

CURRICULUM VITAE

Ts. ChM. Dr.

SITI KHADIJAH BINTI AB RAHMAN



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Jabatan Pengurusan Tanah,
Fakulti Pertanian UPM



AREAS OF INTEREST

Soil Analysis, Environmental Chemistry, Imprinting Technology, Heavy Metal Removal, Food & Drug Analysis, Liquid Chromatography/Mass Spectrometry, and Method Development & Validation.



PROFESSIONAL MEMBERSHIP

Institut Kimia Malaysia (IKM)

Member 2015 - present
M/4235/7091/15

Persatuan Sains Analisis Malaysia (ANALIS)

Member 2017 - present
A445

Malaysia Board of Technologists (MBOT)

Professional Technologist 2020 - present
PT20120215

Institute of Materials, Malaysia (IMM)

Affiliate Ordinary Member 2020 - present
AO-9439



WORK EXPERIENCE

CURRENT POSITION

Senior Lecturer 03/2026 - present
Department of Land Management
Faculty of Agriculture
Universiti Putra Malaysia

PAST WORK EXPERIENCES

Chemist / Researcher 07/2019 - 03/2026
Bahagian Penyelidikan & Inovasi,
Institut Sukan Negara (ISN)

Chemistry & Science Tutor 10/2018 - 02/2021
Pusat Tuisyen Faiza Jaya, BSP Kajang

Enumerator / Researcher 03/2019 - 06/2019
Institut Teknologi Maju, UPM

Enumerator / Researcher 09/2017 - 11/2017
Institut Teknologi Maju, UPM

Research Assistant 07/2013 - 02/2014
Faculty of Science, UPM

Laboratory Demonstrator 02/2011 - 12/2012
Faculty of Science, UPM

Research Assistant 12/2009 - 06/2010
Faculty of Science, UPM

Industrial Trainee 05/2008 - 07/2008
Agensi Nuklear Malaysia, Bangi



EDUCATION BACKGROUND

2017

Doctor of Philosophy (Analytical Chemistry)

University Putra Malaysia (UPM)
Title: Fabrication and Characterization of Ion Imprinted Polymer for Removal of Mercury.

2013

Master of Science (Analytical Chemistry)

University Putra Malaysia (UPM)
Title: Preparation and Characterization of Molecularly Imprinted Polymer for Melamine.

2009

Bachelor of Science (Honours) Major in Chemistry

University Putra Malaysia (UPM)
Title: Preparation and Use of Poly(Hydroxamic Acid) Ion Exchange Resin from PMA Grafted OPEFB Fibre for Heavy Metal Removal.

2006

Matriculation Programme

Kolej Matrikulasi Negeri Sembilan

2004

Sijil Pelajaran Malaysia

SMU(A) Maahad Muhammadi Perempuan, Kota Bharu





SKILLS



INSTRUMENT

| | |
|--------------------------|--------------|
| LCMS/MS | Advance |
| UPLC/HPLC | Advance |
| Automated ELISA Analyzer | Advance |
| Biochemistry Analyzer | Advance |
| UV-Vis | Intermediate |
| ICP-MS | Intermediate |
| FESEM | Intermediate |
| TGA/DTG | Intermediate |
| BET | Fundamental |
| FTIR | Fundamental |

SOFTWARE

| | |
|-----------------|--------------|
| Chemdraw | Advance |
| Analyst | Advance |
| Multiquant | Advance |
| MS Office Tools | Advance |
| ACD Labs | Intermediate |



LANGUAGES

Malay, English and basic Arabic



HONOURS AND AWARDS

| | |
|---|-------------|
| Anugerah Khidmat Cemerlang | 2022 |
| Anugerah Pekerja Terbaik (Bulan Februari 2021) | 2021 |
| Certificate of Achievement (Graduate on Time) | 2017 |
| My Brain 15 (MyPhD Scholarship) | 2014 - 2017 |
| My Brain 15 (MyMaster Scholarship) | 2011 - 2012 |
| Graduate Research Fellowship | 2010 - 2012 |



