CURRICULUM VITAE

1. Name : WAN MD. ZIN BIN WAN YUNUS (PROF. DATO' DR.)

2. Address: Faculty of Defence Science and Technology
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3. Date and Place of Birth: 18 September 1953 / Kelantan

4. Education and Academic Qualification:

University	Date	Qualification
Universiti Kebangsaan Malaysia.	June 1976	BSc. (Chemistry)
Kelsterton College, Wales, UK	July 1977	Postgraduate Diploma (Chemistry)
University of Salford, England, UK	December 1978	MSc (Analytical Chemistry)
University of Salford, England, UK	December 1980	PhD (Analytical Chemistry)

5. Past research projects:

i) Synthesis and Characterization of Ion-exchange Resins.
Source of fund/grant

1985 – 1987, RM 17,000.00, UPM
1988, RM 10,000.00, UPM
1989, RM 12,000.00, UPM
1986 – 1990, RM 46,000.00, IRPA
1991 – 1995, RM130,000.00, IRPA
1996 – 1998, RM216,000.00, IRPA

ii) Identification and quantification of atmospheric pollutant and greenhouse gases/airborne particualte in natural and man-made ecosystem
Source of fund/grant

1997- 2000 RM247,000.00, IRPA

iii) Enzyme and Microbial Technology: Biotechnology of Fats and Oils
Source of fund/grant

1986-1990, RM382,000.00, IRPA
1991-1995, RM600,000.00, IRPA

iv) Graft Copolymerization of Vinyl Monomers onto Sago Starch
Source of fund/grant

1997-1998, RM151,000.00, IRPA

v) Biotechnological Synthesis of Poly(Hydroxamic Acid) Ion-Exchange Resins and Their Characterizations

2000-2002, RM99,000.00, IRPA

vi) Preparation and Characterization of Clay Natural Rubber Nanocomposites

2002-2004, RM123,000.00, IRPA

vii) Effect of Metal Ions on the Formation of Fatty Hydroxamic Acids Complexes

2003 – 2004, RM19,000.00, Fundamental Grant

viii) Microwave Curing of Epoxidised Triacylglyceride/Clay Nanocomposites

2006 – 2008, RM76,000.00, Fundamental Grant

ix) Preparation and Characterization of Fatty Hydrazide Acids from Palm Oils

2006 – 2008, RM218,120.00, Science Fund

x) Carbon nanotube modified clay for rubber nanocomposites preparation

2007-2009, RM 142,00.00 , Research University Grant Scheme

xi) Flexibility improvement of poly(lactic Acid) by sodium stearate modified Mg-Al-LDH

2010-2012, RM 65,000, Fundamental Grant

xii) Enhancement of tensile strength and flexibility of poly(hydroxyl butyrate) by modified clay and layered double hydroxide

2011-2013, RM 116,000, Research University Grant Scheme

xiii) Development of portable arsenic detection system (co-researcher)

2012-2014- RM 230,000, PRGS

6. **Awards and Honours (2010 – present):**

No.	Names of Award	Year	Awarded By
1.	Silver Medal, Invention and Research Exhibition	2010	UPM
2.	Bronze Medal, Invention and Research Exhibition	2010	UPM
3.	Silver Medal, Invention and Research Exhibition	2010	UPM
4.	Excellence Teacher Certificate	2010	Faculty of Science,UPM
5.	Bronze Medal, Invention and Research Exhibition	2010	UPM
6.	Exellence Service Award	2010	UPM
7.	Silver Medal, Invention and Research Exhibition	2011	UPM
8.	Silver Medal, Invention and Research Exhibition	2011	UPM
9.	Silver Medal, Invention and Research Exhibition	2011	UPM
10.	Silver Medal, Invention and Research Exhibition	2011	UPM

11.	Silver Medal, Invention and Research Exhibition	2011	UPM
12.	Bronze Medal, Invention and Research Exhibition	2011	UPM
13.	Gold Medal, Invention and Research Exhibition	2011	UPM
14.	Advanced Communicator Gold	2011	Toastmasters International
15.	Distinguished Toasmasters	2011	Toastmasters International
16.	Fellow	2012	International Union of Pure and Applied Chemistry
17.	Gold Medal, Invention and Research Exhibition	2012	UPM
18.	Siver Medal, Invention and Research Exhibition	2012	UPM
19.	The Most Commited Parcipitant, Academic Staff Leadership Program	2012	UPNM

7. **Papers in Scopus Cited Journals (2011-2012)**

h-index=15, citatation (Scopus)>1300.

