

ISMANIZA ISMAIL

A senior lecturer with background in occupational and environmental hygiene, biotechnology and environmental technology who is meticulous and ambitious but realistic about chances of completing tasks successfully.

Ismaniza has a profound interest in the area of occupational and environmental health, including risk assessment and control, exposure assessment, occupational hazard surveillance as well as industrial safety.

Able to work on own initiative or as a part of team and can deal with duties competently, yet still looks forward to learning much more. Noted to be capable in accepting constructive criticisms. Dedicated in maintaining high quality standards.



PERSONAL DETAILS

D.O.B./ P.O.B. : 26th February 1980/ Penang, Malaysia
Nationality : Malaysian
Languages : English, Malay and Arabic
Interests : Occupational and environmental health, traveling, and meeting new people

ACADEMIC BACKGROUND

2016 : University of Adelaide, Australia
PhD (Occupational and Environmental Hygiene)
2006 : The University of Queensland, Australia
Master of Biotechnology
2003 : Universiti Teknologi MARA, Shah Alam
B. Sc. (Hons.) Environmental Technology
2001 : Universiti Teknologi MARA, Shah Alam
Diploma in Microbiology

AWARDS

2018 : Excellent Service Award/Anugerah Perkhidmatan Cemerlang (UiTM)
2016 : Dean's Commendation for Doctoral Thesis Excellence (South Australia)
2015 : High Commendation, International Student Award (Postgraduate by Research), South Australia
2015 : Merdeka Award, Australia-Malaysia Business Council (South Australia)
2015 : 1st Prize, Poster Award, 31st ICOH Congress, Seoul, Korea
2014 : School Prize, 2014 Florey International Postgraduate Research Conference
2012 : Scholarship by the Ministry of Education Malaysia
2011 : Best Oral Presenter, 5th International Congress of Chemistry & Environment
2006 : Dean's Commendation, 3rd semester of M. Biotechnology

2005	:	Summer Vacation Scholarship from The University of Queensland
2005	:	Dean's Commendation, 1 st semester of M. Biotechnology
2005	:	Young Lecturer Scheme Scholarship
2003	:	Dean's List, 6 th Semester of B. Sc. (Hons) Environmental Technology
2002	:	Dean's List, 5 th Semester of B. Sc. (Hons) Environmental Technology
2002	:	Dean's List, 3 rd Semester of B. Sc. (Hons) Environmental Technology
2001	:	Dean's List, 2 nd Semester of B. Sc. (Hons) Environmental Technology

PROFESSIONAL AFFILIATIONS

Malaysian Industrial Hygiene Association (MIHA)
 International Commission of Occupational Health (ICOH)
 Asian Network of Occupational Health (ANOH)
 Australian Institute of Occupational Hygienists (AIOH)
 Malaysia Microbiological Society
 Rakan Alam Sekitar, Department of Environment Malaysia
 International Society for Applied Life Sciences (ISALS)

TEACHING AND SUPERVISION

a) TEACHING

Occupational Safety and Health: Industrial Hygiene

This course introduces the students to the aspects of industrial hygiene. Basic principles of industrial hygiene are explained and linked with the relevant standards and regulations. The importance of industrial hygiene programs in various working environment are also discussed. Issues in industrial hygiene and strategies to minimise the effects associated with the problems are described in depth to suit the current situations in Malaysia.

Military OEH Short Course

This course is to equip military health personnel (navy, army and airforce) with occupational hygiene knowledge, specifically in their job scope. Exposure to chemicals classified as warfare agents, ultrafine particles, PR 1547 simulations, HAZMAT (in Defence-related projects) are covered with demonstrations on sampling and analysis methods of airborne dust, asbestos, solvent vapours, isocyanates and airborne dust are demonstrated. Glove permeation and skin penetration (dermal exposure) are also discussed.