TRAINING AND COURSES

| | |
|--|--------------------|
| Application of MS Excel for Data Analysis in Analytical | 2025 IKM |
| Mastering Systematic Review and Meta-Analysis - Participant | 2024 ISN |
| LC-MS & Molecular Network Data Mining Workshop - Participant | 2024 UKM |
| HPLC Troubleshooting - APAC Participant | 2022 Phenomenex |
| Bengkel Pengenalan Anti Doping Participant | 2021 ADAMAS |
| Measurement Uncertainty in Chemical Analysis - Participant | 2021 IKM |
| LCMS/MS training - theory & practical -Speaker & trainer | 2020 ISN |
| Procedures of Method Validation & Verification (ISO 17025) Participant | 2020 IKM |
| Oil and Gas Safety Passport (OGSP) - Participant | 2014 NIOSH |



CONTRIBUTION, INVOLVEMENT AND LEADERSHIP

SUPERVISION

- Supervision of Research Assistant** 2024
Supervised one RA in 2024, providing guidance on daily research tasks, experimental work, and progress reporting.
- Supervision of internship students (chemistry)** 2020 - 2025
Supervised 10 final-year internship students from UPM, UiTM, and Nilai University, overseeing their laboratory work and mentoring them on research projects.
- Assisted in Supervising Undergraduate Thesis Projects** 2014 - 2016
Assisted PhD supervisor in mentoring 5 final-year students, supporting their project planning, execution, and thesis writing.

INVOLVEMENT AND LEADERSHIP

- Sports Inno Challenge (Chairman) 2025
- PERFORM Podcast Episod 19 (Invited Panel) 2025
- K-TALK Series 8/2023 (Invited Panel) 2024
- High Performance Sports Colloquium (HPSC) - Guest Speaker & Scientific Reviewer 2022
- International Virtual Sports Medicine and Sports Science Conference (VSMSS 2020) 2020
- Scientific Reviewer & Scientific Committee
- Moderator, parallel session
- National Sports Month (Fit Malaysia) - Exhibitor (national level) 2019
- Research Exhibition (Institut Teknologi Maju, UPM) - Exhibitor (university level) 2017
- Science Exhibition (Convocation Expo, UPM) - Exhibitor (university level) 2017

OTHER CONTRIBUTION

- Commercialization of services (prohibited substances analysis in food supplements)** 2020 - 2026
Led the development and delivery of analytical services for detecting prohibited substances in food supplements, including: Diuretic, Anabolic Androgenic Steroid (AAS), Specified Stimulant, and Prohibited Substances (by WADA) full screening.
- Tender and Procurement Committee** 2019 - 2026
Involved in various tender and procurement committees as chairperson/committee member.
- DECODED Bulletin Editorial Board (ISN)** 2021 - 2026
Contributed as a member of the DECODED Bulletin Editorial Board.



RESEARCH AND PUBLICATION

Refer attachment 1

RESEARCH AND PUBLICATION

1. JOURNAL ARTICLE/BOOK CHAPTER

Siti Khadijah Ab Rahman, Mohd Rizal Md Razali, Yeo Wee Kian & Nurhamizah Rahmat. (2026). Determination of diuretics in the whey protein supplements: uncovering hidden contaminants in the sports nutrition market. *Acta Chimica Slovenica* journal, 73. <https://acsi-journal.eu/index.php/ACSi/article/view/9226>



Siti Khadijah Ab Rahman, Mohd Rizal Md Razali, Yeo Wee Kian, Nurhamizah Rahmat & Nor Azhani Abd Hazis (2024). Doping Trends in Malaysian Sports: Analysis of Banned Substances Usage among Athletes. *International Journal of Human Movement and Sports Sciences*, 12(6), 943 - 952. DOI: 10.13189/saj.2024.120606



Siti Khadijah Ab Rahman, Yeo Wee Kian and Umi Zulaikha Mohd Azmi. (2024). Detection of Diuretics in Whey Protein Utilizing Liquidliquid Extraction Coupled with Liquid Chromatography Tandem Mass Spectrometry (LLE-LC-MS/MS): A Comprehensive Analysis. *Malaysian Journal of Analytical Sciences*, 28(5), 1059 – 1070. https://mjas.analis.com.my/mjas/v28_n5/v28_n5.html



