fermentations. *Journal of Biomedicine and Biotechnology. Doi:10.1155/2011/702179* **(Impact factor: 1.750).**

34. Eng-Tong Phuah, **Oi-Ming Lai**, Thomas Shean-Yaw Choong, Chin-Ping Tan and Seong-Koon Lo (2012) Kinetic study on partial hydrolysis of palm oikl catalysed by *Rhizomucor miehei* lipase. *Journal of Molecular Catalysis B: Enzymatic*. 78:91-97 **(Impact factor: 2.531).**

35. Musfirah Zulkarnain, Tan Chin Ping, **Oi Ming Lai**, Ling Tau Chuan and Imededdine Nahdi (2012) The effects of physical refining on the formation of 3-MCPD esters in relation to palm oil minor components. *Food Chemistry*. 135:799-805. **(Impact factor: 3.146)**

36. Yee Ying Lee and **Oi-Ming Lai** (2012) Health benefits, enzymatic production and application of medium-and long-chain triacylglycerol (MLCT) in food industries: A review. *Journal of Food Science*. 8: R137-143 **(Impact factor: 1.733**)

37. Liong Yan Yee, Rasmina Halis, **Oi-Ming Lai** and Rozi Mohamed (2012) Conversion of lignocellulosic biomass from grass to bioethanol using materials pretreated with alkali and water. *Bioresources 7(4):5500-5513* (**Impact factor:1.418)**

38. Amir Hossein Saberi, **Oi-Ming Lai** and Mat Sahri Miskandar (2012) Melting and solidification properties of palm-based diaclyglycerol, palm kernel olein and sunflower oil in the preparation of palm-based diaclyglycerol-enriched soft tub margarine. *Food and Bioprocess Technology*. 5:1674-1685 (**Impact factor: 3.256)**

39. Nurmaziah Mohammad, Thomas S.Y. Choong, Chiou-Moi Yeoh and **Oi-Ming Lai** (2012) Recent patents on diaclyglycerol production and applications. *Recent Patents on Chemical Engineering*. 5:103-109.

40. Yin-Yin Thoo, Faridah Abas, **Oi-Ming Lai** and Chun-Wai Ho (2013) Antioxidant synergism between ethanolic *Centella asiatica* and alpha tocopherol in model systems. *Food Chemistry*. 138:1215-1219. **(Impact factor: 3.146)**

41. Anahita Khoramnia, Afshin Ebrahimpour, Raheleh Ghanbari, Zahra Ajdari and **Oi-Ming Lai** (2013) Improvement of medium chain fatty acid content and antimicrobial activity of coconut oil via solid-state fermentation using a Malaysian *Geotrichum candidum. BioMed Research International. Article ID 954542, 9 pages. Doi.org/10.1155/2013/954542.* **(Impact factor: 2.706)**

42. Musfirah Zulkurnain, **Oi Ming Lai**, Soo Choon Tan, Razam Abd. Latip and Chin Ping Tan (2013) Optimization of palm oil physical refining process for reduction of 3-monochloropropane-1,2-diol (3-MCPD) ester formation. *J. Agric. Food Chem*. 61:3341-3349. **(Impact factor: 2.469)**

43. Yin-Yin Thoo, Swee-Kheng Ho, Faridah Abas, **Oi-Ming Lai**, Chun-Wai Ho and Chin-Ping Tan (2013) Optimal binary solvent extraction system for phenolic antioxidants from mengkudu (*Morinda citrifolia*) fruit. *Molecules*. 18:7004-7022. **(Impact factor: 2.428)**

44. Razam Ab Latip, Yee–Ying Lee, Teck-Kim Tang, Eng-Tong Phuah, Chin-PingTan and **Oi-Ming Lai**. 2013. Physicochemical properties and crystallisation behaviour of bakery shortening produced from stearin fraction of palm-based diacyglycerol blended with various vegetable oils. *Food Chemistry*. 141(4) 3938-3946. **(Impact factor: 3.334)**

