



CURRICULUM VITAE

Dr. Mohd Farid bin Atan

University Sustainability Centre / Faculty of Engineering
Universiti Malaysia Sarawak (UNIMAS)
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1. PROFESSIONAL PROFILE

Dr Mohd Farid bin Atan is the Deputy Director (Sustainability) at the University Sustainability Centre, Universiti Malaysia Sarawak (UNIMAS). He is also a Senior Lecturer at the Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering at UNIMAS. His area of expertise is process system engineering (PSE) related to wastewater treatment, renewable energy, and polyolefin polymerization. He obtained his PhD in Process System Control and Engineering from Universiti Malaya (2023) and his Master's and Bachelor's Degree in Chemistry and Process Engineering from École Supérieure de Chimie Physique Électronique de Lyon (2010 and 2008). He is actively involved and works closely with various stakeholders in industrial and community engagement and sustainability-related projects. Among the projects are treated water supplies in rural schools and villages in Sarawak, the Telecentre Project for Indigenous People Villages in Pahang, Kelantan, and Sarawak, the SULAM Project for the community in Kuching and Kota Samarahan, and the Strategic Planning Development Project for Bintulu Development Authority. He is also a focal person for SDG sustainability reporting at UNIMAS. His contribution includes the development of the UNIMAS Sustainability Masterplan. He is also a Research Fellow at the Institute of Sustainable and Renewable Energy (ISuRE), Institute of Social Informatics and Technological Innovations (ISITI), and UNIMAS Water Centre (UWC).

2. ACADEMIC QUALIFICATION & PROFESSIONAL QUALIFICATION

Doctor of Philosophy (Process System Engineering & Control), Universiti Malaya, Malaysia

Master of Engineering (Chemistry and Process Engineering), ESCPE Lyon, France

Bachelor of CPE Lyon (Chemistry and Process Engineering), ESCPE Lyon, France

Certified ESG and Sustainability Practitioner (CESP) by Exemplar Global

Certified ISO 14001:2015 Environmental Management Systems Lead

Auditor (Certification No.: 125030739 / 171233910)

Lifetime Fellow Member, International Society for Development and Sustainability (ISDS), Japan (Membership ID: M2311036)

Registered Construction Personnel (Management Level), Construction

Industry Development Board (CIDB), (Registration No: 1840410NS2100296059), Valid until 10 April 2027

Certificate of Global Reporting Initiatives Sustainability by UNDP

Lifetime Fellow Member, International Society for Development and Sustainability (ISDS), Japan (Membership ID: M2311036)

3. PROFESSIONAL / WORKING EXPERIENCE

Deputy Director (Sustainability), University Sustainability Centre, Universiti Malaysia Sarawak, 2022-Present

Senior Lecturer, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering, Universiti Malaysia Sarawak, 2020-Present

Lecturer, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering, Universiti Malaysia Sarawak, 2010-2020

Environmental Engineer Trainee, Pierre Fabre S.A., France, 2010

Research Assistant Trainee, Rhodia S.A., France, 2009

Operator Trainee, Bioxal S.A., France, 2008

4. AREAS OF EXPERTISE

Process System Engineering and Control / Water and Wastewater Treatment Process / Renewable Energy / Higher Education Blended Learning / ESG and Sustainability / Life Cycle Analysis (LCA) / Waste Management / GHG Emission / Occupational, Safety and Health (OSH) / Responsible Tourism

5. RESEARCH

- Research Title:** Community Empowerment Through Environmental Education to Combat Illegal Dumping in Padawan
Sponsor: Majlis Perbandaran Padawan (MPP)
Amount Approved: MYR 35,000
Responsibility: Project Leader
Duration: March 2026 – December 2027
Status: Waiting for Letter of Agreement (New Grant)
- Research Title:** Developing A Sustainability Reporting Playbook for Bintulu Development Authority
Sponsor: Bintulu Development Authority (BDA)
Amount Approved: MYR 50,000
Responsibility: Researcher
Duration: October 2025 – September 2026
Status: On-Going
- Research Title:** Kajian Impak di Bawah Projek Rintis Impak Sosial Petronas Menyemai Masa Hadapan untuk Yayasan Hijau Malaysia dan Petronas
Sponsor: Yayasan Hijau Malaysia (YHM)
Amount Approved: MYR 10,800
Responsibility: Project Leader
Duration: July 2024 – December 2024
Status: Completed

