

Curriculum Vitae



DR. NORAINI KASIM

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CAREER :

Senior Lecturer (2016- current)

Lecturer (2008-2016)

EDUCATIONS :

1. PhD in Analytical Chemistry (2020), Faculty of Applied Sciences, Universiti Teknologi MARA.
2. Master's Degree in Analytical Chemistry and Chemical Instrumentation (2007), Department of Chemistry, Faculty of Science, Universiti Malaya.
3. Bachelor of Science (Hons.) in Applied Chemistry (2005), Faculty of Applied Sciences, Universiti Teknologi MARA.
4. Diploma in Microbiology (2003), Faculty of Applied Sciences, Universiti Teknologi MARA.

RESEARCH :

(Title), (Duration), (Source), (Role), (Cost), (Status)

1. Malaysian Priorities Herbs: LCMS Profiles and Establishment of Validated HPLC Methods of Chemical Markers, 2023-2026, Herbal Research Grant Scheme (HRGS), Member, RM 400,000.00, Active.
2. Antidepressant Potential of Purinium Alkaloids from *Heterostemma piperifolium* using Zebrafish Metabolomics, 2023-2025, Fundamental Research Grant Scheme (FRGS), Project Member, RM 94, 400.00, Active.

3. Metabolites Of Underutilised Fruit-based Functional Food and Pathways Analysis in Obese Rat Model, 2022 - 2024, Dana Ducs (DANA DUCS), Project Member, RM 100,000.00, Active.
4. Anti-obesity Activities of *Syzygium claviiform* Fruit Extracts: In Vitro And In Vivo Studies, 2022 - 2024, Dana Ducs (DANA DUCS), Project Member, RM 100,000.00, Active.
5. Formulation Development of Cream and Gel from *Polygonum minus* and Its In Vitro And Ex Vivo Comparative Assessment for Topical Application, 2022 - 2024, Dana Ducs (DANA DUCS), Project Member, RM 50,000.00, Active.
6. Enhanced Mcg-deep Neural Network Classification Model of Kelulut Honey Authentication from Lcms-based Metabolomics Analysis, 2022 - 2024, Fundamental Research Grant Scheme (FRGS), Project Member, RM 90,000.00, Active.
7. Chemical Profiling, Dereplication and Isolation of Antimicrobial Constituents from The Stembarks of *Lepisanthes rubiginosa* (roxb.) Bl, 2019 - 2022, The Fundamental Research Grant Scheme for Research Acculturation of Early Career Researchers (FRGS RACER), Project Member, RM 51,200.00, Completed.
8. Isolation and characterization of cytotoxic chemical constituents from *Goniothalamus lanceolatus*, Malaysian Ministry of Education, Fundamental Research Grant Scheme (FRGS), Project Leader, 2010-2012, RM 46, 400, Completed.
9. Isolation and characterization of chemical constituents of *Meiogyne virgate* and *Meiogyne monosperma*, Malaysian Ministry of Education, Fundamental Research Grant Scheme (FRGS), Project Member, 2009-2011, RM 36, 000, Completed.
10. Performances of a Multidimensional On-line SPE-LC-DAD Method for Determination of Benzo(a)Pyrene in Coffee, Universiti Teknologi Mara, Excellence Fund, Project Leader, 2010, RM 7, 000, Completed.

PUBLICATIONS :

Adib, A. M., Salmin, N. N., **Kasim, N.**, Ling, S. K., Cordell, G. A., & Ismail, N. H. (2024).

The metabolites of Piper sarmentosum and their biological properties: a recent update. *Phytochemistry Reviews*, 1-33.

Mohamad Ridhwan, M. J., Hashim, N. A. A., **Kasim, N.**, Abdullah, N. N., Inayatsyah, N. A., Abid, O., ... & Imran, S. (2024). Development of a Novel CYP3A4 Classifier Model via Site of Metabolism (SOM)-based Molecular Docking, Multivariate

Analysis and Molecular Dynamics of Known Substrates and Inhibitors. *Journal of Computational Biophysics and Chemistry*, 23(2), 243-269.

Kasim, N., Afzan, A., Manshoor, N., and Ismail, N. H. (2023). Quantification of Vitexin and Isovitexin in Seven Varieties of *Ficus deltoidea* in Peninsular Malaysia. *Malaysian Journal of Chemistry*.

Jani NA, Maarof NI, Zahari MMFM, Jamil M, Zakaria II, Mohamad Zobir SZ, **Kasim N**, Salin NH, Mohamad Ali NA, Khalid WEFW, Pungot NH. (2023). Phytochemical profiling of the essential oils from three Curcuma species and their in vitro and in silico dengue protease inhibition activity. *Natural Product Research*.

Kasim, N., Afzan, A., Mediani, A., Low, K. H., Ali, A. M., Mat, N., ... & Ismail, N. H. (2022). Correlation of chemical profiles obtained from ¹H-NMR and LC-MS metabolomics with α -glucosidase inhibition activity for varietal selections of *Ficus deltoidea*. *Phytochemical Analysis*.

Kamal, M. S. A., Mediani, A., **Kasim, N.**, Ismail, N. H., Satar, N. A., Ab Azis, N., ... & Singh, H. J. (2022). Blood pressure and urine metabolite changes in spontaneously hypertensive rats treated with leaf extract of *Ficus deltoidea* var *angustifolia*. *Journal of Pharmaceutical and Biomedical Analysis*, 210, 114579.