45. Razam Ab latip, Yee-Ying Lee, Teck-Kim Tang, Eng-Tong Phuah, Chin-Ping Tan and **Oi-Ming Lai** (2013) Palm-based diacylglycerol fat dry fractionation: effect of crystallisation temperature, cooling rate and agitation speed on physical and chemical properties of fractions. *PeerJ*. E72: DOI 10.7717/peerj.72. **(Impact factor: 2.112)**

46. Amir Hoessein Saberi, Chin-Ping Tan and **Oi-Ming Lai** (2013) High performance liquid chromatography analysis of 1,3- and 1,2 (2,3)-positional isomers of palm-based diacylglycerols. *Journal of Oil Palm Research*. 25:326-335. **(Impact factor: 0.177)**

47. Teck-Kim Tang Yee-Ying Lee, Eng-Tong Phuah, Noorjahan Banu and **Oi-Ming Lai** (2013) Suppression of

visceral adipose tissue by palm kernel and soy-canola diaclyglycerol in C57BL/6N mice. *European Journal of Lipid Science and Technology*. 115:1266-1273. **(Impact factor: 2.266)**

48. Siou-Pei Ng, **Oi-Ming Lai**, Faridah Abas, Hong-Kwong Lim, Chin-Ping Tan (2014) Stability of a concentrated oil-in-water emulsion model prepared using palm olein-based diaclyglycerol/virgin coconut oil blends: Effects of the rheological properties, droplet size distribution and microstructure. *Food Research International*. 64:919-930. **(Impact factor: 3.378)**

49. Siou-Pei Ng, **Oi-Ming Lai**, Faridah Abas, Hong-Kwong Lim, Boon-Kee Beh, Tau-Chuan Ling, Chin-Ping Tan (2014) Compositional and thermal characteristics of palm olein-based diacylglycerol in blends with palm super olein. *Food Research International*. 55:62-69. **(Impact factor: 3.378)**

50. Anahita Khoramnia, Afshin Ebrahimpour, Boon Kee Beh and **Oi Ming Lai** (2014) In situ bioconversion of coconut oil via coconut solid state fermentation by *Geotrichum candidum* ATCC 34614. Food and Bioprocess Technology. *7:783-794* **(Impact factor: 3.576)**

51. Joo-Ling Loo, Anahita Khoramnia, **Oi-Ming Lai**, Kamariah Long and Hasanah Mohd Ghazali (2014) Mycelium-bound lipase from a locally isolated strain of *Geotrichum candidum*. *Molecules.* 19:8556-8570. **(Impact factor: 2.428)**

52. Yee-Ying Lee, Teck-Kim Tang, Nur Azwani Ab Karim, Noorjahan Banu Mohaned Alitheen and **Oi-Ming Lai** (2014) Short term and dosage influences of palm based medium- and long-chain triacylglycerol on body fat and blood parameters in C57BL/6J mice. *Food and Function.5:57-64.* **(Impact factor: 2.694)**

53. Joo-Ling Loo, Anahita Khoramnia, **Oi-Ming Lai**, Kamariah Long and Hasanah Mohd Ghazali (2014) Mycelium-bound lipase from a locally isolated strain of *Geotrichum candidum*. *Molecules.* 19:8556-8570. **(Impact factor: 2.428)**

54. Yee-Ying Lee, Teck-Kim Tang, Eng-Tong Phuah, Nur Azwani Ab Karim, Siti Maslina Mohd Alwi and **Oi-Ming Lai**. 2015. Palm-based medium-and long-chain triacylglycerol (P-MLCT): production via enzymatic interesterification and optimization using response surface methodology (RSM). *Journal of Food Science and Technology.* 52:685-696. **(Impact factor: 1.123)**