4. **Research Title:** Strategi Tenaga Rendah Karbon Berasaskan Teknologi Hidrogen Hijau untuk Meningkatkan Kecekapan Penjanaan Tenaga Boleh Diperbaharui di Kampung Assum
Sponsor: Matching Research Grant, Ministry of Higher Education
Amount Approved: MYR 430,040
Responsibility: Researcher
Duration: January 2024 – January 2027
Status: On-Going
5. **Research Title:** Optimization of Repellent Additive Mix in Commercial Paint
Sponsor: Industrial Grant (UHSB), ASTEEL Resources Sdn. Bhd.
Amount Approved: MYR 49,000
Responsibility: Researcher
Duration: March 2023 – March 2025
Status: Completed
6. **Research Title:** Process Intensification for Hydrogen Production from Sago Waste in Microbial Electrolysis Cell
Sponsor: Industrial Grant (UHSB), Osaka Gas Foundation of International Cultural Exchange Research Grant Scheme
Amount Approved: MYR 10,000
Responsibility: Researcher
Duration: January 2023 – December 2023
Status: Completed
7. **Research Title:** Elucidation of Crystallization Kinetic and Thermodynamic Behaviours of Ammonium Sulphate in Wastewater via Eutectic Freeze Crystallization Process
Sponsor: Fundamental Research Grant Scheme, Ministry of Higher Education, Malaysia.
Amount Approved: MYR 151,100
Responsibility: Researcher
Duration: September 2022 – August 2025
Status: Completed
8. **Research Title:** Feasibility Study and Analysis of Water Filtration System for Rural Area in Sarawak
Sponsor: Universiti Malaysia Sarawak (UNIMAS), Smart Partnership Grant Scheme
Amount Approved: MYR 20,000
Responsibility: Project Leader
Duration: September 2021 – February 2024
Status: Completed
9. **Research Title:** Advanced Strategies for Modeling and Optimization of Hydrogen Production from Photo-Fermentation Microbial Electrolysis Cell using Sago Waste
Sponsor: Industrial Grant (UHSB), Osaka Gas Foundation of International Cultural Exchange Research Grant Scheme
Amount Approved: MYR 10,000
Responsibility: Project Leader
Duration: January 2020 – December 2021
Status: Completed
10. **Research Title:** Water Treatment System using Ultrafiltration
Sponsor: Ministry of Higher Education, Malaysia
Amount Approved: MYR 3,999,000
Responsibility: Researcher
Duration: December 2019 – December 2024
Status: Completed
11. **Research Title:** Phycoremediation of Landfill
Sponsor: Industrial Grant (UHSB), Trinekens (Sarawak) Sdn Bhd
Amount Approved: MYR 18,000
Responsibility: Researcher
Duration: August 2019 – August 2022
Status: Completed
12. **Research Title:** Strategic Development, Implementation and Assessment on Chemical Engineering Programme
Sponsor: Scholarship of Teaching and Learning Grants, CALM, Universiti Malaysia Sarawak
Amount Approved: MYR 5,000.
Responsibility: Researcher.
Duration: June 2019 – November 2020.
Status: Completed

13. **Research Title:** Phytoremediation Mechanisms towards Ammoniacal Nitrogen Reduction in Industrial Effluent Discharge.
Sponsor: Fundamental Research Grant Scheme, Ministry of Higher Education, Malaysia.
Amount Approved: MYR 128,000
Responsibility: Researcher
Duration: September 2015 – August 2018
Status: Completed
14. **Research Title:** Telecentre Programme for Orang Asli West Malaysia
Sponsor: Prime Minister Department, Malaysia.
Amount Approved: MYR 4,995,000
Responsibility: Researcher.
Duration: December 2013 – December 2018
Status: Completed.
15. **Research Title:** Energy Optimization for Rural ICTs Telecentre
Sponsor: UNIMAS Research Grant for Energy Group, Institute of Social Informatics and Technology Innovations (ISITI), Universiti Malaysia Sarawak.
Amount Approved: MYR 50,000.
Responsibility: Researcher.
Duration: December 2012 – September 2014.
Status: Completed.
16. **Research Title:** Low-Cost and Sustainable Technology for Harvesting Humic Acids.
Sponsor: E-ScienceFund Research Grant, Ministry of Science, Technology and Innovation (MOSTI), Malaysia.
Amount Approved: MYR 94,540.
Responsibility: Researcher.
Duration: September 2011 – August 2013.
Status: Completed.