Osman, C. P., **Kasim, N.**, Mohamed Salim, N. S. A., & Abdul Aziz, N. (2022). Discrimination of 11 Malaysian Durian Cultivars Based on Sulfur-Containing Volatiles and Esters Using Multivariate Data Analysis. *Natural Product Communications*, 17(1), 1934578X211069235.

Noor, H. S. M., Ismail, N. H., **Kasim, N.**, Mediani, A., Zohdi, R. M., Ali, A. M., ... & Al-Mekhlafi, N. A. (2020). Urinary Metabolomics and Biochemical Analysis of Antihyperglycemic Effect of *Ficus deltoidea* Jack Varieties in Streptozotocin-Nicotinamide-Induced Diabetic Rats. *Applied Biochemistry and Biotechnology*, 1-21.

Afzan, A., **Kasim, N.**, Ismail, N. H., Azmi, N., Ali, A. M., Mat, N., & Wolfender, J. L. (2019). Differentiation of *Ficus deltoidea* varieties and chemical marker determination by UHPLC-TOFMS metabolomics for establishing quality control criteria of this popular Malaysian medicinal herb. *Metabolomics*, 15(3), 35.

Kamal, M. S. A., Ismail, N. H., Satar, N. A., Azis, N. A., Radjeni, Z., Mohammad Noor, H. S., **Kasim, N.** & Singh, H. (2019). Standardized ethanol-water extract of *Ficus deltoidea* *Angustifolia* reduces blood pressure in spontaneously hypertensive rats. *Clinical and Experimental Hypertension*, 41(5), 444-451.

- Noor, H. S. M., Ismail, N. H., **Kasim, N.**, Zohdi, R. M., & Ali, A. M. (2016). Hypoglycemic and glucose tolerance activity of standardized extracts *Ficus deltoidea* varieties in normal rats. *J Med Plants Stud*, 4, 275-79.
- Kim, R. P. T., Bihud, V., Bin Mohamad, K., Leong, K. H., Bin Mohamad, J., Bin Ahmad, F., **Kasim, N** & Awang, K. (2013). Cytotoxic and antioxidant Compounds from the stem bark of *Goniothalamus tapisoides* Mat Salleh. *Molecules*, 18(1), 128-139.
- Alias, A., Awang, K., **Kasim, N.**, Bihud, N. V., & Ismail, N. H. (2013). Triterpenes, Sesquiterpene and Alkaloids from *Meiogyne monosperma*. In *The Open Conference Proceedings Journal* (Vol. 4, No. 1).
- Kasim, N.**, Osman, R., Saim, L. I., & Licaberth, I. (2012). Determination of Benzo [a] pyrene in Malaysian commercialized coffee powder using solid phase extraction and gas chromatography. *Malaysian Journal of Analytical Sciences*, 16(1), 39-42.

SUPERVISION

(Title), (Role), (Name of Candidates), (Academic Session), (Level)

Kelulut Honey Authentication using LCMS-based Metabolomics Analysis, Supervisor, Nur Afifah Binti Ibrahim, SESI 2 2023/2024, **MASTERS**

¹NMR-based Metabolomics Coupled With Chemometrics For The Characterisation And Discrimination Of *Piper Sarmentosum* (kadok) In Combination With Bioactivity Assessment, Co-Supervisor, Adiana Binti Mohamed Adib, SESI 1 2020/2021, **PHD**

Dual Cell-to-cell Communication Systems Inhibition Approach For Controlling Pathogenic Bacteria Traits (*Streptococcus Mutans*) To Prevent Or Treat Oral Disease By Producing Antibiofilm From Endophytes Of Medicinal Plants, Co-Supervisor, Nur Raihan Aqilah Binti Mohammad Azmin, SESI 2 2021/2022, **MASTERS**

Forensic Discrimination Of Laser Printer Toners Using Attenuated Total Reflectance - Fourier Transform Infrared Spectroscopy (atr-ftir) And Scanning Electron Microscope - Energy Dispersive X-ray Spectroscopy (sem-edx), Co-Supervisor, Adlina Syafura Binti Ahmad Sabri, SESI 1 2020/2021, **MASTERS**

FTIR/NMR-Based Metabolomics Study of Streptozotocin-Induced Diabetic Rats Treated with *Typhonium Flagelliforme*, Co-Supervisor, Muhammad Aiman Faris Bin Maznan, SESI 1 2020/2021, **MASTERS**

ADMINISTRATIVE POSITIONS

Coordinator, National Outcome-Based Learning (NOBLE) for Faculty of Applied Sciences. January 2024 – current.

Admin, CDL-CQI UFuture System for Faculty of Applied Sciences. January 2024 – current.

Coordinator, Final Year Project 1 for Bachelor of Science (Hons) Chemistry (Forensic Analysis). September 2021- current.

Chairman, Curriculum Review for Bachelor of Science (Hons) Chemistry (Forensic Analysis). January 2021- current.

SCHOLARSHIPS

Scholarship Fellow for a Study/Research Stay, University of Geneva, 2014.

Staff Scholarship for PhD, Ministry of Higher Education, 2013-2017.

Young Lecturer Scholarship for Master's Degree, Ministry of Higher Education, 2005-2007.