CURRICULUM VITAE

Personal Details

Engr. Dr. Chong Chien Hwa,

PhD, C.Eng MIChemE, MIET, Grad.IEM, AAE

Associate Dean (Learning & Quality)

School of Engineering



Address, Mobile and Email

No 92, Jalan 4/4 Taman Permai Mas, Bt 9, 43200 Cheras, Selangor, Malaysia.

Tel: +6(016)9320389 (Mobile); Email: chongchienhwa@gmail.com

Academic Qualifications			
Certificate / Qualification obtained	University	Year	
		Obtained	
PhD in Engineering	University of Nottingham	2010	
B.Eng (Hons) (Chemical Engineering)	Universiti Teknologi Malaysia	2007	

Professional Membersh	Professional Membership				
Certificate /	Institution	Registration number	Year		
Qualification obtained			Obtained		
Chartered Engineer	Engineering Council, UK	602853	2013		
Chartered Member	Institution of Chemical Engineers (IChemE)	99947443	2013		
Chartered Member	Institution of Engineering Technology (IET)	1100277257	2013		
Graduate Member	The Institution of Engineers Malaysia (IEM)	G 26348	2007		
Graduate Member	Board of Engineers Malaysia (BEM)	53660A	2007		
Associate ASEAN Engineer	ASEAN Engineering Register		2012		

Working Experiences				
Employer	Designation	Department/ School	Start Date	Date Ended
Polyplastics Asia Pacific	On Job	Process	March	July 2006
	Trainee		2006	
The University of	Part time	Chemical and	March	July 2007
Nottingham, Malaysia	Research	Environmental	2007	
Campus	Assistant	Engineering		
The University of	Research	Chemical and	July 2007	March 2010
Nottingham, Malaysia	Assistant	Environmental		
Campus		Engineering		
Taylor's University	Lecturer	Chemical Engineering,	March	July 2011
		School of Engineering	2010	
Taylor's University	Senior	Chemical Engineering,	July 2011	July 2013
	Lecturer II	School of Engineering		
Taylor's University	Programme	Chemical Engineering,	July 2011	July 2013
	Director	School of Engineering		
Taylor's University	Senior	Chemical Engineering,	July 2013	Present
	Lecturer I	School of Engineering		
Taylor's University	Associate	School of Engineering	Aug 2013	Present
	Dean			
	(Learning &			
	Quality)			

Teaching experiences		
Modules	Term	Year
Computing for design (Matlab 9.0 and Design II for	1 st semester,	2010
Windows)	Year 1	
Computer application for engineers (Introduction to	2 nd semester,	2010 to 2011
Matlab 9.0)	Year 1	
Stoichiometry Processes & Applications (Mass and Energy	3 rd semester,	2010 to 2011
balance)	Year 1	
Engineering Design & Communication (Portfolio, Project	1 st semester,	2010 to 2011
and Engineering drawing)	Year 1	
Chemical Engineering Thermodynamics & Simulation	3 rd semester,	2010 to 2011
	Year 2	
Chemical Engineering Group Project 1	5 th Semester,	2011 to 2013
	Year 3	
Chemical Engineering Group Project II	6 th Semester,	2012
	Year 3	
Renewable & Alternative Energies	7 th Semester,	2013
	Year 3	

Consultation/Projects

Title	Company/ Institution	Status
Refugee Shelter	Taylor's University	On going
HAZOP review	Kemaman Bitumen	Completed
Drying of Koay Teow	-	Completed
Application of Sonic-Esterification Process on	Universiti Teknologi Malaysia	Completed
Palm Fatty Acid Distillate (PFAD)		
Hearing aids humidity box	Gnosis Sdn Bhd.	Completed
Fly your ideas (Airbus)	Taylor's University	Completed
Design a fruit dryer	Taylor's University	Completed
Convective air drying of papaya using	Taylor's University	Completed
pretreated osmotic Phyllanthus niruri		
(Dukong anak) solution		
Drying of papaya seeds	Taylor's University	Completed
Electrolysis CHEM-E-CAR	Taylor's University	Completed
Fuel cell powered CHEM-E-CAR	Taylor's University	Completed
Solar pesticide and watering system	Taylor's University	Completed
Solar watering system	Taylor's University	Completed
Extraction of vitamin E	Taylor's University	Completed

