

CURRICULUM VITAE



Prof. Dr. Robiah Yunus

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Faculty of Engineering,
Universiti Putra Malaysia,
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Education

- 1982– 1986 University of Alabama, USA
 - BSc in Chemical Engineering, 3.47/4.00
 - Top 5% of Class
- 1988 – 1989 University of Leeds, UK
 - MSc in Integrated Design of Chemical Plant
- 1999 – 2003 Universiti Putra Malaysia, Malaysia
 - PhD in Chemical Engineering

Professional Qualification/Membership/Affiliation

1. Chartered Engineer, UK Engineering Council, 2006, No 20047762
2. Fellow, Institution of Chemical Engineers UK, 2006
3. Certified Chemical Hazards and Risk Assessor (CHRA), 2009
4. Board Member for Institution of Chemical Engineers UK, Malaysia Branch
5. Corporate Member, Institution of Chemical Engineers Malaysia, 2004
6. Member, American Inst. of Chemical Engineers, 2002 (No. 90166079)
7. Member, Malaysian Society of Engineers and Technologist, 2009
8. Member of Malaysian Tribology Society, 2009
9. Member, Society of Tribologist and Lubrication Engineers, 2001 (44529 M)
10. Graduate Member, Institution of Engineers Malaysia, 2003 (G 24784)
11. Graduate Member, Board of Engineers, Malaysia, 1995 (232084).

Appointments

Position	Duration
1. Director, Institute for Advanced Technology (ITMA)	May 2012 to date
2. Deputy Director, Institute for Advanced Technology (ITMA)	May 2011 – April 2012
3. Deputy Dean (Research and Postgraduate Studies) Faculty of Engineering, UPM	May 2011-April 2012
4. Head of Department, Chemical and Environmental	January 2004 to December 2008

Engineering, UPM

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| 5. Head of Process Engineering Unit , FK UPM | 1997 – 2004 |
| 6. Senior Lecturer in Chemical Engineering
Member of Faculty's Board, UTM | 1995 – 1997 |
| 7. Lecturer in Chemical Engineering
Head of Process Simulation Lab, UTM | 1989 – 1995 |
| 8. Assistant Lecturer in Chemical Engineering, UTM | 1986 – 1988 |

Publications

- Rashid, U, Ahmad, J, Yunus, R, Ibrahim, M., Masood, H., Syam, A.M. Momordica Charantia seed oil methyl esters: A kinetic study and fuel properties, *International Journal of Green Energy*, Volume 11, Issue 7, 2014, Pages 727-740. (IF2.069)
- Kheradmand, B., Muniandy, R., Hua, L.T., Yunus, R.B., Solouki, A., An overview of the emerging warm mix asphalt technology (2014) *International Journal of Pavement Engineering*, 15 (1), pp. 79-94. (IF0.745)
