

Curriculum Vitae



A. Current Post

1. Senior Lecturer
Faculty of Applied Sciences,
Universiti Teknologi MARA, 40450 Shah Alam,
Selangor, Malaysia.
2. Chief Technical Officer (CTO),
Bellus Terra Sdn. Bhd.,
No 25-2F, Jalan Setia Perdana BC U13/BC,
Seksyen U13, Setia Alam, 40170,
Shah Alam, Selangor.

B. Personal Information:

Name: Dr. Khairul Adzfa Bin Radzun

Date of Birth: 22nd November 1973.

House Address: 38, Jalan U13/5D, Setia Impian 5, Setia Alam, Seksyen U13, Shah Alam, Selangor.

E-mail: khairuladzfa@salam.uitm.edu.my

Current Designation: Senior Lecturer.

Office Address: Faculty of Applied Sciences, Faculty of Applied Sciences, Universiti Teknologi MARA, 40450, Shah Alam, Selangor, Malaysia.

Handphone no: 011-12275773

Office phone no: 03-55442000 extension 4523

Marital Status: Married

Spouse name: Haryati Bt Hasbullah

Spouse occupation: Business Manager

Spouse office address: Merv Marketing Enterprise, Colmar Tropicale, Berjaya Hills, Bukit Tinggi, Kuala Lumpur.

No. of Children: 3

C. Education:

1. PhD (Microalgal Biotechnology and Bioengineering), Institute for Molecular and Biosciences, University of Queensland Australia (2014).
2. Master of Science (DISTINCTION) Applied Molecular Microbiology, School of Biosciences, University of Nottingham, United Kingdom (2005).
3. Bachelor of Science (Honours) Cell and Molecular Microbiology, Universiti Kebangsaan Malaysia, Bandar Baru Bangi Selangor (1997).

D. Specialized Teaching Subjects

1. Marine Biology.
2. Environmental Biology.
3. Microalgal Biotechnology.
4. Medical Biotechnology.
5. Molecular and Cell Biology.
6. Environmental Health.
7. Haematology.
8. General Microbiology.

9. Virology.
10. Blood screening and diagnostic kits designing.

E. UiTM Malaysia Special and Managerial Appointments

1. Chairman Sci-Biz: Know-How Sharing Session Program.
2. Representative Committee for Master of Science (Industrial Research) program.
3. Coordinator for Industrial Training AS201 Biology Program.
4. Head of Sponsorship Committee, International Sustainable Agriculture, Food and Energy (i-SAFE) Conference.
5. Chairman of Bukit Lagong Go-Green International Summer Programme 2016.
6. Committee Member of AS201 School of Biology Curriculum Review Faculty of Applied Sciences, UiTM Shah Alam, Selangor.
7. Secretary II of Bioentrepreneur Master Program, School of Biology, Faculty of Applied Sciences, UiTM Shah Alam, Selangor.
8. Head of Research Interest Group for Microalgal Biotechnology and Bioengineering (from 2013-present).
9. Chairman for Student Entrepreneurship Division, Faculty of Applied Sciences, UiTM Shah Alam.
10. Resource Person for BIO 400 Concepts of Biology subject (from 2014-present) Faculty of Applied Sciences, UiTM Shah Alam.
11. Assessor for Master of Science Defence Research Proposal (continuous appointment).
12. Chairman for Colloquium and Seminar Series, Faculty of Applied Sciences, UiTM (2013-2015)
13. Research Member of Special Interest Group of Institute of Science Faculty of Applied Sciences (Halal Product), UiTM (Appointment Date: 1st February 2007 to 31st January 2009).
14. Committee Member (Sponsorships and Exhibitions) of Symposium of Malaysian Society for Microbiology. (Appointment Date: 2nd February 2007).
15. Committee Member (Science Quiz) of Science and Technology Exhibition of Faculty of Applied Sciences, UiTM Malaysia 2007. (Appointment Date: 16th February 2007).
16. Coordinator of Pre-Degree Science Exhibition in Science and Technology Exhibition of Faculty of Applied Sciences, UiTM Malaysia 2007 (Appointment Date: 20th July 2007)
17. Committee Member of Master of Science Program Development (MSc of Human Biology) of Faculty of Applied Sciences (Appointment Date: 1st May 2007 to 30th April 2009)

F. Non-Government Organisation (NGO) Special Appointments

1. Exco Member of Malaysia OIC International Business Centre (Appointment Date: 11th September 2007)
2. Technical Advisor for Malaysian Islamic Consumer Association or Persatuan Pengguna Islam Malaysia (Appointment Date: 14th March 2008).
3. Member of Malaysian Nature Society.