1. Abdolmohammadi, S., Siyamak, S., Ibrahim, N. A., Wan Yunus, W. M. Z., Ab Rahman, M. Z., Azizi, S., & Fatehi, A. (2012). Enhancement of mechanical and thermal properties of Polycaprolactone/Chitosan blend by calcium carbonate nanoparticles. *International Journal of Molecular Sciences, 13*(4), 4508-4522. Retrieved from www.scopus.com
2. Abdolmohammadi, S., Yunus, W. M. Z. W., Rahman, M. Z. A., & Azowa Ibrahim, N. (2011). Effect of organoclay on mechanical and thermal properties of polycaprolactone/ chitosan/montmorillonite nanocomposites. *Journal of Reinforced Plastics and Composites, 30*(12), 1045-1054. Retrieved from www.scopus.com
3. Al-Mulla, E. A. J., Bt Ibrahim, N. A., Al-Karkhi, I. H. T., Shameli, K., Zidan, M., Ahmad, M. B., & Yunus, W. M. Z. W. (2012). Synthesis of palm oil-based fatty methylhydrazide. *Research on Chemical Intermediates,* , 1-7. Retrieved from www.scopus.com
4. Al-Mulla, E. A. J., Ibrahim, N. A. B., Shameli, K., Ahmad, M. B., & Yunus, W. M. Z. W. (2012). Fatty amides synthesized from vegetable oil as extractant of molybdenum(VI). *Research on Chemical Intermediates,* , 1-9. Retrieved from www.scopus.com
5. Chieng, B. W., Ibrahim, N. A., & Yunus, W. M. Z. W. (2012). Optimization of tensile strength of poly(lactic acid)/Graphene nanocomposites using response surface methodology. *Polymer - Plastics Technology and Engineering, 51*(8), 791-799. Retrieved from www.scopus.com

6. Ebrahimiasl, S., Yunus, W. M. Z. W., Kassim, A., & Zainal, Z. (2011). Synthesis of nanocrystalline SnO x (x = 1-2) thin film using a chemical bath deposition method with improved deposition time, temperature and pH. *Sensors, 11*(10), 9207-9216. Retrieved from www.scopus.com
7. Eili, M., Shameli, K., Ibrahim, N. A., & Wan Yunus, W. M. Z. (2012). Degradability enhancement of poly(lactic acid) by stearate-zn 3Al LDH nanolayers. *International Journal of Molecular Sciences, 13*(7), 7938-7951. Retrieved from www.scopus.com
8. Hamzah, Y., Isa, N. M., & Yunus, W. M. Z. W. (2012). Synthesis of polymeric nanogel via irradiation of inverse micelles technique. *Pertanika Journal of Science and Technology, 20*(2), 401-407. Retrieved from www.scopus.com
9. Haron, M. J., Tiansin, M., Ibrahim, N. A., Kassim, A., Wan Yunus, W. M. Z., & Talebi, S. M. (2011). Sorption of pb(II) by poly(hydroxamic acid) grafted oil palm empty fruit bunch. *Water Science and Technology, 63*(8), 1788-1793. Retrieved from www.scopus.com
10. Ibrahim, N. A., Hashim, N., Rahman, M. Z. A., & Yunus, W. M. Z. W. (2011). Mechanical properties and morphology of oil palm empty fruit bunch-polypropylene composites: Effect of adding ENGAGE™ 7467. *Journal of Thermoplastic Composite Materials, 24*(5), 713-732. Retrieved from www.scopus.com
11. Ibrahim, N. A., Rahim, N. M., Yunus, W. Z. W., & Sharif, J. (2011). A study of poly vinyl chloride/poly (butylene adipate-co-terephthalate) blends. *Journal of Polymer Research, 18*(5), 891-896. Retrieved from www.scopus.com
12. Ibrahim, N. A., Yunus, W. M. Z. W., Othman, M., & Abdan, K. (2011). Effect of chemical surface treatment on the mechanical properties of reinforced plasticized poly(lactic acid) biodegradable composites. *Journal of Reinforced Plastics and Composites, 30*(5), 381-388. Retrieved from www.scopus.com
13. Junejo, N., Khanif, M. Y., Hanfi, M. M., Wan Yunus, W. M. Z., & Dharejo, K. (2011). Role of inhibitors and biodegradable material in mitigation of nitrogen losses from fertilized lands. *African Journal of Biotechnology, 10*(18), 3504-3514. Retrieved from www.scopus.com
14. Mohamad, M. H., Awang, R., & Yunus, W. M. Z. W. (2011). A review of acetol: Application and production. *American Journal of Applied Sciences, 8*(11), 1135-1139. Retrieved from www.scopus.com
15. Salih, A. M., Yunus, W. M. Z. W., Dahlan, K. Z. M., Mahmood, M. H., & Ahmad, M. (2012). UV-curable palm oil based-urethane acrylate/clay nanocomposites. *Pertanika Journal of Science and Technology, 20*(2), 435-444. Retrieved from www.scopus.com
16. Shameli, K., Ahmad, M. B., Zargar, M., Yunus, W. M., & Ibrahim, N. A. (2011). Fabrication of silver nanoparticles doped in the zeolite framework and antibacterial activity. *International Journal of Nanomedicine, 6*, 331-341. Retrieved from www.scopus.com
17. Shameli, K., Ahmad, M. B., Zargar, M., Yunus, W. M., Rustaiyan, A., & Ibrahim, N. A. (2011). Synthesis of silver nanoparticles in montmorillonite and their antibacterial behavior. *International Journal of Nanomedicine, 6*, 581-590. Retrieved from www.scopus.com
18. Shameli, K., Bin Ahmad, M., Zargar, M., Yunus, W. M., Ibrahim, N. A., Shabanzadeh, P., & Moghaddam, M. G. (2011). Synthesis and characterization of silver/montmorillonite/chitosan bionanocomposites by chemical reduction method and their antibacterial activity. *International Journal of Nanomedicine, 6*, 271-284. Retrieved from www.scopus.com

