



Curriculum Vitae

AHMAD FAHMI LIM ABDULLAH

Nationality : Malaysia
Current position : Associate Professor
Department : School of Health Sciences, Health Campus, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan
Qualifications : BSc Biology (Universiti Sains Malaysia)
MSc Forensic Science (The University of Auckland, New Zealand)
PhD Forensic Science (The University of Auckland, New Zealand)
Research area : Forensic Science
Field of specialisation : Drug Analysis, Digital Enhancement, Gunshot Residue Analysis
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Graduated Students : **PhD**

Supervisor

Chang Kah Haw (2014)
Lee Khai (2021)

Co-supervisor

Lee Wee Chuen (2017)
Low Wei Zeng (2017)

MSc (Research Mode)

Supervisor

Mohd Zawawi bin Yusoff (2016)
Mohd Saharul Nizam bin Abdul Rahim (2015)
Raihanah binti Hamdan (2014)
Mohamad Ismail bin Jamaluddin (2014)

Co-supervisor

Farah Ad-din Nordin (2020)
Muhammad Naeim bin Mohamad Asri (2016)
Wan Ninee Aryantee binti Wan Mohd Pauzi (2016)
Wan Nur Syazwani binti Wan Mohamad Fuad (2016)
Hafezul Helmi bin Hamzah (2014)
Lee Wee Chuen (2012)



MSc (Mixed Mode)

Supervisor

Noorshuhaida Binti Muhamad Sufri (2020)
Siti Noriha Binti Jamal @ A Jalal (2020)
Lilian Lemat Ngau Jok (2019)
Salmimi Azira Saman (2019)
Nor Fardzera Mohamad (2018)
Nur Azzah Azhar (2018)
Sarah Aliah Amir Sarifuddin (2016)
Norzita Mohamed (2016)

Co-supervisor

Malarvili A/P Miiugason (2020)
Masum Uddin Noor Azman (2020)
Syamsul Anuar Abd Malik (2019)
Nurul Syazwani Shaari (2018)
Yasmin Syahirah Noor Azman (2018)

Selected Grants : *Project Head*

International Collaboration Fund (MOSTI) (2019-2021)

A Two-Tier Detection of Xylazine by Novel Electrochemical Sensor Screening and Gas Chromatography Determination

FRGS (MOE) (2019-2021)

A Forensic Intelligence Framework for Handwriting Characteristics among Malaysians from Different Educational Learning Systems

RU USM (2018-2021)

Development of a Colourimetric Based Sensing Device for Methamphetamine Detection during Forensic Investigation and Remediation of Clandestine Laboratory Sites

Short Term USM (2013-2015)

The Applications of Chemometric Methods for Illicit Drug Profiling from Seized Samples for Source Determination

Short Term USM (2010-2012)

Studies of the Behaviours of Gunshot Residues of Hand Firearm Ammunition Prevalent in Malaysia

Short Term USM (2009-2011)

Forensic Lipstick Analysis via Chromatography

Co-researcher

RU USM (2019-2021)

Simultaneous Determination of Xylazine as Recreational Drug and Adulterants of Illicit Drugs

Short term USM (2019-2021)

Exchange Mechanism between Ammunition and Metal Surfaces for Forensic

Firearm Investigation

FRGS (2014-2017)

Investigation of Features, Matching Techniques and Image Quality Metric for Digital Image Authentication and Forgeries Detection

PRGS (MOE) (2013-2015)

Prototype Development of a Portable Multispectral Imaging System for Forensic Applications

FRGS (MOE) (2010-2012)

Investigating and Developing Alternative Light Source for Portable Blood Stains Imaging System for Forensic Application

Selected Publications :

