

CURRICULUM VITAE



Dr. Dayang Radiah Awang Biak
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Education

1. B.Sc.Chemical Engineering, 1996, Case Western Reserve University, Cleveland, Ohio. USA
2. PhD. Chemical Engineering, 2001. University of Birmingham, United Kingdom.

Areas of Interest

1. Chemical Engineering
2. Process Engineering
3. Product Development
4. Nanotechnology & Nanomaterials/Biomaterial

Professional Qualification/ Membership/ Affiliation

1. American Institute of Chemical Engineers (AIChE)
2. MySET, Malaysia
3. Graduate Member, Board of Engineers Malaysia (BEM)

Appointments

Position	Duration
1. Approved Signatory (Technical Officer), Material Characterization Laboratory, UPM	2013 – Present
2. Academic Coordinator, Department of Chemical & Environmental Engineering, Faculty of Engineering, UPM	2000-2003
3. Committee Members for Master of Process Safety & Loss Prevention Programme	2009-2012
4. Committee, Nanotechnology Standard for environment, Malaysia	2009-present
5. Head of Academic & Laboratory for Biochemical Engineering Unit, Department of Chemical & Environmental Engineering	2009-present
6. Teaching Assistant, Chemical Engineering Department, University of Canterbury, New Zealand	2007 -2008
7. Head of Biochemical Engineering Unit, Department of Chemical & Environmental Engineering	2004-2006
8. Member, Academic Student Advisory Board, Faculty of Engineering	2000 – 2002
9. Coordinator, Hazardous Material Laboratory, UPMKB	2000 – 2003

Publications

Journals (30 recent journals)

1. Fui Chin Chong, Beng Ti Tey, Zanariah Mohd Dom, Kok Hing Cheong, Budiartman Satiawihardja, Mohd Nordin Ibrahim, Russly Abdul Rahman, **Dayang Radiah Awang Biak** and Tau Chuan Ling (2007). Rice Bran Lipase Catalysed Esterification of Palm Oil Fatty Acid Distillate and Glycerol in Organic Solvent. *Biotechnology and Bioprocess Engineering* 12: 250 - 256
2. Ahmadun Fakhru'l-Razi, Alireza Pendashteh, Luqman Chuah Abdullah, **Dayang Radiah Awang Biak**, Sayed Siavash Madaeni, Zurina Zainal Abidin (2009). Review of technologies for oil and gas produced water treatment *Journal of Hazardous Materials*, Vol 170, pp 530 -531