- Azhari M Syam, Hamidah A Hamid, Robiah Yunus, Umer Rashid, Dynamic Modeling of Reversible Methanolysis of Jatropha curcas Oil to Biodiesel. *The Scientific World J.* (2013):268385. (IF 1.73)
- NWM Zulkifli, MA Kalam, HH Masjuki, KAH Al Mahmud, R Yunus The effect of palm oil trimethylolpropane ester on extreme pressure lubrication, *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology* 01/2013; DOI:10.1177/1350650113500945 (IF1.73)
- Mahdi, L.M.J., Muniandy, R., Yunus, R.B., Hasham, S., Aburkaba, E., Effect of short term aging on organic montmorillonite nanoclay modified asphalt (2013) *Indian Journal of Science and Technology*, 6 (11), pp. 5434-5442. (IF1.73)
- Jusoh, E.R., Ismail, M.H.S., Abdullah, L.C., Yunus, R., Abdul Rahman, W.A.W., Effect of crude palm oil as plasticiser on the mechanical and morphology properties of low density polyethylene blown film (2013) *International Journal of Materials Engineering Innovation*, 4 (3-4), pp. 302-313. (IF1.73)
- Ghaemi, F., Yunus, R., Ahmadian, A., Salahshour, S., Suleiman, M., Saleh, S.F., Application of fuzzy fractional kinetic equations to modelling of the acid hydrolysis reaction (2013) *Abstract and Applied Analysis*, 2013, art. no. 610314. (IF1.102)
- Zulkifli, N.W.M., Kalam, M.A., Masjuki, H.H., Shahabuddin, M., Yunus, R., Wear prevention characteristics of a palm oil-based TMP (trimethylolpropane) ester as an engine lubricant (2013) *Energy*, 54, pp. 167-173. (IF3.487)
- Sayyar, S., Abidin, Z.Z., Yunus, R., Optimisation of solid liquid extraction of jatropha oil using petroleum ether (2013) *Asia-Pacific Journal of Chemical Engineering*, 8 (3), pp. 331-338.
- Alhassan, F.H., Yunus, R., Rashid, U., Sirat, K., Islam, A., Lee, H.V., Taufiq-Yap, Y.H., Production of biodiesel from mixed waste vegetable oils using Ferric hydrogen sulphate as an effective reusable heterogeneous solid acid catalyst (2013) *Applied Catalysis A: General*, 456, pp. 182-187.
- Soltani, N., Saion, E., Hussein, M.Z., Yunus, R.B., Navaseri, M., Characterization of CdS Nanoparticles Synthesized using Microwave assisted Polyol Method (2013) *Advanced Materials Research*, 667, pp. 122-127.
- Umer Rashid, Farooq Anwar, Robiah Yunus, Alaa H. Al-Muhtaseb, Transesterification for Biodiesel Production using Thespesia populnea Seed Oil: An Optimization Study, *International Journal of Green Energy*, , DOI: 10.1080/15435075.2013.853177