Leadership			
Project title	Role	Year/ Term	Status
Design Competition of the Institution of Engineers Malaysia (IEM)	Chairman	2013/2014	Ongoing
9th Malaysian Chem-e-Car competition 2014	Committee member	2013/2014	Ongoing
Worldwide CDIO fall meeting 2013, 30 Oct to 1 Nov.	Co-Chairman	2013	Ongoing
Biogas Design Competition of Institution of Engineers Malaysia (IEM)	Judge	2013	Completed
8 th Malaysian Chem-e-Car competition, 8-9 April 2013.	Co-Chairman	2013	Completed
Half-day HAZOP Training for Team Members-A Practical Approach organised by IEM Chemical Engineering Technical Division, 2012	Session Chairman	2012	Completed
A visit to Bio-Cosmetics Facility of SIRIM Berhad, Shah Alam	Session Chairman	2012	Completed
Academic staff steering committee member of School of Engineering, Taylor's University.	Representative	2011 to 2012	Completed
CO ₂ car competition	Judge	2011	Ongoing
Engineering Fair, Taylor's University	Judge	2011	Ongoing
International Engineering and Technology Education Conference (IETEC 2011)	Event manager	2011	Completed
International engineering and technology	Assistant Editor	2011	Completed

education (IETEC'11) conference			
proceedings			
Design a new engineering programme:	Chairman	2011	Completed
Bachelor of Eng (Hons) Petroleum and			
Petrochemical			
Design two modules entitled: Stoichiometry	Chairman	2011	Completed
Processes and Applications and Chemical			
Engineering Thermodynamics and			
Simulation			
Chemical Engineering Programme of	Programme Director	2011	Ongoing
Taylor's University			
Contributed question for ASEAN	Panel	2010	Completed
Academy of Engineering and Technology			
(AAET) ESTI quiz competition for ASEAN			
undergraduates			
Joint Management Body (JMB) of Taragon	Chairman	2010 to	Completed
Puteri Cheras, Selangor, Malaysia		2013	
Taylor's University Scholarship	Interviewer	2010	Completed
Journal of Food Science and Technology	International Reviewer	2007	Ongoing
International Journal of Food Engineering			
Journal of the Institution of Engineers,			
Malaysia			
Scientific Research and Essays, Journal of			
Food Engineering			
Taekwon-Do (ITF) Association of University	Team Manager	2005	Completed
Technology Malaysia (UTM) for Malaysia			
Taekwondo Championship (Open)			
National Day Event at College level (Tun Dr.	Deputy Director	2005/2006	Completed
Ismail) in University Technology Malaysia			
(UTM).			
Taekwon-Do (ITF) Association of University	President	2004/2005	Completed
Technology Malaysia (UTM)			
Annual Dinner of Taekwondo-Do (ITF)	Deputy Director	2004/2005	Completed
Association of University Technology			
Malaysia (UTM)			
Annual Event of Taekwondo-Do (ITF)	Director	2004/2005	Completed
Association of University Technology			
Malaysia (UTM)			
"Minggu haluan siswa" of University	Committee Member	2006	Completed
Technology Malaysia (UTM).			
Out-going exchange of AIESEC Student-	Director	2004/2005	Completed
Chapter			
Taekwon-Do (ITF) Association University	Assistant Coach	2003/2004	Completed
Technology Malaysia (UTM)			

Honours and Award				
Name of awards	Title	Award Authority	Award	Year
			Type	

Presidential Award	Presidential Award of	Institution of Engineers	Certificate	2013
	Excellence	Malaysia		
Malaysia Technology	Invention: Hybrid	MTE	Medal/	2009
Expo, Bronze medal	heat pump dryer		Certificate	
Dean's List	Bachelor of	Universiti Teknologi	Certificate	2007
	Engineering (Hons)	Malaysia		
	(Chemical) in			
	Semester 7			
Dean's List	Bachelor of	Universiti Teknologi	Certificate	2007
	Engineering (Hons)	Malaysia		
	(Chemical) in			
	Semester 8			
Dean's List	Bachelor of	Universiti Teknologi	Certificate	2006
	Engineering (Hons)	Malaysia		
	(Chemical) in			
	Semester 5			
Dean's List	Bachelor of	Universiti Teknologi	Certificate	2006
	Engineering (Hons)	Malaysia		
	(Chemical) in			
	Semester 6			
National Chemical	1 st Runner Up in	Universiti Teknologi	Medal/	2006
Engineering	Chemical Project	PETRONAS	Certificate	
Symposium (NACES)	Competition			
Malaysia	Bronze Medal in	International Taekwondo	Medal	2005
Taekwondo	Black-Belt Team	Federation		
Championship	Pattern			
(Open)				
9 th Inter-Varsity	Silver Medal in	National Technology	Medal	2004
Tournament	Individual Sparring	University of Singapore		
	Male Black Belt 1 st -			
	2 nd Dan Light			

