

CURRICULUM VITAE OF PROF DR. HJ WAN MOHTAR WAN YUSOFF

A. Personal Data

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|-----|--------------------------|---|---|
| 1. | Name | : | Wan Mohtar Wan Yusoff |
| 2. | IC No | : | 560512-03-5123 |
| 3. | Date and Place of Birth | : | 12 Mei 1956, Kelantan |
| 4. | Sex | : | Male |
| 5. | Nationality | : | Malaysia |
| 6. | Name of Current Employer | : | Universiti Kebangsaan Malaysia |
| 7. | Address | : | School of Biosciences & Biotechnology
Faculty of Science & Technology
Universiti Kebangsaan Malaysia
UKM 43600 UKM Bangi |
| 8. | Telephone No | : | 03-89213808 |
| 9. | Fax No | : | 03-89213808 |
| 10. | Title of Position Held | : | Professor |
| 11. | Signature of Researcher | : | |
| 12. | Date | : | 05 April 2006 |

B. Educational Qualifications

1. Academic Qualification

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| Degree | : | Ph.D |
| Field | : | Industrial Microbiology / Fermentation Technology |
| Year | : | 1985 |
| Name and Place of Institution | : | Queen Elizabeth College, London University, UK |
| Degree | : | M.Sc |
| Field | : | xxx |
| Year | : | xxx |
| Name and Place of Institution | : | xxx |
| Degree | : | B.Sc |
| Field | : | Chemical Engineering |
| Year | : | 1978 |
| Name and Place of Institution | : | Leeds University, UK |

2.	Other Professional Courses Completed Field : Research Management, Los Banos Univ, Philipines Year : (Repeat as necessary)	
C.	Research Experience 1 Number of Years of Experience in the Field Related to the Proposed Project : 28 years 2 Fields of Specialisation : Fermentation Technology / Industrial biotechnology 3. Major Research Programmes/Projects Completed Title : Utilization of cells and enzyme production for the Bioconversion of cellulosic material IRPA 4-07-03-008 (1991-1995) and 08-02-02-0001 (1996-2000) From : 1991 To : 2002 Position held : Researcher Major output : Publications and Postgraduate students Title : Continuous production of B.t. in a two-stage fermentation system From : 1998 To : 2003 Position held : Researcher Major output : A two-stage continuous production system for B.t. with high delta-endotoxin concentration (Repeat as necessary)	

Title	:	Production of PUFA from oleaginous fungi
From	:	2001
To	:	2004
Position held	:	Project leader
Major output	:	A local isolate with good potential for lipid production rich in GLA and a step by step manual for the production of PUFA
Title	:	Kinetics of lipid biosynthesis at two stages batch system by a local isolates Cunninghamella sp 2A1
From	:	2006
To	:	2009
Position held	:	Project leader
Major output	:	Publications and Postgraduate students
Title	:	Study on bioremediation of oil-contaminated soil via effective microbes (EM) application
From	:	2010
To	:	2012
Position held	:	Project leader
Title	:	Production of biocontrol & biofertilizers using effective microorganism technology for System of Rice Intensification (SRI)
From	:	2012
To	:	2014
Position held	:	Project leader
Title	:	Exploring local super butanol-producing clostridium able to utilize agroindustrial waste materials for biobutanol production
From	:	2012
To	:	2014
Position held	:	Project Leader
Title	:	Optimizing of Process Parameters for a Modular Prototype in the Production of Biobutanol
From	:	2013
To	:	2014
Position Held	:	Project Leader

Title	:	Knowledge Transfer and Implementation of Systems of Rice Intensification and Associated Sustainable Agricultural Innovations in Tumpat Kelantan
From	:	2014
To	:	2016
Position Held	:	Project Leader
D. Research Achievements		
1	Honours and Award	: Excellent service 2003 awarded by UKM Harvest Award (TNB R&D Convention 2013)