G. Research Areas of Interest:

1. Microalgal biotechnology.
2. Marine microalgal microbiology.
3. Robotic nutrient development system for microalgae biofuel.
4. Microalgal strain selection and improvement.
5. Molecular microbiology.
6. Halal authentication of foods and pharmaceutical products
7. Food biotechnology.
8. Herbal drugs medicinal /discovery research.
9. Bacteriology, Virology and Blood Screening research.

10. Diagnostic kits designing.
11. Bioplastic development from microbes.

H. Professional Employment Experiences:

- 1. Senior Lecturer**
Department of Biology, Faculty of Applied Sciences, Universiti Teknologi MARA, Shah Alam, Selangor.
Duration: December 2006 – Present.
- 2. Lecturer**
Department of Biotechnology, Kulliyah of Science, International Islamic University Malaysia (IIUM).
Duration: 1.5 year (May 2005-November 2006).
- 3. Lecturer (Part-Time)**
School of Biotechnology, Selangor Industrial University (UNISEL), Shah Alam, Selangor.
Duration: 1 year (June 2004-April 2005).
- 4. Microbiologist**
Transfusion Microbiology Laboratory, National Blood Centre of Malaysia, Jalan Tun Razak, Kuala Lumpur.
Duration: 7.5 year (November 1997- May 2005).
- 5. Internal Auditor ISO/IEC 17025**
National Blood Centre of Malaysia, Jalan Tun Razak, Kuala Lumpur.
Duration: 4 year (2001-2005).
- 6. Quality Control Officer**
National Blood Centre of Malaysia, Jalan Tun Razak, Kuala Lumpur.
Duration: 4 year (2001-2005).
- 7. Research Assistant**
Tissue Culture Laboratory, Universiti Kebangsaan Malaysia, Bangi, Selangor.
Duration: 10 months (January - October 1997).

I. Research Grants:

	Research Project	Source	Total Funds (RM)	Year	Principal/Co-researcher
1.	Effective Microbes for Biofertilizer – Appointment as Chief Technical Officer for Bellus Terra Sdn Bhd	Bellus Terra Sdn Bhd	500,000 or 3% from company revenue whichever is higher for 5 years (2017 to	2017	Principal

			2022)		
2.	Antimicrobial activity of Marine Macroalgae (Seaweed) Crude Extracts	LESTARI, UITM	20,000	2016	Co Researcher
3.	Optimization of nutrient additives to enhance astaxanthin content in the biomass of <i>Haematococcus pluvialis</i> microalga via an automated microalgal nutrient screening system	FRGS, KPT	80,200.00	2015	Principal Researcher
4.	Formulation and optimization of nutrient for microalgae cultured under coal-fired combustion flue gas conditions	TNBR Consultancy Grant	462,869.86	2014	Principal Researcher
5.	Systematic miniaturized nutrient screening strategies to assess nutrient modulation on microalgal biomass, lipid and biochar	FRGS, KPT	78,800.00	2013	Principal Researcher
6.	Studies on isolation and purification of biosilica from diatoms	FRGS, KPT	101,800.00	2013	Co-Researcher
7.	Heterologous expression of Phospholipase A2 enzyme for Biopharmaceutical Industrial Application.	E-Science, MOSTI	278, 000	2007-2008	Co-researcher
8.	Molecular detection for 'Halal' authentication of Meat and Pharmaceutical Products.	FRGS, IRDC	10,000	2006	Principal Researcher