Occupational Safety and Health: Safety

This is the last part of a three parts on Occupational Safety and Health. This third part introduces the student with the aspects of occupational safety at work place, which include machineries, tools and equipments and working in confined spaces. Besides Emergency Response Preparedness planning (ERP), students are taught to identify and discuss hazards in working environments with the requirement of controls and prevention methods as required by the law.

Occupational Safety and Health

As the first of three parts of Occupational Safety and Health series, this course overviews the fundamentals and basic terms of industrial safety and hygiene. Factories and Machinery Act 1967 as well as OSHA 1994 are also discussed thoroughly.

Occupational Safety and Health II

This course provides information on Occupational Safety and Health in Malaysia, with a brief history, the self-regulatory concept. Other topics covered are causes of accidents and preventive measures, SH committee, procedures in SH Inspection, and Accident Investigation and Analysis.

Environmental Biotechnology

This course covers various biotechnological solutions towards the remediation of environmental problems. Students are introduced to the principles of genetic engineering and their role in environmental issues. Topics such as microbial transformation of organic waste, wastewater microbiology, bioremediation and clean technology are also discussed.

Hydrology and Water Resources

This course interactively engages students cognitively and scientifically in areas of hydrology and water resources. As fundamentals, hydrology is introduced as earth science that concerned with the distribution and movement of water on earth surface as well as for measuring present conditions and estimating future variations in water resources availability and demand. They are also exposed to the concepts of sustainable water resources management and conservation.

Water Resources Technology

Following Hydrology and Water Resources, this sequel subject further discusses the concepts of water budget and its use in analyzing water supply/distribution problems, potential solution and sustainable water resources management. Various water purification technologies and calculations of Water Quality Index are also incorporated in the course.

Business and Environment

The course overviews the balance between business and the impacts to the environment; from raw materials to waste treatment. Sustainable business and cleaner production are also explained in detail, with relation to maintaining wealth whilst conserving and protecting the environment.

Industrial Studies

The course introduces the students to the basic industrial safety. Hazards, risk and danger are widely discussed with real situation examples.

Ecology and Ecosystem

The course covers the hierarchical structure of ecology species followed by populations, communities, and ecosystems. Each topic focuses on a key ecological principle and provides applied examples to further demonstrate the concept of both classical ecological studies as well as current issues in ecology.

b) SUPERVISION*Project and Thesis Supervision (Degree with Honours)*

Level	Title/Student's name	Project Completion
Postgraduate	Pesticide exposure to foggers: dermal and inhalational (Nur Baizura Lawiyai)	On-going
Postgraduate	Occupational exposure to acephate: glove permeation study (Norshahida Saberi)	2017
Undergraduate	Lighting at work: An analysis of the lighting quality and the possible associated symptoms (Fatin Masturah Amin Razip)	On-going
Undergraduate	Effects of office lighting workers and potential effects of Computer Vision Syndrome (CVS) (Nurul Assyiqin Sulaiman)	On-going
Undergraduate	Lighting intensity at UiTM laboratories and the effects on the occupants (Nurul Izzati Darul 'Aludin)	On-going
Undergraduate	Personal exposure monitoring of particulates towards leaf blower workers (Ahmad Asyraf Deris)	2017
Undergraduate	Heavy metals in low-priced toys (Muhammad Alif Azyraf Azmi)	2017
Undergraduate	Fingerprint patterns and chemical properties: analysis and comparison with latent fingerprints (Nur Nisa Nabilah Zakaria)	2017
Undergraduate	Noise exposure monitoring in furniture making factories (Aunie Afifah Abdul Mutalib)	2017
Undergraduate	Analysis of dye of blue ballpoint ink using UV-Vis Spectroscopy and HPLC (Nur Atiqah Mohd Fadzil)	
Undergraduate	Dermal exposure to OPs: Glove permeation of acephate (Mohd Nur Fitri Roslan)	2017
Undergraduate	Wipe sampling of acephate for oil palm plantation workers (Muhamad Izzad Sharif Saharuddin)	2017
Undergraduate	Noise in scrap metal factory: effects on blood pressure of workers (Siti Nurakmal Nazri)	2016