13. H.V. Lee, Y.H. Taufiq-Yap, M.Z. Hussein, **R. Yunus**, Transesterification of jatropha oil with methanol over MgZn mixed metal oxide catalysts, *Energy*: 49, 12-18, 2013.
14. Umer Rashid, Muhammad Ibrahim, Shahid Yasin, **Robiah Yunus**, Y.H. Taufiq-Yap, Gerhard Knothe, Biodiesel from Citrus reticulata (mandarin orange) seed oil, a potential non-food Feedstock, *Industrial Crops and Products* 45 (2013) 355– 359
15. Umer Rashid, Junaid Ahmad, **Robiah Yunus**, Hassan Masood, Azhari Muhammad Syam, Momordica charantia Seed Oil Methyl Esters: Kinetic Study and Fuel Properties, *Energies*, 6, 1-x manuscripts; doi:10.3390/en60x000x, 2013. (IF3.487)
16. Kalani, M., and **Yunus R.**, Effect of supercritical fluid density on nanoencapsulated drug particle size using the supercritical antisolvent method, *International Journal of Nanomedicine*, 7: 2165–2172, 2012. (IF2.469)
17. Naidir, F., **Yunus, R.** , Rashid, U., Masood, H., Ghazi, T.I.M., Ramli, I., The kinetics of epoxidation of trimethylolpropane ester, *European Journal of Lipid Science and Technology*, Volume 114, Issue 7, Pages 816-822., 2012. (IF1.865)
18. Muhammad, Khan, M.A. , Choong, T.S.Y. , Chuah, L.T.G., **Yunus, R.**, Yap, T.Y.H., Kinetics studies for the adsorption of β -carotene on mesoporous carbon coated monolith: Effect of concentration and temperature, *Asian Journal of Chemistry*, 24 (7), pp. 3155-3161. 2012. (IF4.976)
19. Nayereh Soltani, Elias Saion, Mohd Zobir Husseina, Afarin Bahrami, Kazem Naghavib, **Robiah Yunus**, Microwave irradiation effects on hydrothermal and Polyol synthesis of ZNS nanoparticles, *Chalcogenide Letters*, Vol. 9, No. 6, p. 265 – 274, 2012. (IF1.733)
20. Sham, A.M., **Yunus, R.** Ghazi, T.I.M, Choong, T.S.Y, Synthesis of Jatropha Curcas Oil-based biodiesel in a pulsed loop reactor, *Industrial Crops and Products*, Volume 37(1), pp 514-519, 2012. (Scopus).
21. Chang, T.-S, Masood, H., **Yunus, R.**, Rashid, U., Choong, T.S.Y., Biak, D.R.A, Activity of calcium methoxide catalyst for synthesis of high oleic palm oil based trimethylolpropane triesters as lubricant base stock, [Industrial and Engineering Chemistry Research](#) 51 (15) , pp. 5438-5442, 2012 (0.835)
22. Masood, H., **Yunus, R.**, Rashid, U., Choong, T.S.Y., Taufiq-Yap, A, Synthesis and characterization of calcium methoxide as heterogeneous catalyst for trimethylolpropane esters conversion reaction, *Applied Catalysis A, General* 425-426, pp. 184-190, 2012 (IF2.507)
23. Rashid, U., Ibrahim, M., Ali, S., Adil, M., Hina, S., Bukhari, I.H., Yunus, R., Comparative study of the methanolysis and ethanolysis of maize oils using alkaline catalysts, *Grasas y Aceites*, 63 (1), pp 35-43, 2012 (IF2.072)
24. Syam, A.M., Yunus, R. , Ghazi, T.I.M., Yaw, T.C.S., Synthesis of Jatropha curcas-based methyl ester and ethyl ester as biodiesel feedstocks, *Pertanika Journal of Science and Technology*, 20 (1), pp 165-173, 2012 (IF3.384)
25. Ferra Naidir, Robiah Yunus, Irmawati Ramli, Tinia I Mohd Ghazi, synthesis of jatropha curcas based methyl ester and ethyl ester as biodiesel feedstocks, *Pertanika J. Sci & Tech*, 20(1), 177-185, 2012 (IF0.748)
26. Mahta Sadegh Vishkaei, **Robiah Yunus**, Mohamad Amran Mohd Salleh, Afshin Ahmady, Dayang Radiah Awang Biak, Mass Production of High-Purity Graphitic Carbon Nanospheres by Chemical Vapour Deposition Method, *Fullerenes, Nanotubes and Carbon Nanostructures*, 20 (2), pp 109-118, 2012. (Scopus)
27. Kalani, M., **Yunus R.**, Abdulah, N., Optimizing the super critical antisolvent process parameters to minimize the particles sizes of nano encapsulated paracetamol inside LPLA, *Journal of Nanomedicine* , 6:1101-1105, 2011. (Scopus)
28. Kalani, M., and **Yunus R.**, Application of supercritical antisolvent method in drug encapsulation:a review, *Journal of Nanomedicine*, 6:1429-1442, 2011 (IF0.631)