Warda Mohamed Altogbia, Nor Azah Yusof, Zulkarnain Zainal, Azni Idris, **Siti Khadijah Ab Rahman**, Siti Fatimah Abd Rahman & Azizul Isha. (2021). Molecular imprinted polymer for β -carotene for application in palm oil mill effluent treatment. *Arabian Journal of Chemistry*, 14(2), 102928. <https://doi.org/10.1016/j.arabjc.2020.102928>



Nor Azah Yusof, Nor Ain Shahera Khairi & **Siti Khadijah Ab. Rahman**. (2020). Molecularly imprinted polymer for water contaminants. In *Polymer Nanocomposite-Based Smart Materials* (pp. 211-233). Woodhead Publishing. <https://doi.org/10.1016/B978-0-08-103013-4.00012-1>



Noremylia Mohd Bakhori, Nor Azah Yusof, Jaafar Abdullah, Helmi Wasoh, **Siti Khadijah Ab Rahman** & Siti Fatimah Abd Rahman. (2020). Surface enhanced CdSe/ZnS QD/SiNP electrochemical immunosensor for the detection of Mycobacterium tuberculosis by combination of CFP10-ESAT6 for better diagnostic specificity. *Materials*, 13(1), 149. <https://doi.org/10.3390/ma13010149>



Siti Khadijah Ab. Rahman, Nor Azah Yusof, Abdul Halim Abdullah, Faruq Mohammad, Azni Idris & Hamad A. Al-Lohedan. (2018). Evaluation of porogen factors for the preparation of ion imprinted polymer monoliths used in mercury removal. *Plos one*, 13(4), e0195546. <https://doi.org/10.1371/journal.pone.0195546>



Siti Khadijah Ab. Rahman, Nor Azah Yusof, Faruq Mohammad, Abdul Halim Abdullah & Azni Idris. (2017). Ion imprinted polymer monoliths as adsorbent materials for the removal of Hg (II) from real-time aqueous samples. *Current Science*, 113(12), 2282-2291. <https://www.jstor.org/stable/26493536>



Nor Azah Yusof, **Siti Khadijah Ab. Rahman**, Mohd Zobir Hussein & Nor Azowa Ibrahim. (2013). Preparation and characterization of molecularly imprinted polymer as SPE sorbent for melamine isolation. *Polymers*, 5(4), 1215-1228. <https://doi.org/10.3390/polym5041215>



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2. THESES

Siti Khadijah Ab. Rahman. (2017). Fabrication and Characterization of Ion Imprinted Polymer for Removal of Mercury.

<http://psasir.upm.edu.my/id/eprint/71023/1/FS%202017%2075%20IR.pdf>



Siti Khadijah Ab. Rahman. (2013). Preparation and Characterization of Molecularly Imprinted Polymer for Melamine.

<http://psasir.upm.edu.my/id/eprint/67503/1/FS%202013%2088%20IR.pdf>



3. CONFERENCE/ SEMINAR/ SYMPOSIUM

Siti Khadijah Ab. Rahman, Mohd Rizal Md Razali, Yeo Wee Kian, Nurhamizah Rahmat & Nor Azhani Abd Hazis. Tracking Substance Abuse for Clean Sports. International Coaching Symposium: Coaching & Beyond (ICS2024). 2024. Zenith Hotel, Putrajaya.



Siti Khadijah Ab. Rahman. Liquid Chromatography Mass Spectrometry Analysis of Diuretics in Whey Protein Supplements: Uncovering Hidden Contaminants in Sports Nutrition Market. 36th International Conference of Analytical Sciences (SKAM36). 2024. The Everly Putrajaya.



Siti Khadijah Ab. Rahman, Nor Azah Yusof, Abdul Halim Abdullah, Azni Idris 'Synthesis and Characterization of Molecularly Imprinted Polymer for Removal of Hg(II) from Petroleum Samples', Seminar Kimia Analisis Malaysia 28 (SKAM 28). 2015. Weil Hotel Ipoh.



