PROF. MADYA CHM. TS. DR. WONG YEE CHING (00457A)
PENSYARAH UNIVERSITI (TETAP)
FACULTY OF BIOENGINEERING AND TECHNOLOGY
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A. PERSONAL DETAILS

UMK JOIN DATE	03-May-2010
DATE OF APPOINTMENT FOR CURRENT POSITION	03-May-2010
DATE OF CONFIRMATION FOR CURRENT POSITION	14-Aug-2012
EDUCATION(S)	• **(2010) UNIVERSITI PUTRA MALAYSIA** IJAZAH DOKTOR FALSAFAH KIMIA • **(2009) UNIVERSITI PUTRA MALAYSIA** IJAZAH SARJANA KIMIA PEMANGKINAN • **(2006) UNIVERSITI PUTRA MALAYSIA** IJAZAH SARJANA MUDA KIMIA PERINDUSTRIAN • **(2000) SEK. MEN. JENIS KEB. (C) CHUNG CHENG** SPM
GROUP OF EXPERTISE	• Applied Chemistry • Biofuel and Biogas • Biomass Energy Technology (Including Biogas and Biofuel) • Catalysis, Kinetics and Mechanisms of Reactions • Chemical Science • Industrial Chemistry • Nano Structured Materials • Nanotechnology • Oils and Fats • Renewable Energy • Sustainable Green Technology
AWARD(S)	• Award Name: **Anugerah Perkhidmatan Cemerlang 2015 (2016)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Anugerah Gemilang UMK (AGU) Tahun 2014 (2015)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Anugerah Gemilang UMK-Penerbitan &Karya Seni Tahun 2013 (2014)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Anugerah Perkhidmatan Cemerlang 2011 (2012)** Awarded by: Universiti Malaysia Kelantan • Award Name: **Sijil Penghargaan (2010)** Awarded by: MRSM Merbok, Kedah • Award Name: **Sijil Penghargaan (2010)** Awarded by: Naib Canselor, UMK. • Award Name: **PRPI Bronze Medal Award (2009)** Awarded by: UPM Invention, Research and Innovation Exhibition 2009 • Award Name: **PRPI Silver Medal Award (2008)** Awarded by: UPM Invention, Research and Innovation Exhibition 2008
WORKING EXPERIENCE(S)	• R & D Researcher | MARDI 01-Apr-2005-01-Jun-2005 • Pembantu Penyelidik | Universiti Putra Malaysia 01-Jan-2006-01-Dec-2009 • Demonstrasi makmal | Universiti Putra Malaysia 01-Jan-2006-01-Dec-2009

PROFESIONAL MEMBERSHIP(S)	• LEMBAGA TEKNOLOGIS MALAYSIA | MEMBER | NATIONAL 25-Jun-2025-25-Jun-2026

B. TEACHING-LEARNING ACTIVITIES

COURSES TAUGHT	• BAT2014 - NATURAL RESOURCE MATERIALS SCIENCE • BAT3098 - INDUSTRIAL TRAINING • BFT1044 - GENERAL CHEMISTRY • BIT3123 - BIOPROCESS AND INDUSTRIAL DESIGN • BIT3218 - INDUSTRIAL TRAINING • BIT4183 - INDUSTRIAL TECHNOLOGY MANAGEMENT • BPE3243 - RISK ANALYSIS AND MANAGEMENT • BPT3248 - INDUSTRIAL TRAINING • BTT3218 - INDUSTRIAL TRAINING • FAT2014 - NATURAL RESOURCE MATERIALS SCIENCE • FAT4098 - INDUSTRIAL TRAINING • FFT1043 - PRINCIPLE OF CHEMISTRY • FFT1044 - GENERAL CHEMISTRY • FIE4163 - BIOINDUSTRIAL WASTE MANAGEMENT • FIE4183 - INDUSTRIAL TECHNOLOGY MANAGEMENT • FIT3123 - BIOPROCESS AND INDUSTRIAL DESIGN • FIT3223 - RESEARCH PROJECT I • FIT4194 - ETHICS IN BIOINDUSTRIAL ENTREPRENEURSHIP • FIT4218 - INDUSTRIAL TRAINING • FIT4233 - RESEARCH PROJECT II • FPE3223 - ENVIRONMENTAL IMPACT ASSESSMENT • JBT10903 - ORGANIC CHEMISTRY AND ANALYSIS • JFT20302 - STUDENT IN ENTERPRISE PROGRAMME