29. Muhammad, Moonis Ali Khan, Thomas S.Y. Choong, T.G. Chuah, **Robiah Yunus**, Y.H. Taufiq Yap, Desorption of β -carotene from mesoporous carbon coated monolith: Isotherm, kinetics and regeneration studies, *Chemical Engineering Journal* 173 (2011) 474– 479. (IF4.976)
30. M.Y. Harun, A.B. Dayang Radhiah, Z. Zainal Abidin, **R. Yunus**, Effect of physical pretreatment on dilute acid hydrolysis of water hyacinth (*Eichornia crassipes*), *Bioresource Technology*, 102(8):5193-9, 2011. (IF4.976)

Conference Proceedings (30 recent Conference Proceedings)

1. Herliati, Robiah Yunus, A.S. Intan, Z.Z. Abidin Dzulkefly, Kuang, Simulation of Epichlorohydrin Synthesis from Dichloropropanols In Reactive Distillation Column Using Aspen Plus, 12th International Conference on QiR, Bali 4-7 July 2011.
2. Chiou Moi, Yeoh, Thomas Shean Yew, Choong, **Robiah Yunus**, Luqman Chuah Abdullah, Wai Lin, Siew(2008). The Effect of Glycerol to Enzyme Ratio in Enzymatic Glycerolysis. 14th World Congress of Food Science & Technology, Shanghai, China, 19-23 October, 2008, P.211
3. Azhari Muhammad Syam, **Robiah Yunus**, Tinia Idaty Mohd. Ghazi, Thomas Choong Shean Yaw, Alcoholysis of *Jatropha Curcas* Triglycerides using Sodium Methoxide as Catalyst, World Engineering Congress, Sarawak, 2010.
4. Ferra Naidir, **Robiah Yunus**., Tinia Idaty Mohd. Ghazi, Irmawati Ramli, World Engineering Congress, Sarawak, 2010.
5. Iza Wirawan, S.M. Sapuan, **Robiah Yunus**, Khalina Abdan, Physical Properties of Sugarcane Bagasse Filled Poly(Vinyl Chloride) Composites, World Engineering Congress, Sarawak, 2010.
6. Zurina Z. Abidin, Fadhila Nadzri, Thomas Choong S.Y, **Robiah Yunus**, Jamil Salleh, Comparison of Electrode Configuration of a Wire Cloth for Dielectrophoresis Application, World Engineering Congress, Sarawak, 2010.
7. Darmadi, Thomas S.Y. Choong, Chuah, T.G., **Robiah Yunus**, Y.H. Taufiq Yap, Adsorptive removal of cationic and anionic dyes from aqueous solution onto carbon-coated monolith, Pacific Basin Conference on Adsorption Science and Technology, Singapore, 2009.
8. E. Rose Jusoh, M.H. Syah Ismail, L. Chuah Abdullah, **R. Yunus** and W. A. R. Wan Azian. (2009). Effect of CPO as Filler in LDPE. 3rd International Conference on Chemical and Bioprocess Engineering (ICCBPE 2009), 12-14 August, 2009, Kota Kinabalu, Sabah, CPE-81.
9. Rozita Omar, Razif M Harun, Azni Idris, **Robiah Yunus**, Tinia Idaty Mohd Ghazi, and Wan Azlina Wan Abdul Karim Ghani, Anaerobic Treatment of Cattle Manure for Biogas Production, AICHE 2008 Annual Meeting, Philadelphia, PA, 2008.
10. Riza Wirawan, S.M. Sapuan, **Robiah Yunus**, Khalina Abdan, Physical Properties of Sugarcane Bagasse Filled Poly(Vinyl Chloride) Composites, WEC 2010, Kuching, Sarawak., August 2010.
11. **Robiah Yunus** and Fateme Rezaei, Synthesis of Carbon Nanotubes on Short Carbon Fiber by Fluidized Bed CVD, World Congress of Chemical Engineering (WCCE8), 23-27 August 2009, Canada.
12. S.M. Sapuan, Riza Wirawan, **Robiah Yunus**, Khalina Abdan. Heat Treatment and Recyclability of Sugarcane Bagasse Reinforced PVC Composites. Asian Workshop on Polymer Processing (AWPP2009). 1 – 4 December 2009.
13. **Robiah Yunus**, Alternative Diesel Fuel and Synthetic Lubricant from Palm Oil. International Seminar on Green Technology and Engineering (ISGTE), 25-26 July 2007, Universitas Malahayati Bandar Lampung, Indonesia
14. Ferra Naidir, **Robiah Yunus**, Tinia Idaty Mohd. Ghazi, Irmawati Ramli. Response Surface Methodology for Optimization of Epoxidation of Palm Oil-based Trimethylolpropane Ester with Peracetic Acid. 3rd International Conference on Chemical & Bioprocess Engineering 2009. 12th – 14th August 2009.
15. Sepidar Sayyar, Zurina Zainal Abidin, **Robiah Yunus**, Azhari Muhammad. Solid Liquid Extraction of *Jatropha* Seeds by Microwave Pretreatment and Ultrasound Assisted Methods. 3rd International Conference on Chemical & Bioprocess Engineering 2009. 12th – 14th August 2009.