6. CONSULTANCY

1. **Project Title:** Membangun dan Menyediakan Pelan Induk Bandar Rendah Karbon Kuching
Amount Approved: MYR 1,255,596.77
Responsibility: Project Manager
Duration: January – December 2026
Status: On-Going
2. **Project Title:** Responsible Tourism - Food Forest Homestay 2025 - Sustainable Tourism and Culinary Initiative for Homestay -Kampung Siol Kandis & Kampung Annah Rais
Amount Approved: MYR 35,916
Responsibility: Project Leader
Duration: November 2025 – February 2026
Status: Completed
3. **Project Title:** Stakeholder Engagement for Marine Traffic and Risk Analysis (MTRA) for the Proposed Development of Marina and Reclamation Works at Damai Peninsula
Sponsor: SIRIM Berhad
Amount Approved: MYR 25,000
Responsibility: Project Manager
Duration: January – March 2025
Status: Completed
4. **Project Title:** Lead Assessor for Resource Efficiency and Industrial Symbiosis Opportunity (REISO) Program - Asteel Sdn Bhd, Kuching Sarawak
Sponsor: SIRIM Berhad
Amount Approved: MYR 32,000
Responsibility: Lead Auditor / Project Leader
Duration: December 2023 – June 2024
Status: Completed
5. **Project Title:** Development of the Strategic Planning 2024-2030 for Bintulu Development Authority
Sponsor: Bintulu Development Authority (BDA)
Amount Approved: RM191,292.9
Responsibility: Project Manager
Duration: October 2023 – September 2024
Status: Completed

6. **Project Title:** Development of the Strategic Planning 2024-2023 for Bintulu Development Authority
Sponsor: Bintulu Development Authority (BDA)
Amount Approved: MYR 354,375
Responsibility: Project Manager
Duration: May – September 2023
Status: Completed
7. **Project Title:** Sulam Project with Kampung Empila Community
Sponsor: SULAM Fund, UNIMAS Sustainability Centre, UNIMAS
Amount Approved: MYR 1,500
Responsibility: Project Leader
Duration: March – June 2022
Status: Completed
8. **Project Title:** Penghasilan Produk untuk Warga Pusat Pengajian Tafaqqh dan Tahfiz Al-Makki, Kota Samarahan.
Sponsor: SULAM Fund, UNIMAS Sustainability Centre, UNIMAS
Amount Approved: MYR 1,000
Responsibility: Project Leader
Duration: November 2019 – April 2020
Status: Completed
9. **Project Title:** Projek Pembekalan Sistem Air Bersih Terawat di Sekolah-sekolah di bawah Kementerian Pendidikan Malaysia (KPM) Menggunakan Sistem Water Ultrafiltration di SMK Balleh, Kapit
Sponsor: Ministry of Education, Malaysia
Amount Approved: MYR 498,000
Responsibility: Project Member
Duration: April 2019 – December 2021 (Extended)
Status: Completed
10. **Project Title:** Projek Pembekalan Sistem Air Bersih Terawat di Sekolah-sekolah di bawah Kementerian Pendidikan Malaysia (KPM) Menggunakan Sistem Water Ultrafiltration di SMK Ulu Balingian
Sponsor: Ministry of Education, Malaysia
Amount Approved: MYR 492,000
Responsibility: Project Member
Duration: April 2019 – December 2020
Status: Completed
11. **Project Title:** Joint-Research Collaboration between UNIMAS and X-FAB Sarawak on Research Studies for Ammoniacal Nitrogen Reduction at Industrial Effluent Discharge using Phytoremediation Technology
Sponsor: X-Fab Sarawak Sdn. Bhd.
Amount Approved: MYR 277,040
Responsibility: Project Member
Duration: September 2015 – August 2017
Status: Completed

7. AWARDS AND RECOGNITION

Registered Chemical Engineer (Graduate Engineer), Board of Engineers Malaysia (BEM) (Registration No: GE74164A).