55. Eng-Tong Phuah, Teck-Kim Tang, Yee-Ying Lee, Thomas, Shean-Yaw Choong, Chin-Ping Tan and **Oi-Ming Lai**. 2015. Review on the current state of diacylglycerol production using enzymatic approach. *Food and Bioprocess Technology*. 8:1169-1186. **(Impact factor: 2.691)**

56. Yee-Ying Lee, Teck-Kim Tang, Chin-Ping Tan, Noorjahan Banu Mohaned Alitheen, Eng-Tong Phuah, Nur Azwani Ab Karim, and **Oi-Ming Lai.** 2015. Entrapment of Palm-Based Medium- and Long-Chain Triacylglycerol via Maillard Reaction Products. *Food and Bioprocess Technology*. 8:1571-1582. **(Impact factor: 2.691)**

57. Anand kumar Inthiram, Hamed Mirhosseini, Chin-Ping Tan, Rosfarizan Mohamad and **Oi-Ming Lai**. Application of multivariate analysis for detection of crude palm oil adulteration through fatty acid composition and triacylglycerol profile. *Pertanika Journal of Tropical Agricultural Science*. 38:389-398.

58. Zuxing He, Joo Shun Tan., **Oi-Ming Lai**, and Arbakariya B. Ariff. 2015. Optimization of conditions for the single step IMAC purification of miraculin from Synsepalum dulcificum. *Food Chemistry*. 181:19-24. **(Impact factor: 3.334)**

59. Eng-Tong Phuah, Boon-Kee eh, Cindy Shu-Ying Lim, Teck-Kim Tang, Yee-Ying Lee and **Oi-Ming Lai** (2016) Rheological properties, textural properties and storage stability of palm-kernel based diacylglycerol-enriched mayonnaise. *Eur. J. Lipid Sci. Technol*. 118: 185-194 **(Impact factor: 1.812)**

60. Yee-Lin Gan, **Oi-Ming Lai**, Boon How, Chew, Kah Hay Yuen, Kalanithi Nesaretnam, Kim-Tiu Teng, Kanga Rani Selvaduray, Puvaneswari Meganathan and Ju Yen Fu (2016) Safety assessment of tocotrienol supplementation in subjects with metabolic syndrome: A randomised control trial. *J. Oil Palm Research.* 28:34-43

61. Shuen-Yeing Mo, Kim-Tiu Teng, Kalanithi Nesaretnam and **Oi-Ming Lai** (2016) Similar physical characteristics but distinguishable sn-2 palmitic acid content and reduced solid fat content of chemically interesterified palm olein compared with native palm olein by dry fractionation: A lab scale study. *Eur. J. Lipid Sci. Technol*. 118:1389-1398 **(Impact factor: 1.812)**

62. Eng-Tong Phuah, Yee-Ying Lee, Teck-Kim Tang, **Oi-Ming Lai,** Thomas Shean-Yaw Choong, Chin Ping Tan, Wee-Nak Ng and Seong Koon Lo (2016) Modeling and optimization of lipase-catalyuzed partial hydrolysis for diacylglycerol production in packed bed reactor. Int. J. Food Eng. 12: 681-689 **(Impact factor: 0.712)**

63. Zuying He, Joo Shun Tan, Sahar Abbasiliasi, **Oi-Ming Lai** Yew Joon Tam and Arbakariya B Ariff (2016) Phytochemicals, nutritional and antioxidant properties of miracle fruit, *Synsepalum dulcificum*. Industrial Crop and Products. 86:87-94 **(Impact factor:3.449)**