2	Major Publication	:	1 Ismail B. Ahmad, Zubaidah A. Hassan Goh Toh Seng, Shanmugam K. Murthy, Siti Romlah Yahya, Nurina Anuar, Wan Mohtar W. Y. & Laily B. Din (1989). Biologi <i>Chaetomium</i> sp dan Kesan Perencatan Terhadap Pertumbuhan Beberapa Bakteria. Sains Malaysiana 18(3): 55-64. 2 Wan Mohtar Wan Yusoff & Ravindran Thayan (1990). Cellulose degradation in a packed reactor system using mixed culture fermentations. Journal of the Singapore National Academy of Science, Vol. 18 & 19: 13-16 3 Wan Mohtar Wan Yusoff. & Ravindran (1991). Synergism of β-glucosidase and cellulose in mixed culture fermentations. Malays. Appl. Biol. Vol. 20(2):215-222. 4 Jalil Kader, Zainal Abdin Mohd Yusoff, Othman Omar, Wan Mohtar Wan Yusoff & Fauzi Daud (1992). Pemencilan mikroorganisma selulolisis daripada enapcemar kelapa sawit. Sains Malaysiana 21(5): 75-85. 5 Wan Mohtar Wan Yusoff., Abd. Jalil Abd. Kader, Sasidharan Velayutham, Othman Omar (1992). Effects of temperature on continuous cellulolysis by <i>Aspergillus terreus</i> SUK-1 in a packed reactor system. Journal Sains Malaysiana (Sains Hayat) 21 (3): 41-50 6 Che Husna Azhari, Sufian Ali & Wan Mohtar Wan Yusoff (1992). Penghidrogenan selanjat minyak olein sawit dengan mangkin platinum tersokong. Jurnal Kejuruteraan 4:61-70.
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- 10 **Wan Mohtar Wan Yusoff.** & S. Suresh (1996). The effect of aeration rate on itaconic acid production by entrapped *Aspergillus Terreus* SUK-1 in a packed bioreactor system. *Malays. Appl. Biol.* 25(1):75-80.
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- 12 **Wan Mohtar Wan Yusoff**, Othman O., J.Kader, Suresh.Sdan Shree Mano.J 1997. Effects of sodium chloride on cellulase production by *Aspergillusterreus* SUK – 1. *Malays. Appl. Biol* 26(1): 1-5
- 13 Kader. Jalil, GethaKrishnasamy, **Wan Mohtar Wan Yusoff** and Othman Omar. (1999). Hydrolysis of empty fruit bunch of oil palm using cellulolytic enzymes from *Aspergillusterreus* IMI 28243. *Journal Microbiol. Biotechnol.* 9 (4): 514-517.
- 14 **Wan Mohtar Wan Yusoff**, Aidil A. Hamid, Osman Hassan, Rosli Md. Illias & Nooraini Abdurashid. (2000). Penghasilan siklodekstrin glukano transferase daripada bacteria alkalofilik Gi. Prosiding Seminar IRPA RMK-7. Dalam Ismail Sahid & Roslan Abd. Shukor (Eds). Jld II
- 15 Che Husna Azhari, **Wan Mohtar Wan Yusoff**, Aulia Fuad Saad, & A. Ikram. (2000). Pengaruh parameter operasian ke atas morfologi getah asli tertukarbio. Prosiding Seminar IRPA RMK-7 dalam Ismail Sahid & Roslan Abd. Shukor (Eds). Jilid II.
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fermentasi substrat pepejal. Prosiding Seminar IRPA RMK-7. Dalam Ismail Sahid & Roslan Abd. Shukor (Eds.) Jld II

- 19 Hamid, A.A., **Wan Mohtar Wan Yusoff**, Md. Illias, R. & Nadarajah, K. (2000). Screening of oleaginous filamentous fungi from soil for production of polyunsaturated fatty acids. 23rd Symposium of Malaysian Society for Microbiology.
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penghasilan asid γ -linolenik (GLA). Jurnal Teknologi, 34 (C) Jun 2001 : 1-8

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- 35 **Wan Mohtar Wan Yusoff**, Hanan Moawia Ibrahim, Aidil Abdul Hamid, Rosli Md. Illias, Osman Hassan and Othman Omar (2002). A potential new isolate for β -Cyclodextrin Glucanotransferase production. Malaysian Journal of Biochemistry and Molecular Biology. Vol 7: 13-17
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thuringiensis Sub sp *Kurstaki* using a two-stage continuous culture. Malays. Appl. Biol.(Jun 2003) 32(1): 61-67

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- 64 Farhila Muhid, Aidil Abdul Hamid, Abdul Jalil Abdul Kader & **Wan Mohtar Wan Yusoff** (2007). Effects of metal ions concentration on lipid and gamma linolenic acid (GLA) production by *Cunninghamella* sp. 2A1. 9th Symposium of the Malaysian Society of Applied Biology.
- 65 Raja Farzarul Hanim Raja Azmy, Ainon Hamzah & **Wan Mohtar Wan Yusoff** (2007). Kajian keupayaan pencilan bacteria yang mendegradassi hidrokarbon daripada sampel tercemar minyak mentah di Terengganu. Kolokium Siswazah Fakulti Sains dan Teknologi ke-7.
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3. Benefits to society and country :	Acts as advisor to several rubber glove manufacturers in Malaysia and Medan, Indonesia for the treatment of waste water to comply with local authority requirements. An integrated approach that begins with treatment at source of pollutant generation and ends with an in-house laboratory-based monitoring system in order to satisfy the concept of beyond compliance that is industry-friendly. Development of a 2-stage packed bioreactor for the continuous production of cellulase, reducing sugar and spent cellulose. Cellulase has numerous use in industry and currently we are investigating the potential for silage production. Reducing sugar is a well established feedstock for various fermentation processes and the spent cellulose has good potential as the bulk component in poultry feed. As teacher to 27Masters and PhD's students (up till 2013) from Indonesia, Yamen, Iraq, Jordan, Sudan, Iran, Libya and of course Malaysia. All graduated in the field of Fermentation Technology. Field of research includes production of industrially important biotechnological products such as enzymes, biofuels, biosurfactant, biopolymer and PUFA from fermentation of bacteria and fungi. Special considerations are given to industry and community engagements. Currently, in year 2012-2015, emphasis in the application of Effective Microbes in rice production (via SRI approach) and in the production of biofuels for community empowerment. New interest is in Halal-Toiyeb foods with emphasis on the Toiyeb aspects. Approach to education centred on the development of man aware of existence of indigeneous knowledge with Al-Quran and Hadith as source references. The central idea that all organisms (<i>makhluk</i>) are in equilibrium (al-Mizan) in a specialized environs colours much of Prof Wan Mohtar's thoughts and explanation of existence within the Islamic Cosmology.Wallahualam.
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