Registered Engineer, Ingénieurs et Scientifiques de France (IESF) (IESF No.: 482689)

Registered Chemical Technology (Graduate Technologists), Malaysia Board of Technologists (MBOT) (Registration No: GT21010120)

Registered Member, Malaysia Process Control Society (MyPCS) (Membership No: M202001032)

Registered Construction Personnel (Management Level), Construction Industry Development Board (CIDB), (Registration No: 1840410NS2100296059), Valid until 10 April 2027
Lifetime Fellow Member, International Society for Development and Sustainability (ISDS), Japan (Membership ID: M2311036)

Registered Member as ESG Warrior, Malaysian Association of Public Advocacy for Nature (MAPAN), Malaysia (Membership No. FM 00067)

Registered Member, Sarawak Development Institute (Membership No.: 0185)

Certified ISO 14001:2015 Environmental Management Systems Lead Auditor (Certification No.: 125030739 / 171233910)

Bronze Award for the Project entitled "AlphaWater Issue Tracking Progressive Web Application" at Innovation Technology Exposition 2023 (InTEX 2023) from 23 – 24th August 2023

Blended Learning Award (Outstanding Accomplishment), Semester 1, Session 2020/2021 for the courses Process Control System, Chemical Plant Design and Advanced Energy Optimisation and Economics

Excellent Staff Award (Consultation Service), 2015, Faculty of Engineering, Universiti Malaysia Sarawak

Excellent Service Award 2013 (APC – Anugerah Perkhidmatan Cemerlang 2013), Universiti Malaysia Sarawak (UNIMAS), Malaysia

Silver Medal for the Project entitled "Low Cost Biosorbents for Removal of Dissolved Organics Carbon from Peat Swam Run-Off" at UNIMAS Research and Development Exposition 2013, Universiti Malaysia Sarawak (UNIMAS), MALAYSIA, from 20 – 21st March 2013

8. PUBLICATION

INTELLECTUAL PROPERTIES

1. Noraziah Abdul Wahab, **Mohd Farid Atan**, Rudiyanto Philman Jong, Abang Mohammad Nizam Abang Kamaruddin and Jennifer Fiona Wilfred Busu (2023). AlphaWater Issue Tracking Progressive Web Application. Copyright Work (Literary), LY2023Q04954, Intellectual Property Corporation of Malaysia (MyIPO).

BOOKS

1. Wahi R., Abdul Wahab N., **Atan M.** and Jausus N. (2026). Empowering Society 5.0: Digitalization, Sustainability, and Global Collaboration. , 1(1), 1.
2. Wan Ibrahim, W.I., Lo, M.C., Masron, T, Kulathuramaiyer, N., Md Hussain, M.H., Salleh, S.F., Abdul Wahab, N., **Atan, M.F.**, Jausus, N., and Bunsu, A. (2022). UNIMAS SUSTAINABILITY MASTERPLAN 2021-2025. UNIMAS Publisher, Sarawak, Malaysia. eISBN 978-967-0054-17-9
3. Wan Ibrahim, W.I., Lo, M.C., Masron, T, Kulathuramaiyer, N., Md Hussain, M.H., Salleh, S.F., Abdul Wahab, N., **Atan, M.F.**, Jausus, N., and Bunsu, A. (2022) UNIMAS SUSTAINABILITY REPORT 2021/2022. UNIMAS Publisher, Sarawak, Malaysia. eISBN 978-967-0054-18-6
4. **Mohd Farid Atan**, Nazeri Abdul Rahman, Khairul Anwar Mohamad Said, Shanti Faridah Salleh, Mohamed Afizal Mohamed Amin. (2015). Handbook Chemical Plant Design Project (CPDP) Version 2015. Kota Samarahan, Sarawak: Faculty of Engineering, Universiti Malaysia Sarawak (ISBN 978-967-5527-89-0).
5. Al-Khalid Haji Othman, Hushairi Haji Zen, Nazeri Abdul Rahman, **Mohd Farid Atan**, Hazrul Mohamed Basri, Kasumawati Lias and Azfar Satari Abdullah. (2014). Energy Audit Manual: Solar Photovoltaic (PV) Energy Optimization for Rural ICT Telecentre. Kota Samarahan, Sarawak: Institute of Social Informatics and Technological Innovations (ISITI – CoERI), Universiti Malaysia Sarawak (UNIMAS) (ISBN 978-967-5527-74-6).
6. Al-Khalid Haji Othman, Hushairi Haji Zen, Abdul Qayoom Jakhrani, Nazeri Abdul Rahman, **Mohd Farid Atan**, Hazrul Mohamed Basri and Kasumawati Lias. (2014). Solar Photovoltaic (PV) Energy Optimization for Malaysian Borneo Rural ICT Telecentre. Kota Samarahan, Sarawak: Institute of Social Informatics and Technological Innovations (ISITI – CoERI), Universiti Malaysia Sarawak (UNIMAS), ISBN (978-967-5527-75-3).