- Radwan Mail, Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2021). Quick discrimination of seized Erimin-5 tablets by attenuated total reflectance-Fourier transform infra-red spectroscopy, Australian Journal of Forensic Sciences. In press.
- Way Koon Teoh, Noor Zuhartini Md Muslim, Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2021) Quick determination and discrimination of commercial hand sanitisers using attenuated total reflectance-Fourier transform infrared spectroscopy and chemometrics, Analytical Methods, 13:1601-1611.
- Salmimi Azira Saman, Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2021). Profiling of cured residue of solvent-based adhesives by attenuated total reflectance–Fourier transform infrared spectroscopy with chemometrics for forensic investigation. Journal of Forensic Sciences. 66(2):608-618.
- Yudtapum Thipwimonmas, Janjira Jaidam, Kritsada Samoson, Vacharachai Khunseeraksa, Apichai Phonchai, Adul Thiangchanya, Kah Haw Chang, Ahmad Fahmi Lim Abdullah, Warakorn Limbut (2021). A simple and rapid spectrophotometric method for nitrite detection in small sample volumes. Chemosensors 2021, 9 (7).
- Saisahas K, Soleh A, Promsuwan K, Phonchai A, Mohamed Sadiq NS, Teoh WK, Chang KH, Abdullah AFL, Limbut W. (2021). A portable electrochemical sensor for detection of the veterinary drug xylazine in beverage samples. J Pharm Biomed Anal. 198:113958.
- Farah Ad-din Nordin, Uma Rashmika Bominathan, Ahmad Fahmi Lim Abdullah, Kah Haw Chang. (2020). Forensic significance of gunshot impact marks on inanimate objects: The need for translational research. Journal of Forensic Sciences. 65(1): 11-25.
- Mohd Zawawi Yusoff, Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2020), Trace elemental profile investigation of illicit heroin for forensic intelligence. Australian Journal of Forensic Sciences. 52(1):60-70.
- Khai Lee, Anis Amanina Abdul Fatah, Nuryuhanis Mohd Norizan, Zakiah Jeffrey, Fatin Hanani Md Naw, Wan Fatimah Khairunisa Wan Nor, Huan Xin Wong, Saiful Fazamil Mohd Ali, Poh Ying Lim, Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2019), Inter-rater

reliability of vehicle color perception for forensic intelligence. PLoS ONE. 2019; 14(6).

- Sarah Aliah Amir Sarifudin, Kah Haw Chang, Bee Ee Khoo, Ahmad Fahmi Lim Abdullah. (2019). Shoeprint image enhancement using Adobe® Photoshop® as an aid during forensic comparison. Malaysian Journal of Forensic Sciences. 9(1):33-37.
- Azie Azyanti Mohd Rafae, Saiful Fazamil Mohd Ali, Ahmad Fahmi Lim Abdullah, Kah Haw Chang. (2019). Colourimetric Based Detection of Gunshot Residue on Gloves Worn during Shooting. Malaysian Journal of Analytical Sciences. 23(2):229-236.
- Wei Zeng Low, Bee Ee Khoo, Ahmad Fahmi Lim Abdullah. (2018), Contactless Visualization of Latent Fingerprints on Nonporous Curved Surfaces of Circular Cross Section—A Statistical Evaluation on the Materials as Plane Mirror, Journal of Forensic Sciences. 63(4):1092-1098.
- Pei Wen Lim, Ahmad Fahmi Lim Abdullah, Kah Haw Chang. (2018). Forensic gas chromatography analysis of time elapsed gasoline in fire scene investigation. Malaysian Journal of Analytical Sciences. 22(1):72-79.
- Mohd Zawawi Yusoff, Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2018), Attenuated total reflectance–Fourier transform infra-red spectral profiling of illicit heroin for forensic intelligence. Australian Journal of Forensic Sciences. 50(5):543-551.
- Wei Zeng Low, Bee Ee Khoo, Ahmad Fahmi Lim Abdullah. (2016), Contactless Visualization of Latent Fingerprints on Nonporous Curved Surfaces of Circular Cross Section, Journal of Forensic Sciences. 61(4):1093-1099.
- Ahmad Fahmi Lim Abdullah, Kah Haw Chang (2016). Authors' response. Journal of Forensic Sciences. 61(5):1411-1412.
- Wee Chuen Lee, Bee Ee Khoo, Ahmad Fahmi Lim Abdullah. (2016), Enhancement of Seminal Stains using Background Correction Algorithm with Color Filters, Forensic Science International. 263:1-9.
- Khai Lee, Zaraiha Awang, Vanitha Kunalan, Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2016). Recovery of Ketamine from Ribena using Liquid-Liquid Extraction Followed by Gas Chromatography Techniques. Malaysian Journal of Forensic Sciences. 7(1):32-37.
- Wee Chuen Lee, Bee Ee Khoo, Ahmad Fahmi Lim Abdullah. (2016). A Robust Background Correction Algorithm for Forensic Bloodstain Imaging Using Mean-based Contrast Adjustment, Science and Justice. 56(3):201-209.
- Wei Zeng Low, Bee Ee Khoo, Zulfiqar Ali Abdul Aziz, Lingwei Low, Tjoon Tow Teng, Ahmad Fahmi Lim Abdullah. (2015), Application of acid-modified Imperata cylindrica powder for latent fingerprint development. Science and Justice. 55(5):347-354.
- Ahmad Fahmi Lim Abdullah, Kah Haw Chang, Savarana Kumar