3. Firoozeh Danafar, A. Fakhru'l-Razi, Mohd Amran Mohd Salleh and **Dayang Radiah Awang Biak (2009)** Fluidized Bed Catalytic Chemical Vapor Deposition Synthesis of Carbon Nanotubes - A Review. *Chemical Engineering Journal*, Vol 115, n pp 37 – 48.
4. Chong F.C., Tan W.S., **Awang Biak D.R.**, Ling T.C., Tey B.T. (2009) Purification of histidine-tagged nucleocapsid protein of Nipah virus using immobilised metal affinity chromatography *Journal of Chromatography B* 877: 1561-1567.
5. A. Fakhru'l-Razi, Firoozeh Danafar, Dayang Radiah Awang Biak, Mohd Amran Mohd Salleh, (2009) An innovative procedure for large scale synthesis of carbon nanotubes by fluidized bed catalytic vapor deposition”, *Fullerenes, Nanotubes, and Carbon Nanostructures*.
6. F.M Mirjalili, L. Chuah, A.B. Dayang, M. Hasmaliza, R. Aghabazaden & F. Ahmadun (2009). Mechanical Properties of α -Al₂O₃/PP Nano composite. *Journal of Applied Sciences*, Vol 9(17), pp 3199 – 3201.
7. Chong F.C., Tan W.S. Awang Biak, D.R., Ling T.C. & Tey B.T. (2009). A simplified process for purification of recombinant nucleocapsid protein of Nipah virus. *Journal of Bioscience and Bioengineering*. (supplement 1), Vol. 108, pp S770 – S771.
8. Fakhru'l-Razi, A., Pendashteh, Alireza Abidin, Zurina Zainal Abdullah, Luqman Chuah | Biak, Dayang Radiah Awang, Madaeni, Sayed Siavash (2010). Application of membrane-coupled sequencing batch reactor for oilfield produced water recycle and beneficial re-use. *Bioresource Technology*, Vol: 101, Issue: 18, pp. 6942
9. Chong, Fui Chin, Tan, Wen Siang, Biak, Dayang Radiah Awang, Ling, Tau Chuan, Tey, Beng Ti. (2010). Direct recovery of recombinant nucleocapsid protein of Nipah virus from unclarified *Escherichia coli* homogenate using hydrophobic interaction expanded bed adsorption chromatography. *Journal of chromatography. A*, Vol: 1217, Issue: 8, pp. 1293.
10. Firoozeh Danafar, A. Fakhru'l-Razi, Mohd Amran Mohd Salleh, Dayang Radiah Awang Biak, (2010). Influence of catalytic particle size on the performance of fluidized-bed chemical vapor deposition synthesis of carbon nanotubes. *Chemical Engineering Research and Design*. doi:10.1016/j.cherd.2010.05.004
11. R. Yunus, S.F. Salleh, N. Abdullah, A.B. Dayang Radiah (2010). Effect of ultrasonication on pre-treatment on low temperature acid hydrolysis of oil palm fruit bunch. *Bioresource Technology*.
12. M., Atiyah, A.B. Dayang Radiah, A. Zurina Zain., A. Fakhru'l-Razi. (2011). Low Temperature Synthesis of Carbon Nanotubes Via Floating Chemical Vapor Deposition Method. *Fullerenes, Nanotubes, and Carbon Nanostructures*.
13. Mahmood Rashid. A, Dayang Radiah A.B, Zurina Z.A, Fakhru'l-Razi.A, Intan S.A, Faizah M.Y, Hamdan Mohamed.Y (2011). Low Temperature Growth of Vertically Aligned Carbon Nanotubes via Floating Catalyst Chemical Vapor Deposition Method. *Journal of Material Science and Technology*.
14. S. Adnan, a.B. Dayang Radiah (2011). The effect of acetylation onto the crystallinity of BC/CNT acetate. *Journal of Chemical Technology & Biotechnology*.
15. M.Y. Harun, A.B. Dayang Radiah, R. Yunus, Z.Z. Abidin (2011) Effect of physical treatment on dilute acid hydrolysis of water hyacinth (*Eichhornia crassipes*). *Bioresource Technology*.
16. Fatemeh Mirjalili, Luqman Chuah Abdullah, Hasmaliza Mohamad, A. Fakhru'l-Razi, A. B. Dayang Radiah, and R. Aghababazadeh (2011) Process for Producing Nano-Alpha-Alumina Powder. *International Scholarly Network*
17. Ali Reza Pendashteh, , Luqman Chuah Abdullah, A. Fakhru'l-Razi, Sayed Siavash Madaeni, Zurina Zainal Abidin, Dayang Radiah Awang Biak (2012). Evaluation of membrane bioreactor for hypersaline oily wastewater treatment. *Process safety and Environmental Protection*. Volume 90, Issue 1, Pages 45-55.
18. Hasan, N. Dayang Radiah, A.B. & Kamarudin, S (2012). Application of bacterial cellulose (BC) In natural facial scrub. *International Journal of Advanced Science, Engineering & information Technology*. Issue 2. Pg 1 -4.
19. Buthainah. A, Dayang Radiah.A.B, Alnuami. W, Shiva. G, Noor Hazira. H, Chandima. G (2013). Review Article: Applications Of Nanocomposites In Industrial Systems. *Design For Scientific Renaissance* 2 (5).

20. Balavandy, S.K., Shameli, K., Dayang Radiah, A.B., & Abidin, Z.Z. (2014) Stirring Time Effect of Silver Nanoparticles Prepared in Glutathione Mediated By Green Method. *Chemistry Central Journal*. 8:11

Conference Proceedings (30 recent Conference Proceedings)