WEB OF SCIENCE INDEXED JOURNALS

1. Asrul M.A.M., **Atan M.F.**, Yun H.A.H., Tan I.A.W., Wahi R., Abdullah R. and Elciana A.D. (2025). Performance assessment through comprehensive analysis of mathematical model assumptions for biohydrogen production from various substrates in microbial electrolysis cell. *International Journal of Hydrogen Energy*, 106(1), 896-920.

- Asrul M.A.M., **Atan M.F.**, Yun H.A.H., Tan I.A.W., Wahi R., Abdullah R. and Elciana A.D. (2025). Performance assessment through comprehensive analysis of mathematical model assumptions for biohydrogen production from various substrates in microbial electrolysis cell. *International Journal of Hydrogen Energy*, 106(1), 896-920.
- Ting W.H.T., Tan I.A.W., Salleh S.F., Abdul Wahab N., **Atan M.F.**, Abdul Raman A.A., Kong S.L. and Lam L.S. (2024). Sustainable saline wastewater treatment using eutectic freeze crystallization: Recent advances, challenges and future prospects. *Journal of Environmental Chemical Engineering*, 12(3), 1. (*Journal Impact Factor: 7.4, Q1, 2022*)
- Mohd Asrul, M.A., **Atan, M.F.**, Abdul Halim Yun, H. and Lai, J.C.H. (2022). A Review of Advanced Optimization Strategies for Fermentative Biohydrogen Production Processes. *International Journal of Hydrogen Energy*, 47: 16785-16804 (*Journal Impact Factor: 7.139, Q2, 2021*)
- Mohd Asrul, M.A., **Atan, M.F.**, Abdul Halim Yun, H. and Lai, J.C.H. (2021). Mathematical Model of Biohydrogen Production in Microbial Electrolysis Cell: A Review. *International Journal of Hydrogen Energy*, 46: 37174-37191 (*Journal Impact Factor: 7.139, Q2, 2021*)
- Atan, M.F.**, Hussain, M.A. and Shamiri, A. (2021). The influence of catalyst flow rate and superficial gas velocity on the modified two-phase model for propylene polymerization in a gas-phase fluidized bed reactor. *The Canadian Journal of Chemical Engineering*, 99: 1745-1757 (*Journal Impact Factor: 2.500, Q3, 2021*).
- Atan, M.F.** and Hussain, M.A. (2020). Dynamic modeling: The influence of the improved solid elutriation correlation on the two-phase mathematical model of polyolefin polymerization in a gas-phase fluidized bed reactor. *Asia-Pacific Journal of Chemical Engineering*, 15: e2438. (*Journal Impact Factor: 1.777, Q3, 2021*)
- Atan, M.F.**, Hussain, M.A., Abbasi, M.R., Khan, M.J.H. and Fazly Abdul Patah, M. (2019). Advances in Mathematical Modeling of Gas-Phase Olefin Polymerization. *Processes*, 7: 67. (*Journal Impact Factor: 3.352, Q2, 2021*)
- Steam Distillation. *Journal of Applied Science & Process Engineering*, 3: 1-16.
- Ku Yusoff, T.A.F., **Atan, M.F.**, Abdul Rahman, N., Salleh, S.F. and Abdul Wahab, N. (2015) Optimization of PID Tuning Using Genetic Algorithm. *Journal of Applied Science & Process Engineering*, 2: 97-106.
- Atan M.F.**, Mapi, K.A., Ghazali, S.N.F, Abdul Rahman, N and Salleh, S.F. (2015). Adsorption of Humic Substances by using Coconut Copra. *Applied Mechanics and Materials*, 695: 251-254.
- Atan M.F.**, Mapi, K.A., Ghazali, S.N.F, Abdul Rahman, N and Salleh, S.F. (2014). Utilization of Coconut Copra as Low Cost Biosorbents for Removal of Humic Substances from Peat Swamp Run-Off. *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 3: 6-16.
- Ibrahim, M.D., Othman, A.K., Zen, H., Rahman, N.A., **Atan, M.F.** and Masiar@Peton, J. (2014). Smart Power Management System for Rural Telecentre Conceptual Design. *Journal of Applied Science and Agriculture*, 9: 14-19.
- Abdul Rahman, N., **Atan, M.F.**, Igam, P., Baini, R., Che Mat F. and Salleh, S.F. (2013a). Study on the Potential of Using Agricultural Wastes as Fuel for Power Generation in Sarawak. *European International Journal of Science and Technology*, 2: 103 – 140.
- Abdul Rahman, N., **Atan, M.F.**, Low, C.M., Baini, R., Che Mat F. and Salleh, S.F. (2013b). Study on the Potential of Pelletisation of Empty Fruit Bunch with Sago as Binding Agent for Power Generation. *European International Journal of Science and Technology*, 2: 111 – 118.