Jayaram, Maimonah Sulaiman. (2015). A Review on Synthetic Cathinone and Its Derivatives: Analyses and Legal Status. *Malaysian Journal of Forensic Sciences* 6(1): 30-43.

- Kah Haw Chang, PT Jayaprakash, Ahmad Fahmi Lim Abdullah. (2015). Application of different standard loading approaches during solid phase microextraction for forensic analysis of single particle smokeless powders. *Australian Journal of Forensic Sciences*. 47(2):147-160.
- Raihanah Hamda, Nik Fakhruddin Nik Hassan., Wan Nur Syuhaila Mat Desa, Vanitha Kunalan, Maimonah Sulaiman, Ahmad Fahmi Lim Abdullah. (2015). Characterisation of seized clandestine methamphetamine in Malaysia. *Malaysian Journal of Forensic Sciences* 6(1):20-29.
- Kah Haw Chang, Chong Hooi Yew, Ahmad Fahmi Lim Abdullah. (2015). Behaviors of Gunshot Residues from Spent Cartridges by Headspace Solid Phase Microextraction-Gas Chromatographic Techniques. *Journal of Forensic Sciences*. 60 (4):869-877.
- Ahmad Fahmi Lim Abdullah, Kah Haw Chang, Savarana Kumar Jayaram, Maimonah Sulaiman. (2014). A Review on Synthetic Cathinone and Its Derivatives: Prevalence and Syntheses. *Malaysian Journal of Forensic Sciences* 5(2): 46-52.
- Kah Haw Chang, Chong Hooi Yew, Ahmad Fahmi Lim Abdullah. (2014). Optimization of Headspace Solid-Phase Microextraction Technique for Extraction of Volatile Smokeless Powder Compounds in Forensic Applications. *Journal of Forensic Sciences* 59(4):1100-1108.
- Ahmad Fahmi Lim Abdullah, Kah Haw Chang, Saiful Fazamil Mohd Ali. (2014). A Survey of Vehicle Top Coat Colour in Malaysia. *Malaysian Journal of Forensic Sciences* 5(2):27-30.
- Wee Chuen Lee., Ahmad Fahmi Lim Abdullah, Bee Ee Khoo. (2015). Forensic Bloodstain Imaging: A Digital Method for Stain Enhancement and Background Reduction. *Australian Journal of Forensic Sciences*. 47(1):116-124.
- Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2014). Extraction Efficiency of the Sequential Solid Phase Microextraction of Gunshot Residues from Spent Cartridges. *Malaysian Journal of Forensic Sciences* 5(1):7-11.
- Wee Chuen Lee, Bee Ee Khoo, Ahmad Fahmi Lim Abdullah, Zulfiqar Ali Abdul Aziz. (2013). Statistical Evaluation of Alternative Light Sources for Bloodstain Photography. *Journal of Forensic Sciences*. 58(3):658-663.
- Ahmad Fahmi Lim Abdullah, Kah Haw Chang, Wan Nur Syuhaila Mat Desa, Maimonah Sulaiman, Raihanah Hamdan, Vanitha Kunalan. (2014). Clandestine Drug Laboratory: Emergence, Types, Factors and Problems. *Health and the Environment Journal* 5(2): 11-27.
- Kah Haw Chang, PT Jayaprakash, Chong Hooi Yew, Ahmad Fahmi

Lim Abdullah. (2013). Gunshot Residue Analysis and its Evidential Values: A Review. *Australian Journal of Forensic Sciences* 45(1): 3-23.