List of publications

Journal

- 1. **Chong, C.H.**, Law, C.L., Cloke. M., Hii, C.L. Luqman Chuah, A. & Daud, W.R.W. (2008). Drying kinetics and product quality of dried chempedak. Journal of Food Engineering, 88(4).522-527.
- 2. **Chong, C.H.**, Law, C.L., Cloke. M., Luqman Chuah, A. & Daud, W.R.W. (2008). Drying kinetics, texture, colour and determination of effective diffusivities during sun drying of chempedak, Drying Technology, 26(10), 1286-1293.
- 3. **Chong, C.H.**, Law, C.L., Cloke. M., Luqman Chuah, A. & Daud, W.R.W. (2009). Drying Models and Quality Analysis of Sun-Dried Ciku. Drying Technology, 27(9), 985-992.
- 4. **Chong, C. H.**, Law, C. L., Cloke. M., Luqman Chuah, A. & Daud, W. R. W. (2009). Kinetics of mass transfer, colour, total polyphenol and texture change of *Manilkara zapota* during convective air drying. ASEAN Journal of Chemical Engineering, 1(1), 47-59.
- 5. **Chong, C. H.**, Figiel, A., Law, C. L. (2010). Intermittent hot air, dehumidified air, heat pump and convective cum vacuum microwave drying characteristics and models. ASEAN Journal of Chemical Engineering, 10(1), 50-55.

- 6. **Chong, C. H.**, Law, C. L. (2011). Application of intermittent drying of cyclic temperature and step-up temperature in enhancing textural attributes of dehydrated *Manilkara zapota*. Drying Technology, 29, 245-252.
- 7. Al-Atabi, M., Satesh, N., **Chong, C.H.**, Florence, C., Mohammad, H. (2013). A holistic approach to develop engineering programme outcomes: A case study of Taylor's University. Journal of Engineering Science & Technology (JESTEC), 4, 19-30.
- 8. Satesh, N., Al-Atabi, M., **Chong, C.H.**, Florence, C., Mohammad, H, Gamboa, R.A., Sivanesan, S. (2013). A blueprint for executing continual quality improvement in an engineering undergraduate programme. Journal of Engineering Science & Technology (JESTEC), 4, 31-37.
- 9. Satesh, N., Al-Atabi, M., **Chong, C.H.**, Florence, C., Mohammad, H, Gamboa, R.A. (2013). A blueprint for measuring programme outcomes. Journal of Engineering Science & Technology (JESTEC), 4, 46-55.
- 10. **Chong, C.H.** & Law, C.L. (2013). Intermittent drying of chempedak with the application of varying temperature profiles, Drying Technology & Equipment, 1, 23-42.
- 11. **Chong, C.H.**, Figiel, A., Law, C.L., Wojdyło, A. (2013). Hybrid drying of apple cubes by using of heat pump, vacuum-microwave and intermittent techniques, Food and Bioprocess Technology: An International Journal, 1-15.
- 12. **Chong, C.H.**, Figiel, A., Law, C.L. Wojdyło, A., Oziembłowski, M. (2013). Colour, phenolic content and antioxidant capacity of some fruits dehydrated by a combination of different methods, Food Chemistry, 141, 3889-3896.

Conference Proceedings

- 1. **Chong, C.H.** & Law, C.L. (2007). Sun drying of ciku (*Manilkara zapota*). In Proceeding of the 14th Regional Symposium on Chemical Engineering (RSCE), Yogyakarta, Indonesia, Dec, 4-5.
- 2. **Chong, C.H.**, Law, C.L., Cloke, M., Asli. U.A & Yunus, R.M. (2007). Ultrasonic esterification of palm fatty acid distillate (PFAD). In Proceeding of the 21st Symposium of Malaysia Chemical Engineers (SOMChE), University Putra Malaysia, Selangor, Malaysia, Dec, 12 -14.
- 3. **Chong, C.H.**, Law, C.L., Cloke. M., Luqman Chuah, A. & Daud, W.R.W. (2008). Drying kineitcs, texture, total polyphenol, colour change during hot air drying of ciku. In Proceeding of the 16th International Drying Symposium (IDS), Volume C, Ramoji Film City, Hyderabad, India, Nov, 9- 12, 1403-1409.
- 4. **Chong, C.H.**, Law, C.L., Cloke. M., Luqman Chuah, A. & Daud, W.R.W. (2008). Intermittent turbulent hot air drying of ciku. In Proceeding of the 15th Regional Symposium on Chemical Engineering In Conjunction with 22nd Symposium of Malaysian Chemical Engineers, Kuala Lumpur, Malaysia, Dec, 2-3, 863-868.
- 5. **Chong, C.H.**, Law, C.L. & Daud, W.R.W. (2009). Effects of hybrid dehumidifier drying on hardness kinetics of *Manilkara zapota*. In Proceeding of 3rd International Conference on Chemical and Bioprocess Engineering (ICCBPE-2009), Sabah, Malaysia, Aug,12-14.
- 6. **Chong, C.H.** & Law, C.L. (2009). Product Quality of Intermittently Dried *Manilkara* zapota. In Proceedings of 12th Polish Drying Conference, Lodz, Poland, Sept, 12 14.
- 7. Urbanek, P., Płócienniczak, M., **Chong, C.H.** & Figiel A. (2009). Drying kinetics of apple cubes dehydrated by different methods. In Proceeding of 4th International Conference on Quality and Safety in Food Production Chain, Wroclaw, Poland, Sept, 24-25.
- 8. Płócienniczak, M., Urbanek, P., Janiak, M., Oziembłowski, M., **Chong, C.H.** & Figiel, A. (2009). Rheological and sensory properties of apple cubes dehydrated by different