CONFERENCES

- Mohd Asrul M., **Atan M.F.**, Abdul Halim Yun H. and Chang Hui J. (2024). Effect of Substrate Concentration on Hydrogen Production Rate in Microbial Electrolysis Cell using Mathematical Modelling based on Simplified Biofilm Growth. Presented at The 15th International UNIMAS Engineering Conference 2024 (EnCon2024), 14 -16 February 2024, Kuching, Sarawak.
- Singh, A., Mustafa, Z., Kharuddin, A.F. and **Atan, M.F.** (2021). An Application of Fuzzy Delphi Technique to Measure Experts Consensus on Communication Skills Among Engineering Graduates. Presented at Global Education Conference and Postgraduate Colloquium 2021 (GECPC 2021), 8-9 September 2021, Online.
- Then, M.Y., Ramesh, S., Mohd Asrul, M.A., **Atan, M.F.**, Abdul Halim Yun, H., Lai, J.C.H., Rahman, M.R., Abdullah, M.O. and Abdul Wahab, N. (2020). Dynamic Modeling of Hydrogen Production from Photo-Fermentation in Microbial Electrolysis Cell using Sago Waste. Presented at 13th International UNIMAS Engineering Conference 2020 (EnCon 2020), Kota Samarahan, Malaysia
- Atan, M.F.** and Hussain, M.A. (2019). Dynamic Modeling: The influence of the Improved Solid Elutriation Correlation on the Two-Phase Mathematical Model of Polyolefin Polymerization in Gas-Phase Fluidized Bed Reactor. Presented at 26th Regional Symposium on Chemical Engineering (RSCE 2019), Petaling Jaya, Malaysia.
- Atan, M.F.**, Hussain, M.A. and Abdul Rahman, N. (2018). Past And Current Development Of Two-Phase Modeling Of Polypropylene In Gas Phase Fluidized Bed Reactor : A Review. Presented at 1st International Conference on Innovative Sciences and Technologies for Research and Education (InnoSTRE 2018), Kuching, Malaysia.
- Atan, M.F.**, Abdul Rahman, N., Johari, M.H., Ghazali, S.N.F. and Salleh, S.F. (2013). Study on the Potential of Utilizing the Agricultural Waste as Biosorbent for Heavy Metal Ions. Presented at 6th Engineering Conference (EnCon 2013), Kuching, Malaysia.
- Abdul Rahman, N., Igam, P., **Atan, M.F.**, Baini, R., Che Mat N.F. and Salleh, S.F. (2012a). Study on the Potential of Using Agricultural Wastes as Fuel for Power Generation in Sarawak. Presented at 5th Engineering Conference (EnCon 2012), Kuching, Malaysia.
- Abdul Rahman, N., Awang, M.A., **Atan, M.F.**, Baini, R., Che Mat N.F. and Salleh, S.F. (2012b). Sustainable Utilization of Biomass Wastes for Power Generation from Sago Processing Industry. Presented at 5th Engineering Conference (EnCon 2012), Kuching, Malaysia.
- Atan, M.F.**, Abdul Rahman, N., Low, C.M., Baini, R., Che Mat F. and Salleh, S.F. (2012). Study on the Potential of Pelletisation of Empty Fruit Bunch with Sago as Binding Agent for Power Generation. Presented at 5th Engineering Conference (EnCon 2012), Kuching, Malaysia.
- Abdul Rahman, N., Osman, Y.I., **Atan, M.F.**, Baini, R., and Che Mat, N. (2011a). Implementation of TOPSIS Method for Sustainable Biomass Waste Disposal Options in Sarawak, Malaysia. Presented at 4th Engineering Conference (EnCon 2011), Kuching, Malaysia.