16. Darmadi, Thomas S.Y. Choong, Chuah, T.G., **Robiah Yunus**, Taufiq-Yap, Y.H.(2009), Adsorption of Methyl Orange Onto Polymer-Based Carbon Coated Monolith. The Second International Conference on Green Technology and Engineering (ICGTE) 2009, Malahayati University, Bandar Lampung, Indonesia, pp.161-171.
17. A.M. Syam, **R. Yunus**, T.I.M. Ghazi and T.C.S. Yaw. Methanolysis of Jatropha Oil In the Presence of Potassium Hydroxide Catalyst. 23rd Symposium of Malaysian Chemical Engineers (SOMChE) 2009 in conjunction with the 3rd International Conference on Chemical and Bioprocess Engineering (ICCBPE). 12 -14 August 2009.
18. Sepidar Sayyar, Zurina Zainal Abidin, Azahari, **Robiah Yunus**. Optimization of Solid Liquid Extraction of Jatropha Seeds. FEIIC Symposium on Engineering and Technology, 15-16 December 2008.
19. R. Omar, R. M. Harun, T.I. Mohd. Ghazi, W.A.K.G. Wan Azlina, A. Idris and **R. Yunus**. Anaerobic Treatment of Cattle Manure for Biogas Production. 2008 American Institute of Chemical Engineers (AIChE) Annual Meeting, Philadelphia, USA. 16- 21 November 2008.
20. Sumaiya Z. A. , Abdullah L. C., **Robiah Y.**, Salmiah A.. Seeded Crystallization of Dihydroxystearic Acid (DSHA) – Effect on Yield, Purity and Crystal Size Distribution, 14th Regional Symposium on Chemical Engineering 2007.
21. A.R. Suraya, C. Vargis, **R. Yunus**, S. Shamsudin. Effect of Carbon Fiber Whizkerization on the Flexural Stregth of Carbon Fiber -Epoxy Composite. International Engineering Convention. Jeddah, Saudi-Arabia. 10 - 14 M arch 2007.
22. Darmadi, Thomas S.Y. Choong, Chuah, T.G., **Robiah Yunus**, Y.H. Taufiq Yap (2007). Development of furfuryl alcohol derived mesoporous carbon coated monolith for liquid adsorption by using response surface methodology. 14th Regional Symposium on Chemical Engineering 2007, Yogyakarta-Indonesia, 4-5th December 2007.
23. **Robiah Yunus**, Chang P.Y., Lee L.H., and Azhari. Preliminary Study on Extraction and Synthesis of Biodiesel. from Jatropha Curcas Seeds and Soybean, 1st International Conference on Natural Resources Engineering & Technology 2006, 24-25th July 2006.
24. G. F. L. Koay, S. Zainal Abidin, T. G. Chuah, P. Siwayanan, **R. Yunus**, S. Ahmad and T. S. Y. Choong (2005). Solvent Crystallization of Palm Oil Based Dihydroxystearic Acid Using Isopropyl Alcohol with Natural Cooling Policy. International Science Congress (ISC 2005), Kuala Lumpur, 3-6th August 2005.
25. Mahdi E., M.S. Alkoles, M.S. Hamouda, B.B. Sahari, **R. Yunus** and G. Goudah, Light Composite Elliptic Springs for Vehicle Suspension, 13th International Conference on Composite Structure, New Zealand, 14-16 Nov. 2005.
26. **Robiah Yunus**, Kimberly Wain, Kraipat Cheenkachorn and Joseph Perez, Friction, Wear And Oxidation Stability of Some Palm Oils, Paper presented at the AOCS meeting, Houston, Texas, May, 2002.
27. **Robiah Yunus et al.**, Aspen Plus Simulation and Process Integration of an Oleochemicals Plant, ASPEN WORLD '94, Boston, MA, USA, November 1994.
28. Riza Wirawan, S.M. Sapuan, **Robiah Yunus**, Khalina Abdan. Sugarcane Bagasse Reinforced PVC: From Waste to Green Composites. The 9th National Symposium on Polymeric Materials 2009 (NSPM 2009). 14 -16 December 2009.
29. Muhammad, Chuah T.G, Taufiq Yap Y. H., Robiah Yunus and T.S.Y. Choong, The Effect of Polyethylene Glycol Composition on Mesoporous Carbon Coated Monolith Derived from Furfuryl Alcohol, SOMCHE 2010, June 2010.
30. Riza Wirawan, S.M. Sapuan, **Robiah Yunus**, Khalina Abdan. Flexural Properties of Sugarcane Bagasse Pith and Rind Reinforced Poly(vinylchloride). The 9th National Symposium on Polymeric Materials 2009 (NSPM 2009). 14 -16 December 2009.