- methods. In Proceeding of 4th International Conference on Quality and Safety in Food Production Chain, Wroclaw, Poland, Sept, 24-25.
- 9. **Chong, C.H.**, Law, C.L. & Daud, W.R.W. (2009). Drying kinetics and product quality of Artocarpus Integer in hybrid dehumidifier-dryer. In Proceeding of the 6th Asia-Pacific Drying Conferences, Bangkok, Thailand, Oct, 19-21.
- 10. **Chong, C.H.**, Figiel, A. & Law, C.L. (2009). Intermittent hot air dehumidified air, heat pump and convective cum vacuum microwave drying characteristics and models. In Proceeding of the 16th Regional Symposium on Chemical Engineering (RSCE), Manila, Philippine, Dec, 1-2.
- 11. **Chong, C. H.**, Figiel., A. & Law, C. L. (2010). Finish-product appearance and colour as well as sensory assessment on colour of dehydrated fruits. In Proceeding of 4th World Engineering Congress, Kuching, Malaysia, 2-5 Aug.
- 12. **Chong, C. H.**, Figiel, A., Wojdyło, A. & Law, C. L. (2010). Drying kinetics, biochemical, physical appearance and rheology properties of combined hybrid heat pump vacuum-microwave drying of ciku. In Proceeding of 4th World Engineering Congress, Kuching, Malaysia, 2-5 Aug.
- 13. **Chong, C. H.**, Figiel, A. & Law, C. L. (2010). Rheology and sensory properties of pear cubes dehydrated by different methods. In Proceeding of 17th International Drying Symposium, Magdeburg, Germany, 3-6 Oct.
- 14. **Chong, C. H.**, Figiel, A. & Law, C. L. (2010). Drying kinetics and drying models of fruit that underwent continuous heat pump drying and hybrid drying methods. In Proceeding of 17th International Drying Symposium, Magdeburg, Germany, 3-6 Oct.
- 15. **Chong, C.H.**, Ong, S.S., Low, L.K., Eugene, Y.T.U., Gogulanathan, Y.N. & Kenneth, H.Y.L. (2011). Convective air drying of papaya pre-treated with *Phyllanthus Niruri* Solutions, 7th Asia-Pacific Drying Conference (ADC 2011), Tianjin, China, 18-20 September.
- 16. **Chong, C. H.**, Figiel, A. & Law, C. L.(2012). Mechanical and rheology properties of dehydrated fruits, 18th International Drying Symposium (IDS), Xiamen City, China, 11-15 November.
- 17. Sim, Y.P., Sim, Y. W., Pang, Z.X., Jegachandra, S., Hosseini Fouladi, M., Shamel, M.M., **Chong C.H.** & Mohd Nor, M.J. (2012). Improvement of Fire Retardant Property of Natural Fiber. Proceedings of the 4th International Conference on Noise, Vibration and Comfort (NVC 2012), Kuala Lumpur, Malaysia, 26-28 November.
- 18. Naidu, C.S. & **Chong, C.H.** (2013). Engaging Learning through an idea journal and a story-based simulation activity, Proceedings of the International Conference on Learning and Teaching (ICLT), Selangor, Malaysia, 28-29 June.
- 19. Naik, H.G., Woo, M.W., Jerry Y. Y. Heng, Rashmi, W. & Chong, C.H. (2013). Drying kinetics of pesticide droplets, Proceeding of the 1st Conference on Engineering Undergraduate Research Catalyst (EURECA), Selangor, Malaysia, 1-2 July.
- 20. Lau, P.W., Wahida, P.F. & **Chong, C.H.** (2013). Solar drying of *Polygonum minus Huds*, Proceeding of the 1st Conference on Engineering Undergraduate Research Catalyst (EURECA), Selangor, Malaysia, 1-2 July.
- 21. Lim, X. K., Tee, L.H., Yusof, Y.A. & **Chong, C. H.** (2013) Effects of Xanthan Gum concentration on spray drying of *Piper betel* L. leaves extract, Proceeding of the 1st Conference on Engineering Undergraduate Research Catalyst (EURECA), Selangor, Malaysia, 1-2 July.
- 22. Ng, K.L., Wahida, P.F. & **Chong, C.H.** (2013). Optimisation on the concentration of Thymol from dried *Plectranthus amboinicus* leaves, Proceeding of the 1st Conference on Engineering Undergraduate Research Catalyst (EURECA), Selangor, Malaysia, 1-2