C. RESEARCH AND DEVELOPMENT

JOURNAL(S)	1. Wong, Yee Ching, Kee Shu Huey, Anussha A/P Shankar. (2025-06). Comparative Investigation on the Optimisation of Hydrogel Derived from Cellulose of Banana Stem (Musa x paradisiaca), Cellulose and Carboxymethylcellulose (CMC) Crosslinked Using Citric Acid. Malaysian Journal of Bioengineering and Technology (MJBeT) , Vol. 2 (2) , pp. 60-78. https://doi.org/10.70464/mjbet.v2i2.1602 2. Wong, Yee Ching, Sharizatul Akma Mohd Sari, Norfatihah Mohd Adenam, Hasan Abdellatif Hasan. (2025-09). Optimizing Biogas Production from Municipal Solid Waste: A Comprehensive Analysis of Microbial Communities and Substrate Characteristics in Anaerobic Digestion Systems. International Journal of Electroactive Materials , Vol. 13 , pp. 52 - 57. 3. Wong, Yee Ching, Chan Mei Yun. (2024). Synthesis and Characterization of Bioplastic Derived from Chlorella sp. Residue Biomass. International Journal on Algae , Vol. 26(2) , pp. 175-188. https://doi.org/10.1615/InterJAlgae.v26.i2.60 4. Wong, Yee Ching, Marisaa C.. (2024). Shaping Sustainable Bioplastics: Illuminating Chlorella sp. Growth with Light Variations and NPK Levels. International Journal on Algae , Vol. 26(4) , pp. 361 - 374. https://doi.org/10.1615/InterJAlgae.v26.i4.50 5. Lavania Ramarao, Wong, Yee Ching. (2023). Modification of Bioplastic from Napier Grass (Pennisetum purpureum) Cellulose with Various Plasticiser. International Journal of Electroactive Materials , Vol. 11 , pp. 83-92. 6. Ching W.Y., Heera M.. (2022). Synthesis and Characterization of Biofilm from Microalgae Residue. International Journal on Algae , Vol. 24(4) , pp. 383 ¿ 398. https://doi.org/10.1615/InterJAlgae.v24.i4.70 7. Wong, Yee Ching, Nur A. Shukri. (2021-04). Investigations of Light Intensities, Nutrient, and Carbon Sources Towards Microalgae Oil Production via Soxhlet Extraction Techniques. Current Biotechnology , Vol. 10 , pp. 46-54. https://doi.org/10.2174/2211550110666210204151145 8. Solehah A, YC Wong, Veloo, KV. (2021). Characterization and Adsorption Study of Raw Sugarcane Bagasse for Bromophenol Blue Removal. Asian Journal of Fundamental and Applied Sciences , Vol. 2(1) , pp. 1-10. 9. Wong, Yee Ching, Diah Nazirah Roma. (2021). Potential of the Biodegradability and Characteristics of Bioplastic From Microalgae Residues. International Journal on Algae , Vol. 23(1) , pp. 95 - 108. https://doi.org/10.1615/InterJAlgae.v23.i1.50
PROCEEDING(S)	1. Hui T.S., Ramle, S.F.M., Ching W.Y., Hamid Z.A.A.. (2024-03). Purification of crude glycerol from waste cooking oil for the production of bio-soap. In AIP Conference Proceedings . American Institute of Physics. https://doi.org/10.1063/5.0152377 2. Wong, Yee Ching, Nur Zulaikha Hazwani Binti Johori, Hasan Abdellatif Hasan. (2024). Anaerobic Co-Digestion of Bread Waste and Sewage Sludge for Methane Production. In E3S Web of Conferences . EDP Sciences. https://doi.org/10.1051/e3sconf/202459701003 3. Ching W.Y., Azman N.A.N.. (2022). Extraction of PHA from Haematococcus sp. by using sonication method for bioplastic application. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/0094243X 4. Ching W.Y., Hamzah N.Z.B.. (2022). Biodiesel production from polanga oil by soxhlet extraction technique. In AIP Conference Proceedings . American Institute of Physics Inc.. https://doi.org/10.1063/5.0078555

BOOK(S)	
CHAPTER(S)	1. Zubaidah Aimi Abdul Hamid, Razis, Ahmad Faizal Abdull, Sitti Fatimah Mhd Ramle, Wong, Yee Ching. (2025-01-01). Sustainable nutrient recovery from palm oil mill effluent through microalgae cultivation. In Nutrients and Colored Compounds in Wastewater: Advanced Treatment and Recovery (pp. 145 - 156). Elsevier. https://doi.org/10.1016/B978-0-443-21701-2.00010-6
OTHER(S)	
RESEARCH(S)	1. ANAEROBIC DIGESTION MECHANISM FOR BIAGAS FORMATION FROM MUNICIPAL SOLID WASTE | HEAD | UMK-MATCH | 2023 2. ANAEROBIC DIGESTION MECHANISMS FOR BIOGAS FORMATION FROM MUNICIPAL SOLID WASTE | HEAD | UMK-MATCH | 2022 3. KINETIC STUDIES OF ENZYMATIC HYDROLYSIS PRE-TREATMENT AND MICROBIAL FERMENTATION OF INDUSTRIAL FOOD WASTE-DERIVED LACTIC ACID | MEMBER | FRGS | 2023 4. MECHANISM OF SILICA EXTRACTION FROM RICE HUSK FUNCTIONALIZED BY THIOUREA DERIVATIVES OF ORGANIC COMPOUND USED IN CATALYTIC STUDY | MEMBER | FRGS-RACER | 2020 5. ROLE OF MIXED METAL OXIDE CATALYSTS STRUCTURES IN REFORMING PROCESSES | HEAD | FRGS | 2014 6. SONOCHEMICALLY ASSISTED MIXED OXIDE CATALYSTS FOR BIOMAS GASIFICATION | HEAD | RAGS | 2012 7. UPSCALING BIOPLASTIC PROTOTYPE DEVELOPMENT FROM MICROALGAE RESIDUE | HEAD | UMK-FUND | 2020
SUPERVISION	• **Enhancing Biogas Formation Via Municipal Solid Waste Codigestion Unravelling Nitrogen Role In Anaerobic Digestion** | MAIN SUPERVISOR FOR A PHD'S STUDENT
RESEARCH AWARD (S)	

D. CONSULTATION

CONSULTATION(S)	

E. COMMUNITY SERVICES

COMMUNITY SERVICES	