Books (if any)

Chapter in Books (If any)

1. M.Y. Liew, A. Salmiaton, W.A.K.G. Wan Azlina and **R. Yunus**. (2013) Catalytic Pyrolysis of Waste Chicken fat Using Zeolite Catalysts. In *Developments in Sustainable Chemical and Bioprocess Technology*, R. Pogaku *et al.* (eds), Springer Science and Business Media, New York
2. **Robiah Yunus**, Rozita Omar, Zurina Zainal Abidin and Dayang Radhiah Awang Biak, Oil Palm as Bioenergy Feedstock, in *Palm Oil: Production, Processing, Characterization and Uses*, AOCS Press. 2012
3. Azhari Muhammad Syam, **Robiah Yunus**, Suraya Abd. Rashid (2012), *Synthesis of Biodiesel from Refined Bleached Deodorized Palm Oil: Study on the effect of alkali as the catalyst*, Saarbrucken: Lambert Academic Publishing.
4. Gun Hean Chong and **Robiah Yunus** (2011) *Particle Formation and Encapsulation Using Supercritical Solvent*, Saarbrucken: Lambert Academic Publishing,
5. *Proceedings of World Engineering Congress 1999*, Eds: **Robiah Yunus**, Fakhru;-Razi Ahmadun and Zarina Zainal Abidin, ISBN 967-960-087-04. Serdang, Malaysia.

Research Grants

No	Project Title	Amount (RM)	Year	Source of fund
1	Enhancing Productivity and Sustainability of Palm Oil Milling Industry	5,855,000	2012-2017	LRGS
2	Investigation Of Rheological Behaviour of Nanographene-Modified Drilling Fluid From Bio-Based Synthetic Esters	137,000	2013-2015	FRGS
3	Development of Advanced Coating Technology for Controlled Release Fertilizer	695,520	2011-2013	PETRONAS
4	Development of continuous pulsed loop reactor for Synthesis of ester-based biodegradable fluid	145,000	2011-2013	ERGS
5	Optimization of Particle Size of nano-encapsulated drug by controlling process parameters using SAS parameters	151,000	2011-2013	RUGS
6	Study on mechanism of two-stage acid hydrolysis of oil palm empty fruit bunch (OPEFB) fiber	49,540	2010-2012	FRGS
7	Integrated Production of Environmental Friendly Biodegradable Lubricants from Vegetable Oils, Technofund	4,555,000	2007-2010	Technofund,
8	Synthesis of Biodegradable Epichlorohydrin from Glycerol (Biodiesel Byproduct).	235,000	2007-2009	E-Scienfund

9	Mass Transfer Modeling of Nano Encapsulation of Linamarin Using Supercritical Carbon Dioxide (SCCO ₂)	57,000	2007-2009	RUGS
10	Kinetics Study on Transesterification of Jatropha Triglycerides for Biodiesel Production	100,000	2007-2009	FRGS
11	Formulation of Carbon-carbon Fibre Composite and Fibre Reinforced Plastics for Engineering Application	2,755,600	2004 -2008	IRPA,
12	Formulation of Natural Synthetic Lubricant for Hydraulic Fluids,	112,000	2003 -2004	IRPA
13	Synthesis of High Performance Environmental Friendly Biodegradable Lubricants from Vegetable Oils,	249,000	2002 - 2004	IRPA
14	Modelling and Simulation of Chemical Process Plant for Optimum Productivity	6,738	1987	UPM Short Term Project,
15	Production of methyl ester from palm oil using immobilized lipase,	50,000	1988	IRPA
	Process Integration for Maximum Energy recovery in a Gas Processing Plant,	200,000	1988	IRPA,
	Research on Computer Aided Process Engineering (CAPE) under project Development of Physical Properties Data Bank.	195,000	1989	IRPA
TOTAL GRANT				RM15,548,398

Awards/Recognition (Current)

Num	Name of Award Year	Title	Award Authority	Award Type
1.	Silver Medal	Innovative Technology Environment in Biodiesel Production Category from Jatropha Oil	International	2010
2.	Bronze Medal	Innovative Technology in Biodiesel Production	Alternative Energy Category	International 2010