64. Shy Kai Ng, Kar Lin Nyam, Imededdine Arbi Nehdi, Gun Hean Chong, **Oi Ming Lai** and Chin Ping Tan (2016) Impact of stirring speed on beta-lactoglobulin fibril formation. Food Sci. Biotechnol. 25:15-21 **(Impact**

	factor:0.90) 65. Yu Kiat Lin. Pau loke Show, Yee Jiun Yap, Arbakariya Ariff, Mohammad Suffian Mohammad Annuar, **Oi Ming Lai**, Teck kim Tang, Joon Ching Juan and Tau Chuan Ling (2016) Production of gamma cyclodextrin by Bacillus cereus cyclodextrin glycosyltransferase using extractive bioconversion in polymer-salt aqueous two-phase system. J. *Biosci Bioeng*. 121:692-696 **(Impact factor:4.052)** 66. Liu Man Man, Zhang Can, Liu Fang, Tek-Kim Tang, Wang Yoon, **Oi-Ming Lai** (2016) Crystallization properties of diacylglycerol blended with sunflower oil. *Guangdong Agricultural Sciences* 43:49-56. 67. Wong Yu Hua, Halimah Muhamad, Faridah Abas, **Oi Ming Lai**, Kar Lin Nyam and Chin Ping Tan (2017) Effects of temperature and NaCl on the formation of 3-MCPD esters and glycidyl esters in refined, bleached and deodorized palm olein during deep-fat frying of potato chips. Food Chemistry **(Impact factor: 4.052)** 68 Wee Ting Lai, Nicholas Mun Hoe Khong, Sue Shan Lim, Yen Yi Hee, Biow Ing Sim, Kah Yan Lau, **Oi Ming Lai** (2016). A review: Modified agricultural by-products for the development and fortification of food products and nutraceuticals. Trends in Food Science and Technology. **(Impact factor: 4.051)** 69 Yee Ying Lee, Teck Kim Tang, Eng Tong Phuah, Noorjahan Banu Mohamed Alitrheen, Chin Ping Tan, **Oi Ming Lai** (2016). New functionalities of Maillard reaction products as emulsifiers and encapsualting agents, and the processing paramrters: A brief review. Journal of the Science of Food and Agriculture. **(Impact factor: 1.714)** 70. Kok Ming Goh, **Oi Ming Lai**, Faridah Abas, Chin Ping Tan. Effetcs of sonication on the extraction of free-amino acids from moromi and application to the laboratory scale rapid fermentation of soy sauce. Food Chemistry. **(Impact factor: 4.052)**
Books/Monographs	1. C.C. Akoh and **O.M. Lai** (eds.) (2005) *Healthful Lipids*. AOCS Press, USA. pp 731-749 2. **O.M Lai**, C.P. Tan and Casimir Akoh (eds.) (2012) *Palm oil: Production, Processing, Characterization and Uses.* AOCS Press, USA. ISBN 978-0-9818936-9-3
Chapter in book	1. **O.M. Lai**. (2005) Palm oil, its fractions and components. In C.C. Akoh and **O.M. Lai** (eds.) *Healthful Lipids*. AOCS Press, USA. pp 731-749. 2. **O.M. Lai,** S.K., Lo and C.C. Akoh. (2005) Patent literature on enzyme-modified and *trans*-free fats and oils. In C.C. Akoh and **O.M. Lai** (eds.) *Healthful Lipids*. AOCS Press, USA. pp 433-507. 3. **O.M. Lai** and S.K. Lo (2005) *Trans* fatty acids and *trans*-free lipids. In C.C. Akoh (ed.) *Handbook of Functional Lipids*. CRC Press, USA. pp.203-259. 4. **O.M. Lai** and S.K. Lo (2008) Thermal Techniques: Differential Scanning Calorimeter. In Sun, Da-Wen (ed.) *Modern Techniques for Food Authentication*. Elsevier, UK. pp 543-583. 5. **O.M. Lai,** C.C. Akoh and J.D. Weete (2008) Microbial Lipases. In C.C. Akoh and D. B. Min (eds.) *Food Lipids*, 3rd edn. Taylor and Francis, USA. pp 767-806. 6. **O.M. Lai** and S.K. Lo (2011) Diacylglycerol oils and saturated fat reduction. In Geoff Talbot (ed.) *Reducing Saturated Fats in Foods*, Woodhead Publishing, Cambridge, UK. Pp 158-178. 7. **O.M. Lai,** S.K. Lo and C. Akoh (2012) Chemical and enzymatic modification of palm and palm kernel oils to add value. In **O.M. Lai**, C.P. Tan and Casimir Akoh (eds.) *Palm oil: Production, Processing, Characterization and Uses*. AOCS Press, USA. Pp 527-544. 8. C. Akoh, Garima Pande and **O.M. Lai** (2012) Food uses of palm oil and its components. In **O.M. Lai**, C.P. Tan and Casimir Akoh (eds.) *Palm oil: Production, Processing, Characterization and Uses*. AOCS Press, USA. Pp 561-586. 9. J.D. Weete, **O.M. Lai**, C.C.Akoh, E.T. Phuah and Y.Y. Lee. (In press). Mircobial lipase. In C.C Akoh and D.B. Min (eds.) *Food lipids: chemistry, nutrition and biotechnology*.
Proceedings	1. Amir Hoessein Saberi and **O.M. Lai** (2010) Isothermal crystallization kinetics of palm oil in blends with palm-based diacylglycerol. *101st AOCS Annual Meeting and Expo*, Phoenix, Arizona. 16-19 May. 2. W.F. Leong, Y.C. Man, **O.M. Lai**, K. Long, M. Misran and C.P. Tan (2010) Optimization of sucrose laureate stabilized water-soluble phytosterol nanodispersion. *101st AOCS Annual Meeting and Expo*, Phoenix, Arizona. 16-19 May. 3. Noorlida Habi Mat Dian, Fatihanim Mohd. Nor, Miskandar Mat Sahri and **Lai Oi Ming** (2010) Hard stock from enzymatically interesterified hard palm stearin: Characterization and potential application in trans free and low SAFA Solid fat formulations. *101st AOCS Annual Meeting and Expo*, Phoenix, Arizona. 16-19 May.