Undergraduate	Effects of noise exposure on blood pressure of wrought iron factory workers (Fatin Adlina Mohd Nasir)	2016
Undergraduate	Occupational noise exposure and blood pressure level of airport workers (Nor Izzati Che Ahmd)	2016
Undergraduate	Outdoor Air Quality Assessment At School: PM ₁₀ Concentration and Its Elemental Composition (Hamad Shakir Othman)	2012
Undergraduate	Comprehensive Study of Selected In-Situ Parameters in Tasik Mutiara, Puchong (Muhammad Faisal Yunus)	2012
Undergraduate	A Study of Lake Eutrophication by Nutrient Loading at Tasik Mutiara, Puchong (Mohamad Anas Hussien)	2012
Undergraduate	Nosocomial Infection: Biological Indoor Air Quality Assessment in Healthcare Facilities (Norsyakirin M Bakari)	2012
Undergraduate	Biological Indoor Air Quality Assessment: Fungi in Healthcare Facilities (Farah Haneem Hashim)	2012
Undergraduate	Biological Indoor Air Quality (Fungi) and Its Determinants in Childcare Centres (Wan Norhamima Wan Deraman)	2012
Undergraduate	Indoor Airborne Bacteria: Distribution and Concentration in Childcare Centres (Mohd Fitri Md Sarip)	2012
Undergraduate	Antioxidant and chemical composition of <i>Hibiscus sabdariffa</i> (Roselle) (Fathin Ismah Roshide)	2012
Undergraduate	Comparison of Organophosphorus Pesticides Contents in <i>Apium graveolens</i> (Nur Aqilah Mohd Yusof)	2011
Undergraduate	Effects of Palm Oil Mill Effluent (POME) on Soil (Hasneewaty Kamaruddin)	2010
Undergraduate	Identification of indoor bacteria and fungi at Pharmaniaga building, Shah Alam (Ummi Kalthum Mustapha)	2010
Undergraduate	Determination of microbial existence and contamination in indoor air of a medical centre (Nurfasihah Roslan)	2010
Undergraduate	Enhancing bioremediation of petroleum contaminated soil by using waste sludge (Sherina Kamal)	2009

Undergraduate	Comparison of bioaerosols in urban and suburban housing area (Mohd Azlan Anuar)	2009
Undergraduate	Water Quality of Selayang Hot Springs (Nurul Hidayah Zulkipli)	2009
Undergraduate	Comparative study of adsorbent for colour removal from aqueous solution by commercial activated carbon and coir pith activated carbon (Adlil Rajiah Mohd Nasir)	2009
Undergraduate	Biodegradation of textile dye using soil-isolated bacteria (Anis Amira Abdul Manap)	2009
Undergraduate	Biodecolorization of textile dye using white rot fungi (Siti Janatul Adeni)	2009
Undergraduate	Determination of Heavy Metals in Fish Muscles at Tasik Mutiara, Puchong Idaliza Mat Salleh	2008
Undergraduate	In situ water quality and heavy metal contents of Sungai Damansara (Murniza Omar)	2008
Undergraduate	Effluent Quality from Wastewater Treatment Plant in UiTM and IWK (Siti Khadijah Ibrahim)	2008
Undergraduate	Water quality monitoring of Sungai Kuning (Zaidatulnisha Zainol)	2008
Undergraduate	Oil spill removal by using sugarcane bagasse (Farah Hanis Mohd Fadzil)	2008
Undergraduate	Determination of Particulate Matter (PM ₁₀) Concentration and Elemental Composition at the Damansara-Puchong Highway (LDP) Toll Plaza a.k.a Sunway Toll Plaza (Hamzah Ahmad)	2007
Undergraduate	Water Quality Monitoring of Sungai Renggam (Nur Sattirah Al-Nujma Othman)	2007
Undergraduate	Water Quality Monitoring in Tasik Chini (Khairul Ezwan Razali)	2007
Undergraduate	Removal of Oil Spill by Using Sawdust (Rohaida Melisa Mohd Faudzi)	2007
Undergraduate	Oil Removal Using Activated Carbon Prepared from Paddy Husks (Asmani Ali)	2007
Undergraduate	Bioadsorption of Aqueous Lead Using Tea Waste (Seri Suharni Jamingon)	2007