1. Atiyah, M.R., **Dayang Radiah, A.B.**, Fakhru'l-Razi, A., Zainal Abidin, Z., Mohd Yasin, F., & Ahamad, I.S. Effects of In-Situ Monitoring Device on The Synthesis of CNT via FC-CVD Technique. Malaysian Society of Technology Symposium, Kuching, 2008.
2. Fakhru'l-Razi, A. Luqman Chuah, A. **Dayang Radiah, A.B.**, Zainal Abidin, Z., Sayed Siavash, M. & Alireza, P. *Oilfield Produced Water Treatment In Sequencing Batch Reactor With Isolated Tropical Halophile Microorganism Consortium*. International Conference on Environment 2008 (ICENV, 2008). Malaysia
3. Fakhru'l-Razi, A. Luqman Chuah, A. **Dayang Radiah, A.B.**, Zainal Abidin, Z., Sayed Siavash, M. & Alireza, P. *Treatment of Synthetic Produced Water In SBR Coupled with membrane With Isolated Tropical Halophile Microorganism Consortium*. Ecobalance 2008. Hokkaido, Japan
4. Atiyah, M.R., **Dayang Radiah, A.B.**, Fakhru'l-Razi, A., Zainal Abidin, Z., Mohd Yasin, F., & Ahamad, I.S. . The Influence of Pre-heater Set Temperature On The Sythesis of Carbon Nanotubes via Floating Catalysts Chemical Vapour Deposition Method , 4th International Conference On Recent Advances in Materials, Minerals & Environment and 2nd Asian Symposium on Materials & Processing, 1st - 3rd June 2009, Penang
5. Mustapha Akil, Dayang Radiah Awang Biak, Intan Salwani Ahamad, Rosfarizan Mohamad², Suryani Kamaruddin-. The Effects of processing parameters on fermentable sugar production from typical Malaysian Starch Based Waste via acid hydrolysis. Proceedings of Regional Annual Fundamentals of Science Seminar 2010.
6. Buthainah, A., Dayang Radiah, A.B., Sapuan, M.S. & Zaidan, A.W. Review Article: Effects of Carbon nanotubes Fillers on Nanocomposite Properties. The Postgraduate Symposium on Composite Science and Technology 2014 & 4th Postgraduate Seminar on Natural Fubre Composite 2014. (Best paper)

Chapter in Books (If any)

7. Yunus, R, Omar, R, Abidin, Z.Z. Dayang Radiah, A.B. (2012) .Oil Palm As Bioenergy Feedstock in Palm Oil: Production, Processing, Characterization & Uses. AOCS
8. Abidin, Z.Z., Dayang Radiah, A.B., Yusoff, H.M. & Harun, M.Y. (2013). Solid-Liquid Extraction for Biorefinery in Biorefineries. Wiley.

Research Grants (Leader)

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Selective Deposition and Mechanism of Growth Study of CNP on a substrate via FC-CVD Technique	40,000	2007-2009	RU Grant
2.	Theoretical Modelling of Pretreatment Methods for Potential Lignocellulosic Biomass Resources for Bioethanol Production in Malaysia	100,000	2007-2009	FRGS
3.	Influences of dispersion states of CNTs on properties of acetyl BC-CNT Nanobiocomposites	54,000	2010-2012	FRGS
4.	Formulation of Natural Facial Scrub with Bacterial Cellulose/Methylated Bacterial Cellulose Bead Exfoliants	82, 000	2012-2014	FRGS

Professional Services/Consultation

No	Year	Title	Authority	Amount
1	2010	Expert Advice on Curriculum	MUST	RM5000

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Wan Fadli Wan Hassan	Treatment of Sulfinol Contaminated Water	Ongoing
2.	Alyaa Khadier	Catalyst Deactivation during hydrogenation	Ongoing

MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Mahmood Rasheed Atiyah	Low Temperature Deposition of CNT via CVD Technique	Graduated
2.	Samaneh Lotfiman	Production of Bacterial Cellulose Using Dates Extracts	Graduated
3.	Syed Sahabeddin Nerhzati	Simulations of gasification and pyrolysis of biomass	Graduated
4.	Sharmeen Adnan	Impregnation of In-House Synthesized Carbon Nanotubes in Bacterial Cellulose	Graduated
5.	Mustapha Akil	Bacterial cellulose from <i>a. Xylinum</i> fermentation using Hydrolysate of banana-peel waste as carbon source	Graduated
6.	Mohd Yusof Harun	Acid Hydrolysis of water Hyacinth for Bioethanol Production	Graduated
7.	Norhasliza Hasan	Formulation of Facial Scrub Using Bacterial Cellulose	Graduated
8.	Norliana Mohamad	Production of Sophorolipid Using Impregnated Enzyme	On-going
9.	Nik Mohd Kamil Amirah	Biogas Production From Food Waste	On-going
10.	Buthaina Ali Abed	Synthesis of PC-CNT nanocomposites	On-going
11.	Intesar Hussain	Nanodispersant for waste water treatment	On-going

MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Khairino Farhadi	Evaluation Studyfor Safety Culture Awareness Among Operators at A Process Plant	Graduated
2.	Syafiqa Salleh	Evaluation of Scale Up Synthesis Process For Ionic Liquid Production	On-going
3.	Mohd Wafiuddin Hasanudin	Quantitative Risk Assessment of For Oil and Gas FPSO Ship Collision	On-going
4.	Ahmad Sapuan Hassan	Awareness of Modern Brake in PKS	On-going
5.	Azrul Azlan Ahad	Level of Border's Awareness on Fire Prevention at SMK Bako, Kuching	On-going