J. Postgraduate Research Students

	Level of Education	No of Students	Role	Year
1	Postgraduate MSc	3	Supervisor	2014 until present
2	Postgraduate PhD	2	Supervisor and Co-supervisor	2014 and 2015 until present

K. Associated Universities, Government Organisations and Non-Government Organisations

Research collaboration with:

1. Microbiology Unit, Department of Pathology, Kuala Lumpur Hospital, Malaysia
2. Faculty of Science, Department of Biotechnology, International Islamic University Malaysia, Kuantan Pahang.
3. Faculty of Pharmacy, UiTM Shah Alam, Malaysia
4. Department of Chemistry, Petaling Jaya, Selangor, Malaysia
5. Malaysia OIC International Business Centre.
6. Persatuan Pengguna Islam Malaysia
7. UiTM Industrial Linkage Centre (UILC) – Establishment of Halal Screening Services Company and Incubator between UiTM and NusaTek Sdn Bhd under supervision of UILC
8. AlgaeTec International Sdn Bhd – Nutrient optimization to increase biomass and astaxanthin production from microalgae *Haematococcus pluvialis* (MOA establishment is in progress).
9. Solar Biofuels Consortium, University of Queensland Australia.

L. Accolades:

1. **Gold Award – Invention, Innovation and Design Exposition 2018** – Automated Media Optimization System, Dewan Agung Tuanku Canselor, UiTM Shah Alam, 24-28/09/2018.
2. **Bronze Award – Invention, Innovation and Design Exposition 2018** – Elevator Pitch-Automated Media Optimization System, Dewan Agung Tuanku Canselor, UiTM Shah Alam, 24-28/09/2018
3. **Silver Award – National E-Content Development Competition 2018** – MOOC entitled - PARASITOLOGY. NATIONAL E-CONTENT DEVELOPMENT COMPETITION, DEWAN SRI BUDIMAN, UiTM SHAH ALAM, SELANGOR, 28/08/2018.
4. **Best of the Best and Gold Medal Awards – INDES 2017 (UiTM Sri Iskandar Perak)** - Apple or Date Vinegar-Centella aistica (Pegaga) powder arabic gum (A&D-VineCA).
5. **Silver Award A&D-VineCA: IIDEX 2017 (UiTM Shah Alam Selangor)** -Apple or Date Vinegar-Centella aistica (Pegaga) powder arabic gum (A&D-VineCA).
6. **Young Consultant Award (Anugerah Perunding Harapan) 2015.**
Consultants Appreciation and Award Ceremony, 2015, Research Management Institute UiTM Shah Alam, Selangor.
7. **INPEX Pittsburgh USA-11th -14th June 2008**
David L.Lawrence Convention Centre, Pittsburgh, United States of America
Award: General Award (Co-Researcher)
Research Title:
 - a) Halazyme- Recombinant Halal Phospholipase A2 Enzyme from microbes
8. **BANK ISLAM INNOVATION AWARD OF YEAR 2007 in conjunction with IID 2008, 27th March 2008**
Dewan Sri Budiman/Annex UiTM Shah Alam, Selangor
Award: RM 2500.00 (Principle researcher)
Research Title:

- a) MAXRACT- DNA Testing System for Porcine Traces Detection in Leather and Food Products and,
- b) PharmKARNA- Pharmaceutical Product Genetic Testing

9. IID2008- Glocalizing UiTM's Inventions, Innovations and Designs, 25th – 27th March 2008

Dewan Sri Budiman/Annex UiTM Shah Alam, Selangor.

Organizer: Institute of Research, Development and Commercialisation (IRDC)

Award: Diamond Award (1) (Co-researcher)

Gold Medal (1)

Faculty Awards (2) from Faculty of Chemical Engineering and Business and Management School

Research Title:

- a) Halazyme- Recombinant Halal Phospholipase A2 Enzyme from microbes

10. Eureka Brussels Innova Energy

The Belgian and International Trade Fair for Technological Innovation

22nd – 25th November 2007

Awards (Principle researcher):

1. Gold Medal
2. Special Award from State Office of Industrial Property of The Republic of Macedonia
3. The research is reported in the Belgian newspaper ; Gazet Van Antwerpen on 23rd November 2007, Berita Harian on 3rd December 2007 and Sinar 1st December 2007.