3.	Bronze Medal	from Jatropha Oil Innovative Technology in Biodiesel Production	Science Category	International	2010
4.	Special Medal	from Jatropha Oil Formulation of Carbon Fiber Reinforced Polypropylene composite for Car Bonnet Application	EUREKA	International	2007
5.	Gold Medal	Formulation of Carbon Fiber Reinforced Polypropylene composite for Car Bonnet Application	EUREKA	International	2007
6.	Gold Medal	Isolation and Encapsulation of Cassava Linamarin in Biodegradable Nanoparticles for Cancer Cells Targeting	INPEX	International	2006
7.	Gold Medal	International Product Exhibition, High Performance SLubricant from Palm Oil 2004	IENA British Invention	International	2004
8.	Gold Medal	High Performance Synthetic Lubricant from Palm Oil,	Show		
9.	Silver Medal 2004	High Performance Synthetic Lubricant from Palm Oil	British Invention	International	
10.	Silver Medal	Environmentally Friendly Synthetic Lubricant from Palm Oil,	Show International Product Exhibition	International	2004
11.	Silver Medal	Environmentally Friendly Synthetic Lubricant from Palm Oil	International Product Exhibition	International	2004
12.	Gold Medal	Low-Cost Technology for Acid Hydrolysis of Oil Palm Empty Fruit Bunch For Bioethanol Production	Pameran Rekacipta Penyelidikan	National	2011
13.	Gold Medal	Technology for Production of Encapsulated Nanoparticles for Controlled Drug Delivery	Pameran Rekacipta Penyelidikan	National	2011
14.	Bronze Medal,	Jatropha Curcas L. Fruit Shelling Machine,	MTE	National	2010
15.	Silver Medal	Ultrasonic Assisted Solvent Extraction of Jatropha Oil	MTE	National	2010
16.	Gold Medal	Locally Fabricated Supercritical Particle Formation Unit	Pameran Rekacipta Penyelidikan	National	2008
17.	Gold Medal	Jatropha Curcas L. Fruit Shelling	Pameran Rekacipta Penyelidikan	National	2009

	Machine			
18. Service Award	Faculty of Engineering	Excellence in Service	National	2008
19. Bronze Medal	Formulation of Carbon Fiber Reinforced Polypropylene composite for Car Bonnet Application	ITEX	National	2007
20. Bronze Medal	Innovative Technology in Biodiesel Production from Jatropha	MTE	National	2007
21. <i>Silver Medal</i>	Production of Nano-composite Particles using Supercritical Antisolvent (SAS) Technique.	PRPI	National	2007
22. The Best Presentation Award	NioManufacturing Conference	The Presentation	National	2007
23. Anugerah	Anugerah Saintis Cemerlang	KPT	National	2004
24. Service	Excellence in Service Award	Faculty of Engineering	National	2003
25. Gold Medal	Expo Science and Techno;ogy	MOSTI	National	2003
26. Gold Medal	Invention & Research Exhibition	UPM	National	2003
27. Award	Excellence in Service Award	Faculty of Engineering	National	2000

Profesional Services/Consultation

No.	Year	Title	Authority	Amount
1.	2008-2010	Consulting Engineer for Biotech Corporation on SFE project	Biotech Corporation Malaysia, Malaysia Biotechnology Corporation Sdn. Bhd. Level 23, Menara Atlan 161, Jalan Ampang 50450 Kuala Lumpur	
2.	2008-todate	Consulting Engineer for Solution Biogen Sdn Bhd	Solution Biogen Sdn. Berhad No. 3, Jalan TPK 2/4 Taman Perindustrian Kinrara 47100 Puchong, Selangor	
3.	2011-2014	Contract Research with Petronas	ABF and Kulim Fertilizer	
4.	2008-2010	Contract Research with Puncak Niaga to develop Alternative coagulant From biobased products	Puncak Niaga	
5.	1 st April-30 Nov. 2008	Consulting Engineer for Oleon Sdn. Bhd. On the Synthesis of Jatropha oil Based TMP Ester	Oleon Sdn. Bhd	

6. 1st Jan- 1st Jan 1995 Consultancy Project with Terengganu, UPEN
Terengganu UPEN on Manpower Requirement for The Industry in Terengganu
7. 1st Jan- 1st Jan 1995 Consultancy Project with Frank Small & Associates
Frank Small & Associate on Sectoral Study of the Chemical Industry in Malaysia

Student Supervision

Ph.D (Main Supervisor)