Siti Khadijah Ab. Rahman, Nor Azah Yusof, Abdul Halim Abdullah, Azni Idris. 'Fabrication and Characterization of Molecularly Imprinted Polymer for Removal of Hg(II) from Petroleum Samples', Fundamental Science Congress 2015 (FSC 2015), Universiti Putra Malaysia.



Siti Khadijah Ab. Rahman, Nor Azah Yusof, Mohd Zobir Hussein, Nor Azowa Ibrahim. 'Fabrication and Characterization of Molecularly Imprinted Polymer for Melamine'. Fundamental Science Congress 2012 (FSC 2012), Universiti Putra Malaysia.



Siti Khadijah Ab. Rahman, Nor Azah Yusof, Mohd Zobir Hussein, Nor Azowa Ibrahim, 'Preparation and Characterization of Molecularly Imprinted Polymer for Melamine', Malaysia Polymer International Conference 2011 (MPIC 2011), Hotel Equatorial Bangi.



Siti Khadijah Ab. Rahman, Nor Azah Yusof, Mohd Zobir Hussein, Nor Azowa Ibrahim, 'Synthesis and Characterization of Molecularly Imprinted Polymer for Melamine', Fundamental Science Congress 2011 (FSC 2011), Universiti Putra Malaysia.



4. OTHER PUBLICATION

Siti Khadijah Ab. Rahman. (2024). Siri Langkah Mudah Eksperimen Kimia: Method Validation (Recovery). e ISBN 978-629-97888-1-2

<https://sportslibrary.isn.gov.my/Home/Page/31>



Siti Khadijah Ab. Rahman, Nur Syahira Saiful Faizal, Nur Aida Syazwani Roslan (2021). Muscle Fatigue: Have You Ever Faced It?. Decoded. Volume 1, Issue 4

<https://cloud.isn.gov.my/index.php/s/RceAH6oMt9dDay5#pdfviewer>



Siti Khadijah Ab. Rahman, Nur Syahira Saiful Faizal, Nur Aida Syazwani Roslan (2021). Muscle Fatigue: The Best Treatments. Decoded. Volume 1, Issue 5

<https://cloud.isn.gov.my/index.php/s/RceAH6oMt9dDay5#pdfviewer>



5. RESEARCH GRANT

- i Grant Type : RMK13 Rolling Plan 1
Role : Secretary of the Technical Working Group (TWG) / Co-Researcher
Research Title : Projek Pemulihan untuk Prestasi dan Adaptasi Optimum Atlet (Reboost)
Total Allocation : RM10,000,000.00
Year : 2026-2030
Duration : 5 years
Sponsor : Ministry of Economy

- ii Grant Type : RMK13 Rolling Plan 1
Role : Secretary of the Technical Working Group (TWG) / Co-Researcher
Research Title : Dana Penyelidikan Sukan Berprestasi Tinggi
Total Allocation : RM5,100,000.00
Year : 2026-2030
Duration : 5 years
Sponsor : Ministry of Economy

- iii Grant Type : The ISN Research Grant (ISNRG): RMK11
Role : Main Researcher
Research Title : Screening the Contaminants, Adulterants and Profiling Amino Acid Composition in Selected Commercially Available Sports Supplements
Total Allocation : RM270,000.00
Year : 2023-2025
Duration : 16 months
Sponsor : Ministry of Economy

- iv Grant Type : The ISN Research Grant (ISNRG): RMK11
Role : Co-Researcher
Research Title : Effects of Acute Red Pitaya Consumption on Recovery of Physiological Function and Performance after Simulated Race
Total Allocation : RM 190,005.00
Year : 2022-2024
Duration : 2 Years
Sponsor : Ministry of Economy

- v Grant Type : Prototype Research Grant Scheme (PRGS)
Role : Member
Research Title : ImprintSorb for Rapid Mercury Removal Adsorbent for Liquid Hydrocarbon Streams
Total Allocation : RM 127,000.00
Year : 2015 – 2017
Duration : 2 years
Sponsor : Ministry of Higher Education