Research Title:

MAXRACT- DNA Testing System for Porcine Traces Detection in Leather and Food Products (Principle researcher)

11. Eureka Brussels Innova Energy

The Belgian and International Trade Fair for Technological Innovation

22nd – 25th November 2007

Awards (Co-researcher):

1. Bronze Medal

Research Title:

PharmKARNA- Pharmaceutical Product Genetic Testing for Complete Peace of Mind (Co-researcher)

12. Malaysia Technology Exhibition 2007, 29th -31st March 2007

Putra World Trade Centre (PWTC), Kuala Lumpur.

Organizer: Malaysia Association of Research Scientists (MARS)

Award: Silver Medal (2) (Principle researcher)

Research Titles:

- a) Novel Molecular Marker for *Sus scrofa* DNA detection in Meat and Pharmaceutical Product.
- b) Detection of *Sus scrofa* Molecular Markers via Real –Time PCR.

13. IID2007- Glocalizing UiTM's Inventions, Innovations and Designs, 24th – 25th January 2007

Dewan Sri Budiman/Annex UiTM Shah Alam, Selangor.

Organizer: Institute of Research, Development and Commercialisation (IRDC)

Award: Gold Medal (2) (Principle researcher)

Research Titles

- a) Novel Molecular Marker for *Sus scrofa* DNA detection in Meat and Pharmaceutical Product.

- b) Detection of *Sus scrofa* Molecular Markers via Real –Time PCR.

14. International Innovation and Technology Exhibition (ITEX 2006)

Kuala Lumpur Convention Centre (KLCC).

Organizer: Ministry of Higher Education.

Silver Medal.

Research Title (Principle Researcher):

- a) Designing Real-Time PCR for the detection of *Sus scrofa* DNA in meat products.

15. IPTA Research and Development Expo 2005,

Putra World Trade Centre (PWTC)

Kuala Lumpur

Organizer: Ministry of Higher Education and Universiti Teknologi Malaysia

Award: Bronze Medal (2)

Research Titles (Co-researcher):

- c) Genomic Instability of Phage Challenge *Campylobacter jejuni* (collaboration with University of Nottingham, United Kingdom)
d) Cloning and Expression of Porcine Phospholipase A₂ (collaboration with University of Nottingham, United Kingdom and Faculty of Pharmacy, UiTM Shah Alam)

16. Public Service Department Excellent Service Award 2003

Transfusion Microbiology Laboratory, National Blood Centre of Malaysia, Jalan Tun Razak, Kuala Lumpur.

Organizer: Ministry of Health Malaysia and Public Service Department Malaysia.

M. Publications:

Year 2018 (International Journal)

1. Development of Improved Formulation for *Neochloris oleoabundans* via an Automated Microalgal Nutrient Screening System.
Universiti Teknologi Mara, Shah Alam Selangor.
Authors: Siti Nurhanis Ibrahim, Khudzir Ismail, **Khairul Adzfa Radzun**
Journal of Advanced Science, Engineering and Information Technology (Impact Factor: 1.23) 2016.

Year 2017 (International Journal)

1. Comparison Growth Performance for *H. pluvialis* via an Automated Microalgal Nutrient Screening System against Flask Scale Cultivation.
Universiti Teknologi Mara, Shah Alam Selangor.
Authors: Fazril Aminudin, Khudzir Ismail, **Khairul Adzfa Radzun**
Journal of Applied Environmental and Biological Sciences (Impact Factor: 1.20) 2016.

Year 2015 (International Journal)

1. Automated nutrient screening system enables high-throughput optimization of microalgae production conditions
The University of Queensland, Institute for Molecular Bioscience, Brisbane, Queensland, Australia and Universiti Teknologi Mara, Shah Alam Selangor.
Authors: **Khairul Adzfa Radzun**, Juliane Wolf, Gisela Jakob, Eugene Zhang, Evan Stephens, Ian L Ross, Ben Hankamer
Biotechnology for Biofuels (Impact Factor: 6.44) 2015, 8:65. DOI101186/s13068-015-0238-7.