No.	Name	Title	Status
1.	Chong Gun Hean	Nano- Encapsulation of Linamarin in Supercritical CO ₂ condition	Graduated
2.	Azhari	Design of Novel Reactor for Transesterification of Jatropha Biodiesel	Graduated
3.	Ferra Naidir	Synthesis of Oxidatively Stable Biolubricant from Palm Oil	Graduated
4.	Shanti Faridah Salleh	Hydrolysis of Biomass for Bioethanol Production	Graduated
5.	Herliati	Synthesis of Biodegradable Dichlorohydrin from Glycerol (Biodisel byproducts)	Graduated
6.	Nasrin Khodapaniah	Identification of Effective natural coagulant for Water Treatment Plant	Viva
7.	Saad Abbas	Effect of Thermal Softening on the Textural Properties of Palm Oil Fruitlets	Graduated
8.	Darmadi	Preparation of Furfuryl Alcohol Derived Activated Carbon Monolith For Liquid Adsorption	Graduated
9.	Rozita Omar	Pyrolysis of EFB Using Microwave Technology	Graduated
10.	Yeoh Chiou Moi	Production and Purification of Concentrated Diacylglycerol Oil	Graduated
11.	Riza Wirawan	Thermo-Mechanical properties of sugarcane bagasse-filled polyvinyl chloride (PVC) composites	Graduated
12.	Muhamad	Adsorption of 3-Carotene onto Carbon Coated Monolith	Graduated
13.	Lim Voon Lei	Synthesis of Biodiesel using Heterogeneous Catalyst	Graduated
14.	Sara Yasina Yusof	Monitoring and Modeling Of Air Particulate Matter In Ambient Air Of Malaysia	Graduated

15. Eltahir Elzarroug Aburkaba	Initial Investigation of the Use of Local Industrial wastes and Byproducts as Mineral Fillers in Stone mastic Asphalt Pavements, 2008.	Graduated
16. Chang Teck Sin	Development of Soap-free Synthesis of Biolubricant	Ongoing
17. Farahnaz Eghbali Babadi	Design of Coating Technology for Slow Release Fertilizer	Ongoing
18. Seyed Ali Zamani		Ongoing
19. Hamidah Abd Hamid		Ongoing
20. Zaini Yaacob		Ongoing
21. May Thang Yin Mee		Ongoing
22. Lina Ismail Jassim		Ongoing
23. Ferial Ghaemi		Ongoing
24. Shiva Geshnizjani		Ongoing
25. Umni Kalsom Hasanah		Ongoing
26. Nor Dalila AbdulRahman		Ongoing

MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Hadi Amirkhani	Hydrolysis of lignocelluloses materials from Oil Palm Fronds for Biodiesel Production	<i>Graduated</i>
2.	Nor Saiful Hafiz Bin Abdul Habib	Production of ester based drilling fluid	<i>Graduated</i>
3.	Hassan Masood	Development of Heterogeneous Catalyst for biolubricant production	<i>Graduated</i>
4.	Hamidah Abd Hamid	Dynamic Modeling and Simulation of Transesterification of Palm Methyl Ester and Trimethylolpropane	Graduated
5.	Mahshid Kalani	Nano-Encapsulation of Drug Using Supercritical Carbon Dioxide In Supercritical Anti Solvent Method, SAS	<i>Graduated</i>
6.	Anita Abu Bakar	Effect of Hydroxyl group on Oxidative Stability of Palm-based Lubricant	Graduated
7.	Siti Zubaidah Sulaiman	Design of scale up production unit farm oil-based biodegradable lubricant	Graduated
8.	Azhari	Synthesis of Low Pour Point Palm -based Biodiesel	Ongoing
9.	Fateme	Formulation of Carbon Fibre Reinforced Polyethylene for Automotive Parts	Ongoing
10.	Norhalaliza Alias	Formulation of Hydraulic Fluid Using	Ongoing



11. Sarina Sulaiman	Palm Oil-based Kubricant Carbon Fiber Reinforced Carbon for Brake Pad Application	Ongoing
12. Nor Hasni	Formulation of Carbon Fibre Reinforced Polyurethane for Automotive Parts	Ongoing
13. Khairul Ridhwan	Development of Coating Technology for Slow Release Fertilizer	Ongoing
14. Ummi Nor Husna	Two Stage Hydrolysis of Biomass for Bioethanol Production	Ongoing
15. Nurshamimi A. Rahman		Ongoing
16. Yayat Noerhidayat		Ongoing
17. Sohei; Nekoui		Ongoing
18. Nuratiqah Mohamad Aziz		Ongoing
19. Nurliyana Abdul Raof		Ongoing