	4. Nur Azwani Ab. Karim, Razam Abd. Latip, Lo Seong Koon, Mohd. Suria Affandi Yusoff, Koh Soo Peng and **Lai Oi Ming** (2010) Production and frying application of palm-based medium-long chain triglyceride (MLCT). Euro fed Lipid, Munich, Germany Nov 2010. 5. **O.M. Lai**, Amir Hoessein Saberi and C.P. Tan (2011) Phase behavior of palm oil blended with palm-based diacylglycerol. Euro Fed Lipid Congress, Rotterdam, Netherlands, 18-21 September 2011. 6. Yin Yin Thoo, Chin Ping Tan, Chun Wai Ho, faridah Abas and **Oi Ming Lai** (2011) Antioxidant activity of extracts from ultrasound-assisted extraction of *Centella asiatica* and synergism with alpha-tocopherol.Euro Fed Lipid Congress, Rotterdam, Netherlands, 18-21 September 2011. 7. **O.M. Lai** and A.H. Saberi (2012) Melting and solidification properties of palm-based diaclylglycerol, palm kernel olein and sunflower oil in the preparation of palm-based diaclyglycerol-enriched soft tub margarine. 103rd American Oil Chemists' Society Annual Meeting and Expo. April 29-2 may 2012, Long Beach, CA USA. 8. Wai Fun Leong, Chin Ping Tan, Yaakob Che man, **Oi Ming Lai**, Kamariah long and Mitsutoshi Nakajima (2012) Stability evaluation of the sucrose laureate-stabilized phytosterol; nanodispersion-containing soy milk. 103rd American Oil Chemists' Society Annual Meeting and Expo. April 29-2 may 2012, Long Beach, CA USA. 9. Noor Lida Habi Mat Dian, Miskandar Mat Sahri,. Tan Chin Ping and **Lai Oi Ming** (2012) Directed Interesterification of Palm Oil. 103rd American Oil Chemists' Society Annual Meeting and Expo. April 29-2 may 2012, Long Beach, CA USA. 10. Oi Ming Lai Maillard reaction products as encapsulating agents for fucntional lipid palm-based medium-and long-chain triacylglycerol. 106th American Oil Chemists' Society Annual Meeting and Expo. May 3-May 6, Orlando, Florida, USA.
Other publications	-
Computer software	-