- Wee Chuen Lee, Bee Ee Khoo, Ahmad Fahmi Lim Abdullah. (2012). A simple, low-cost and portable LED-based multi-wavelength light source for forensic application. *Proceedings of SPIE - The International Society for Optical Engineering*. 8560: Article number 856005.
- Kah Haw Chang, Ahmad Fahmi Lim Abdullah. (2012). Macroscopic Examination of Morphological Features of Propellant Powders Prevalence in Malaysia. *Malaysian Journal of Forensic Sciences* 3(1):46-51.
- Ahmad Fahmi Lim Abdullah, AA Abraham., Maimonah Sulaiman, Vanitha Kunalan. (2012). Forensic Drug Profiling of Erimin-5 using TLC and GC-MS. *Malaysian Journal of Forensic Sciences* 3(1):11-15.
- Ahmad Fahmi Lim Abdullah, Yanthidra Marimuthu, Kah Haw Chang, NF Mohamad Said, Noor Zuhartini Md Muslim, Nik Fakhuruddin Nik Hassan, Mohd Hadzri Yaacob, Chong Hooii Yew. (2011). Forensic Discrimination of Lipsticks by Thin Layer Chromatography and Gas Chromatography-Mass Spectrometry. *Malaysian Journal of Forensic Sciences* 2(1):22-28.
- Muhammad Sufiyan Azah, Ahmad Fahmi Lim Abdullah (2011). A Study on the Variability of Fresh Diesel from Service Station in Kota Bharu using GC-MS and PCA. *Health and the Environment Journal* 2(2):43-48.
- Wai Yeap Chan, AR Rusyidah, Kee Bian Chan, Ahmad Fahmi Lim Abdullah. (2011). Analytical Studies of N-Benzylpiperazine and 1-(3-Trifluoromethylphenyl)piperazine- A New Class of Designer Drug of Abuse. *Malaysian Journal of Chemistry* 13(1):8-17.
- Ahmad Fahmi Lim Abdullah, Gordon M. Miskelly. (2010). Residues at Clandestine Methamphetamine Laboratories and Their Health Effects. *Health and the Environment Journal* 1(1):21-29.
- Ahmad Fahmi Lim Abdullah, Gordon M. Miskelly, Chong Hooi Yew. (2010). Quality Scientific Approach for Remediation and Analysing Clandestine Laboratory Residues. *Malaysian Journal of Chemistry* 12(1):1-8.
- Kah Haw Chang, PT Jayaprakash, Chong Hooi Yew, Ahmad Fahmi Lim Abdullah. (2010). Health Concern on Lead Encountered during Firing Practices: A Review. *Health and the Environment Journal* 1(2):24-29.
- Wai Yeap Chan, Kee Bian Chan, Ahmad Fahmi Lim Abdullah. (2010). A Review on Benzylpiperazine and Trifluoromethylphenylpiperazine: Origins, Effects, Prevalence and Legal Status. *Health and the Environment Journal* 1(2):38-50.
- Ahmad Fahmi Lim Abdullah, Gordon M. Miskelly (2010). Recoveries of Trace Pseudoephedrine and Methamphetamine



Residues from Impermeable Household Surfaces: Implications for Sampling Methods Used during Remediation of Clandestine Methamphetamine Laboratories. *Talanta* 81:455-461.

- Ahmad Fahmi Lim Abdullah, Gordon M. Miskelly. (2009). Formation of Trifluoroacetylated Ephedrine during the Analysis of a Pseudoephedrine-Formaldehyde Adduct by TFAA Derivatization Followed by GC-MS. *Journal of Forensic Sciences* 54(2):365-369.

- Professional Services :**
- Chairperson, Medical and Health Sciences Transition Committee, Ministry of Health Malaysia.
 - Member of the Allied Health Professions (AHP) Working Act for Forensic Science Officer professions, Ministry of Health Malaysia.
 - Member of the Act and Regulations Committee, Ministry of Health Malaysia.
 - Evaluation Panel of Malaysian Qualifications Agency.
 - Institutional Representative to the Technical Committee on Forensic Sciences for the development of ISO/TC 272 (Malaysian Standards) by Malaysian Institute of Chemistry.
 - Panel Member in Technical Working Group (TWG 35) for Trace Evidence Analysis, under the Malaysian Laboratory Accreditation Scheme by Department of Standards Malaysia.
 - Panel Member in Technical Working Group (TWG 26) for Controlled Substances in Forensic Science Analysis, under the Malaysian Laboratory Accreditation Scheme by Department of Standards Malaysia.