SCOPUS INDEXED JOURNALS / PROCEEDINGS

- Atan M.F.**, Asrul M.A.M., Henry A.C., Yun H.A.H., Tan I.A.W. and Lai J.C.H. (2025). A Modular Intelligent Control Framework for Scalable Biohydrogen Production in Microbial Electrolysis Cells. *Chemical Engineering Transactions*, 122(1), 139-144.
- Donald J., Lai J., **Atan M.** and Saree S. (2025). Optimization of Mechanical Properties in Sago Cellulose-based Biodegradable Films for Sustainable Packaging. *Chemical Engineering Transactions*, 122(1), 1-6.
- Sim C.S.F., Tan I.A.W., Ting W.H.T., Salleh S.F., Abdul Wahab N., **Atan M.F.**, Sanaullah K. and Abdul Raman A.A. (2025). Recovery of ammonium sulfate from aqueous solutions using freeze crystallization process. *Journal of Advanced Research in Micro and Nano Engineering*, 37(1), 100-111.
- Mohd Asrul, M.A., **Atan, M.F.**, Abdul Halim Yun, H., Abdul Wahab, N., Hung, H.H. and Lai, J.C.H. (2024). Optimization of Mathematical Modeling of Microbial Electrolysis Cell for the Production of Hydrogen from Sago Wastewater Substrate. *ASEAN Engineering Journal*, 14(2), 7-17.
- Then, M.Y., Ramesh, S., Mohd Asrul, M.A., **Atan, M.F.**, Abdul Halim Yun, H., Lai, J.C.H., Rahman, M.R., Abdullah, M.O. and Abdul Wahab, N. (2021). Dynamic Modeling of Hydrogen Production from Photo-Fermentation in Microbial Electrolysis Cell using Sago Waste. *IOP Conference Series: Materials Science and Engineering*, 1101: 012040.
- Mustafa Kamal, M., Baini, R., Mohamaddan, S., Selaman, O.S., Ahmad Zauzi, N., Rahman, M.R., Abdul Rahman, N.A., Chong, K.H., **Atan, M.F.**, Abdul Samat, N.A.S., Taib, S.N.L. and Othman, A.K. (2017). Effect of temperature to the properties of sago starch. *IOP Conference Series: Materials Science and Engineering*, 206: 1-13.
- Noor, S.H.M., Syam, K., Jaafar, A.A., Sharif, M.F.M., Ghazali, M.R., Ibrahim, W.I. and **Atan, M.F.** (2016). Development of a working hovercraft model. *IOP Conference Series: Materials Science and Engineering*, 114: 1-9.

NON-INDEXED JOURNALS

- Awang Salleh D., Razali N., Andrew A., Kanakaraju D. and **Atan M.** (2025). Curriculum Analytics of SDG Integration in UNIMAS Academic Programmes. , 1(1), 1-1.
- Nik Ahmad Lutfi, N.A.F., **Atan, M.F.**, Abdul Rahman, N., Salleh, S.F. and Abdul Wahab, N. (2016) Study On Mathematical Model In Simulating Cymbopogon Winterianus Essential Oil Extraction By



- Abdul Rahman, N., Kassim, N.H., **Atan, M.F.**, Bains, R., and Che Mat, N. (2011b). Sustainable Pelletisation of Musa Acuminata Balbisiana and Musa Patadisiaca Sapientum Biomass Wastes for Power Generation from Small-Scaled Banana Plantation in Sarawak. Presented at 4th Engineering Conference (EnCon 2011), Kuching, Malaysia.
- Atan, M.F.**, Abdul Rahman, N., Salleh, S.F. and Hashim, S.H. (2011). Determination of the key parameters influencing the volumetric coefficient of mass transfer in liquid phase in saline milieu. Presented at 4th Engineering Conference (EnCon 2011), Kuching, Malaysia.

9. POST GRADUATE SUPERVISION

Doctor of Philosophy by Research offered by Universiti Malaysia Sarawak

In Progress

- Tan Hong Kiat
(Development and Validation of an ISO 45001-Based Safety Performance and Risk Management Model for Steel Manufacturing SMEs, Academic Session 2025/2026, Main Supervisor)
- Syukry Hamidi Bin Hashim
(Dynamic modelling and optimization of carbon management system for low carbon city model, Academic Session 2024/2025, Main Supervisor)
- Andrica Claudia Anak Henry
(Integrated life cycle framework of biohydrogen for sustainable power generation through the integration of waste management and renewable energy, Academic Session 2024/2025, Main Supervisor)
- Mohamad Afiq Bin Mohd Asrul
(Modified Dynamic Modeling and Control for Optimal Biohydrogen Production from Leachate with Multivariate Effects of Reaction and Kinetics of Multi-Population Microbial in Biofilm Growth, Academic Session 2023/2024, Main Supervisor)

Master by Research offered by Universiti Malaysia Sarawak

Completed

- Mohamad Afiq Bin Mohd Asrul
(Advanced Strategies for Modeling and Optimization of Hydrogen Production from Photo-Fermentation Microbial Electrolysis Cell using Sago Waste, Academic Session 2020/2021, Co-Supervisor)