RESEARCH AND PUBLICATIONS

a) PUBLICATIONS (JOURNAL AND CONFERENCE PAPERS)

Ismail, I., Gaskin, S., Pisaniello, D. & Edwards, J. W. (2017). Organophosphorus pesticide exposure in agriculture: effects of temperature, ultraviolet light and abrasion on PVC gloves. *Industrial Health*, <http://dx.doi.org/10.2486/indhealth.2017-0157>

Ismail I., Pisaniello D., Gaskin S., Edwards, J.W. Performance of PVC Gloves: Effects of Temperature, Ultraviolet (UV) and Abrasion on Permeation of Organophosphorus Pesticides (OPs). 34th Annual Conference of the Australian Institute of Occupational Hygienists, Gold Coast, December 2016. Published in the *Proceedings of the 34th Annual Conference of the Australian Institute of Occupational Hygienists*.

Ismail, I., Pisaniello, D., Gaskin, S., & Edwards, J.W., (2015), Dermal Exposures to Organophosphorus Pesticides for ambulance workers - Permeation through disposable gloves: Findings for omethoate, *J Health & Safety Research & Practice* 7(1), 14-22

Ismail I., Pisaniello D., Gaskin S., Edwards, J.W. Dermal absorption of organophosphorus insecticides: effects of concentration and temperature on skin penetration of omethoate. 33rd Annual Conference of the Australian Institute of Occupational Hygienists, Perth, December 2015. Published in full in the *Proceedings of the 33rd Annual Conference of the Australian Institute of Occupational Hygienists*, Cross, M. (Ed). AIOH, Perth p71-79. ISBN 978-0-9775920-9-8.

Ismail I., Pisaniello D., Gaskin S., Edwards, J.W. Dermal exposures to organophosphorus pesticides for ambulance workers - Permeation through disposable gloves: Findings for Omethoate. 32nd Annual Conference of the Australian Institute of Occupational Hygienists, Melbourne, December 2014. Published in full in the *Proceedings of the 32nd Annual Conference of the Australian Institute of Occupational Hygienists*, R. Golec (Ed). AIOH, Melbourne p137-146. ISBN 978-0-9803010-1-4.

Ismail I, Pisaniello D, Gaskin S, Edwards JW. "The Effects of Temperature, Ultraviolet (UV) and Abrasion on the Performance of Gloves Used By Agricultural Workers Handling Organophosphate Pesticides (OPs)." 31st International Commission on Occupational Health, Seoul, Korea June 2015. Published in the *Proceedings of the 31st ICOH Congress*.

M.N Mamat, **I. Ismail** S.F. Mahamood (2010). Islamic Philosophy on Behaviour-based Environmental Attitude: *Asian Journal of Environment Behaviour Studies*. Vol 1, No 2 May 2010: Pg 44-60.

Ismaniza Ismail, Rusdin Laiman & Hamzah Ahmad (2011) Study of Particulate Matter (PM₁₀) Concentration and Elemental Composition at Damansara-Puchong Highway. *Proceedings of 2011 2nd International Conference on Biology, Environment and Chemistry (ICBEC 2011)*. 28-30 December 2011. Dubai, UAE. ISSN- 2010-4618. Pg 339-343. ISBN 978-981-07-1052-1.