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

Project No.	*Project Title*	*Role*	*Year*	*Source of fund*	*Status*
I-ECO/23(UPM-15)	Technology transfer for development of high value food products from by-products of the corn industry	Project leader	2016-2018	KPT	In Progress
GP/IPS/9470500	Development and characterization of multinutrients chewable tablet from bioyogurt (probiotics) powder	Project leader	2016-2019	Geran Putra	In Progress
InnoHub/9003238	Stabilized tocotrienol-carotenoids rich nutra- and cosmeceutical functional ingredient	Project leader	2016-2017	InnoHub	In Progress
06-01-04-SF1972	Microencapsulation of palm-based medium and long chain triacylglycerol and its application as healthy non dairy creamer.	Project leader	2014-2017	MOSTI	In progress
GP/IPS/9396600	Development of cereal flakesc formulation from by products of the corn industry	Project leader	2013-2016	Geran Putra	Completed
GP/IBT/9407400	Production of cellulose gel from corn cob and corn silk as topical delivery system	Project leader	2013-2015	Geran Putra	Completed
UPMCS	Preclinical study on palm-based medium- and long-chain triacylglycerol (MLCT) as anti –obesity functional oil on C57BL/6J diet induced	Project leader	2012-2013	Sime Darby Research Sdn. Bhd	In progress

	obesity (DIO) mice				
Technofund TF0408D056	Diacylglycerol oil from palm oil as anti-obesity functional oil	Main IHL Collaborator	2008-2010	MOSTI	Completed
Technofund TF0206B051	Production of coenzyme Q10 with improved bioavailability for food supplement from tobacco leaves	Main IHL Collaborator	2007-2009	MOSTI	Completed
UBC	Medium chain palm-based diacylglycerol oil as anti cholesterol and anti obesity functional oil: A preclinical investigation	Project leader	2009-2011	Sime Darby Research Sdn. Bhd	Completed
UBC	Production of diacylglycerols for various edible oil products	Project leader	2006-2009	Golden Hope Research Sdn. Bhd.	Completed
UBC	Production of medium- and long-chain triaclyglycerols (MLCT) through enzymatic route as special cooking oil for dietary theraphy and other edible oil products	Project leader	2006-2009	Golden Hope Research Sdn. Bhd.	Completed
01-01-07-189FR	Mathematical modeling of ultrasound-assisted purification of qualene from deodorizer distillates	Project leader	2007-2008	MOHE	Completed
09-02-04-004BTK/ER/008	Improving the functional and nutritional qualities of fats and oils using biotechnology processes	Sub-Project leader	2001-2005	MOSTI	Completed
01-02-04-0054	Enzymatic synthesis of ferulyl-substituted acylglycerols for sunscreen formulation	Project leader	2002-2004	MOSTI	Completed
09-02-04-0301	The development of filter aids and enzyme immobilization carriers from cheap silica sources	Project leader	2001-2003	MOSTI	Completed
09-02-04-0152	Production and characterization of thermostable enzymes from hyperthermophilic bacteria isolated from oil wells	Project leader	2000-2003	MOSTI	Completed

I. ID PUBLISHING *(Publishing ID)*		
	Author ID	***Name***
Scopus	-	-
ORC ID	-	-
Web of Science ID	-	-
Researcher ID	-	-

Others	-	-

J. RANGKAIAN SOSIAL *(Social Networking)*	
Facebook	-
LinkedIn	-
Researchgate	https://www.researchgate.net/profile/Oi_Ming_Lai
Academia	http://profile.upm.edu.my/omlai/profile.html
Google Scholar	-
Blog	-
Website url	-
Others	-