2. High-throughput screen for high performance microalgae strain selection and integrated media design.
The University of Queensland, Institute for Molecular Bioscience, Brisbane, Queensland, Australia and Universiti Teknologi Mara, Shah Alam Selangor.
Authors: Juliane Wolf, Ian L Ross, **Khairul Adzfa Radzun**, Gisela Jakob, Eugene Zhang, Evan Stephens, Ben Hankamer.
Algal Research (Impact Factor: 5.014) 2015
3. Formulation and testing of an improved nutrient for Isochrysis sp. at a live coal-fired power plant. Tenaga Nasional Berhad, Malaysia and Universiti Teknologi Mara, Shah Alam Selangor.
Authors: Liyana Yahya, Mohd Nazry Chik, Irina Harun, Mohd. Harifin Boosroh, **Khairul Adzfa Radzun**, Asnawi Sulong. 5 th International Conference on Environment 2015 (ICENV 2015), 18th – 19th of August, 2015, Penang, Malaysia.

Year 2013 (International Journal)

1. RNAi Knock-Down of LHCBM1, 2 and 3 Increases Photosynthetic H₂ Production Efficiency of the Green Alga *Chlamydomonas reinhardtii*
The University of Queensland, Institute for Molecular Bioscience, Brisbane, Queensland, Australia and Universiti Teknologi Mara, Shah Alam Selangor.
Authors: Melanie Oey, Ian L Ross, Evan Stephens, Janina Steinbeck, Juliane Wolf, **Khairul Adzfa Radzun**, Johannes Kügler, Andrew K Ringsmuth, Olaf Kruse, Ben Hankamer
PLoS ONE (Impact factor: 4.09). 01/2013; 8(4):e61375. DOI:10.1371/journal.pone.0061375

Year 2012 (PhD Thesis)

1. Developing an automated high-throughput microalgal nutrient screening system
Author: **Khairul Adzfa Radzun**
PhD Thesis,
University of Queensland, Australia.

Year 2008 (International Magazine)

1. **Khairul Adzfa Radzun**. Who's the "New Kid on the Block" in Halal Detection Science. Halal Journal (2008):Issue November 2008

Year 2007 (International Journal)

1. Genome Dynamics of *Campylobacter jejuni* Response to Bacteriophage Predation
Authors: Andrew E. Scott, Andrew R. Timms, Phillippa L. Connerton, Catherine Loc Carrillo, **Khairul Adzfa Radzun**, Ian F. Connerton.
Address: Division of Food Sciences, University of Nottingham, Loughborough, United Kingdom.
PLoS Pathogens (2007) Volume 3: Issue 8, e119, page 1-10.

Year 2004 (International Journal)

1. Correlational study between SIA HCV and HCV RNA PCR among selected blood donor sample in NBC, Malaysia
Authors: **Khairul Adzfa Radzun**, Abdul Hamid Bon, and Yasmin Ayob
Address: Transfusion Microbiology Laboratory, National Blood Centre (NBC), Kuala Lumpur, Malaysia.
Journal Title: Vox Sanguinis (2004) 87 (Suppl. 3), S93–S145 A 4.5.p106.

N. Journal Review/Editorial:

1. Science Letters Reviewer, Faculty of Applied Science Journal: Article title: *In silico* and experimental determination of *Plasmodium berghei* MAPK1: A preliminary study. Author: M. F. Z. R. Yahya¹ and H. M. Sidek², Faculty of Applied Science¹, UiTM Shah Alam and Universiti Kebangsaan Malaysia².

O. Scientific Competition/Event Judge Appointment:

- a) Young Selangor Innovate 2016, UiTM Puncak Alam Selangor. Organisers: UiTM and KPT
- b) Scitech 2017, UiTM Shah Alam Selangor. Organisers: UiTM, KPT and MOSTI.

END OF DOCUMENT