Ismaniza Ismail & Nurfasihah Roslan (2011) Bioaerosols and Nosocomial Infection in a Medical Centre in Kuala Lumpur. *Simposium Kimia Analisis Malaysia (SKAM-24) Conference Proceedings*, 21-23 November 2011. Langkawi, Kedah Darul Aman. Pg 111.

Ismaniza Ismail & Idaliza Mat Saleh (2011) Biomagnification of Heavy Metals in Fish: A Case Study at Tasik Mutiara, Puchong. Simposium Kimia Analisis Malaysia (SKAM-24) Conference Proceedings, 21-23 November 2011. Langkawi, Kedah Darul Aman. Pg 102.

Ismaniza Ismail & Lindsay I. Sly (2011). *Pedomicrobium* Enumeration in Biofilm from an Expanded Bioreactor for Manganese Removal. International Conference on Environment and BioScience, 21-22 October 2011. Cairo, Egypt. International Proceedings of Chemical, Biological & Environmental Engineering, Vol.21. Pg 167-171. ISBN 978-981-08-9919-6.

Ismaniza Ismail & Hasneewaty Kamarudin (2011). Effects of Palm Oil Mill Effluent (POME) on the Soil and Growth of *Brassica hirta*: 5th International Congress of Chemistry and Environment Conference Proceedings. 27-29th May 2011. Port Dickson, Negeri Sembilan. Pg 84.

Mohd Nor Mamat, Siti Fatahiyah Mahamood & **Ismaniza Ismail (2010).** Islamic Philosophy on Behaviour-based Environmental Attitude: 1st National Conference on Environment-Behaviour Studies (1nCEBS) Proceedings. Shah Alam: UPENA. Pg 123-132.

Ismail, I. (2008). Detection and quantitation of *Pedomicrobium* in biofilm from an expanded bed bioreactor for manganese removal from drinking water. Simposium Kimia Analisis Malaysia (SKAM - 21), 25-27 November 2008. Universiti Malaysia Sabah. Pg 73.

b) BOOKS AND TECHNICAL WRITING

Ismaniza Ismail, Wan Ramlee, Industrial Safety I: An Introduction for Environmental Technologists, University Publication Centre (UPENA), UiTM 2011. ISBN 978-967-363-298-5

Ismaniza Ismail, Wan Ramlee, Industrial Safety II: An Introduction for Environmental Technologists, University Publication Centre (UPENA), UiTM 2011. ISBN 978-967-363-299-2

Wan Ramlee, **Ismaniza Ismail & Nurul Nadiah,** Preliminary Study on Illegal Dumping in Seksyen 16, 17, 18 and 24 of Majlis Bandaraya Shah Alam, UiTM 2008.

Wan Ramlee, Sulaiman Shaari, Fauziah Ismail, Rusdin Laiman & **Ismaniza Ismail,** Guidelines on Supervision, Assessment, Evaluation and Format for Students' Project. 2nd Edition, University Publication Centre (UPENA), UiTM 2007. ISBN 978-967-305-018-5.

SELECTED WORKING EXPERIENCES

- July 2012 – present - Senior Lecturer of Environmental Technology Programme
Faculty of Applied Sciences, UiTM Shah Alam
- Aug 2006 – July 2012 - Lecturer of Environmental Technology Programme
Faculty of Applied Sciences, UiTM Shah Alam
- Nov 2005 – Feb 2006 - Vacation Scholar (research)
The University of Queensland, Australia
- Sept 2004 – Feb 2005 - Environmental Control Officer
Department of Environment, Selangor, Malaysia
- May 2003 – Jun 2003 - Practical Trainee
Dept. of Occupational Safety & Health, Selangor, Malaysia
- Dec 2000 – Feb 2001 - Medical Lab Technologist (Industrial Training)
Kuala Lumpur General Hospital, Malaysia

REFEREES

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North Terrace, South Australia 5000

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Faculty of Applied Sciences
Universiti Teknologi MARA
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