19. Siti Zulaiha, H., Wan Md Zin, W. Y., & Norazowa, I. (2012). *Effect addition of octadecylamine modified clay (ODA-MMT) to polylactide/polycaprolactone (PLA/PCL) blend* Retrieved from www.scopus.com
20. Siyamak, S., Ibrahim, N. A., Abdolmohammadi, S., Wan Yunus, W. M. Z., & Rahman, M. Z. A. B. (2012). Effect of fiber esterification on fundamental properties of oil palm empty fruit bunch fiber/poly(butylene adipate-co-terephthalate) biocomposites. *International Journal of Molecular Sciences, 13*(2), 1327-1346. Retrieved from www.scopus.com
21. Siyamak, S., Ibrahim, N. A., Abdolmohammadi, S., Yunus, W. M. Z. B. W., & Rahman, M. Z. A. B. (2012). Enhancement of mechanical and thermal properties of oil palm empty fruit bunch fiber poly(butylene adipate-co-terephtalate) biocomposites by matrix esterification using succinic anhydride. *Molecules, 17*(2), 1969-1991. Retrieved from www.scopus.com
22. Tajau, R., Dahlan, K. Z. M., Mahmood, M. H., Yunus, W. M. Z. W., & Hashim, K. (2012). *Radiation induced formation of acrylated palm oil (APO) nanoparticles using cetyltrimethylammonium bromide microemulsion system* Retrieved from www.scopus.com
23. Tajau, R., Dahlan, K. Z. M., Mahmood, M. H., Yunus, W. M. Z. W., Ismail, M., Salleh, M. Z., & Faisal, S. M. (2012). Acrylated vegetable oil nanoparticle as a carrier and controlled release of the anticancer drug-thymoquinone. Paper presented at the *2012 International Conference on Enabling Science and Nanotechnology, ESciNano 2012 - Proceedings,* Retrieved from www.scopus.com
24. Then, Y. Y., Ibrahim, N. A., & Yunus, M. Z. W. (2011). Enhancement of tensile strength and flexibility of Polycaprolactone/Tapioca starch blends by octadecylamine modified clay. *Journal of Polymers and the Environment, 19*(2), 535-539. Retrieved from www.scopus.com
25. Tuan Noor Maznee, T. I., Hazimah, A. H., & Wan Md Zin, W. Y. (2012). Optimization of reaction conditions for enzymatic synthesis of palm fatty hydrazides using response surface methodology. *Journal of Oleo Science, 61*(5), 297-302. Retrieved from www.scopus.com