	 July. 23. See, W.L., Chong, C.H. & Law, C.L. (2013). Microwave assisted infrared drying of mango (Mangifera Indica L.), Proceeding of the 1st Conference on Engineering Undergraduate Research Catalyst (EURECA), Selangor, Malaysia, 1-2 July. 24. Wong, S.F., Wahida, P.F. & Chong, C.H. (2013). Drying kinetics and total phenolic content of dried Mentha arvensis Linn leaves, Proceeding of the 1st Conference on Engineering Undergraduate Research Catalyst (EURECA), Selangor, Malaysia, 1-2 July.
Chapter in	1. Chong, C.H. & Law, C.L. (2010). Drying of exotic fruits. In e-book of Jangam, S.V.,
book	Law.C.L & Mujumdar, A.S. Drying of foods, vegetables and fruits, Vol 2. New e-books project of Transport Processes Research Group (TPR)-Prof. Arun S. Mujumdar.
Bulletin/	1. Patil, A., Nair, C.S., Chong, C.H., Shaharuddin, Y.M.R.A.R. (2011). International
Proceedings	engineering and technology education conference (IETEC'11), 16-19 January. 2. Chong, C.H . (2012). A visit to Bio-Cosmetics Facility of SIRIM Berhad, Shah Alam. JURUTERA, The monthly bulletin of the institution of engineers, Malaysia: Vol. 2012 No.11 November.
	3. Chong, C.H. (2013). Half-day HAZOP Training for Team Members-A Practical
	Approach. JURUTERA, The monthly bulletin of the institution of engineers, Malaysia: Vol. 2013 No. 1 January.
	4. Chong, C.H. (2013). 8th Malaysian Chem-E-Car Competition 2013. JURUTERA, The monthly bulletin of the institution of engineers, Malaysia: Vol.2013 No. 9 September.

Trainings/ Key	notes				
Trainings/	1. Chong, C.H. (2013), Introduction to Engineering Programme Accreditation & Quality				
Workshops	Management, Taylor's University, Selangor, Malaysia, 4 March.				
·	2. Chong, C.H. (2013). Engineering Accreditation Manual 2012, Taylor's University,				
	Selangor, Malaysia, 15 March.				
	3. Chong, C.H. (2013). School of Engineering (SOE) Induction Training, Taylor's				
	University, Selangor, Malaysia, 14 Aug.				
	4. Chong, C.H. (2013). Outcome-Based Education, Continual Quality Improvement &				
	Assessment Rubric, Taylor's University, Selangor, Malaysia, 15 Aug.				
	5. Chong, C.H. (2013). Engineering Accreditation Council (EAC) manual, Quality				
	Management System, Project based learning incorporated CDIO initiative & Grand				
	challenges, Taylor's University, Selangor, Malaysia, 16 Aug				
Keynotes	1. Chong, C.H. (2013), Journey to Zero, CDIO Asian Regional Meeting, Singapore				
	Polytechnics, Singapore, 26-28 March.				

Professional Software					
Software	Good	Very good	Excellent		
HYSYS		•			
Design II for Windows		•			
UniSim		•			

Language Proficiency			
Language	Good	Very good	Excellent

English	•	
Malay	•	
Chinese (Mandarin and Cantonese)	•	

Referees				
Personal Details	University	Contacts		
Prof. Ir. Dr. Law Chung Lim	The University of Nottingham, Malaysia	Chung-Lim.Law@nottingham.edu.my		
Assoc. Prof. Dr. Adam Figiel	Wroclaw University of Environmental and Life Sciences, Poland	adam.figiel@up.wroc.pl		