Master's by Coursework offered by Universiti Malaysia Sarawak

In Progress

- Rozextta Canelra Anak Michael
(Quantitative Assessment Of Heat Stress Exposure Among Construction Workers, Academic Session 2025/2026, Main Supervisor)
- Dayang Nurli Faizzah Binti Awang Anwa
(Life Cycle Assessment Model for Biohydrogen Production from Biomass, Academic Session 2025/2026, Main Supervisor)
- Grace Meliah Mesa
(Life Cycle Assessment for Heat Exchange System, Academic Session 2025/2026, Main Supervisor)

Completed

- Shahanim Syahirah Binti Kusrin Shah
(Life Cycle Assessment (LCA) for Silico Manganese (SiMn) Slag, Academic Session 2024/2025, Main Supervisor)
- Shahsha Syamimi Binti Kusrin Shah
(Carbon Footprint of Heavy Metal Industry in Bintulu, Sarawak, Academic Session 2024/2025, Main Supervisor)
- Sunny Deshween Anak Deshon Kaman
(Advanced Modelling and Optimization of Hydrogen Production from Solid Waste, Academic Session 2020/2021, Main Supervisor)

10. TEACHING

Bachelor of Chemical Engineering with Honours

KNC1041 Workshop Practices, KNC2462 Process Instrumentation, KNC3213 Process Control System, KNC3413 Process Integration and Optimisation, KNC3553 Integrated Design Project 1, KNC4564 Integrated Design Project 2

Master of Engineering in Energy and Environment

KNC6023 Advanced Renewable Energy System and KNC6103 Advanced Energy Optimisation and Economics

Master of Science in Occupational Safety and Health

KMO6023 Physical Safety and KMO6132 Process Safety

10. UNIVERSITY ADMINISTRATIVE APPOINTMENTS

Year 2024

- Internal Auditor for ISO 9001:2015, from 1 July 2024 until 30 June 2026
- Acting Director of University Sustainability Centre, from 21 until 25 June 2024
- Acting Director of University Sustainability Centre, from 10 until 12 June 2024
- Speaker (Module 8: Leadership Presentation) for Borneo Leadership Transformation & Strategic Program (BOLTS), from 26 until 29 February 2024
- Acting Director of University Sustainability Centre, from 5 until 8 February 2024
- Acting Director of University Sustainability Centre, from 31 January until 1 February 2024
- Research Fellow; UNIMAS Water Centre (UWC) from 1 July 2022 until 30 June 2024
- Research Fellow, Institute of Social Informatics and Technological Innovations (ISITI) from 1 September 2023 until 31 August 2025

Year 2023

- Acting Director of University Sustainability Centre, 29 December 2023
- Acting Director of University Sustainability Centre from 12 until 13 December 2023
- Module Developer (Module 8: Leadership Presentation) for Borneo Leadership Transformation & Strategic Program (BOLTS), 21 October 2023
- Acting Director of University Sustainability Centre from 5 until 6 October 2023
- Acting Director of University Sustainability Centre from 22 until 25 September 2023
- Acting Director of University Sustainability Centre from 6 until 8 September 2023
- Acting Director of University Sustainability Centre on 21 June 2023
- Acting Director of University Sustainability Centre from 19 until 20 June 2023
- Acting Director of University Sustainability Centre from 22 until 26 May 2023
- Acting Director of University Sustainability Centre from 20 until 12 May 2023
- Publication and Publicity Committee, SULAM INNOVATE 2023 from 1 March 2023 until 30 November 2023
- Acting Director of University Sustainability Centre from 2 until 3 February 2023
- Fluid Mechanics Laboratory Coordinator from 1 February 2023 until 1 February 2026
- Enumerator for Kajian Pemetaan dan Pemantauan Ketua Isi Rumah (KIR) for the project entitled Pembasmian Miskin Tegar Keluarga Malaysia (MNTKM) from 10 October 2022 until 31 December 2023
- Research Fellow, UNIMAS Water Centre (UWC) from 1 July 2022 until 30 June 2024
- Research Fellow, Institute of Sustainability and Renewable Energy (ISuRE) from 1 February 2022 until 31 January 2024
- Research Fellow, Institute of Social Informatics and Technological Innovations (ISITI) from 1 September 2021 until 31 August 2023

Year 2022

- Enumerator for Kajian Pemetaan dan Pemantauan Ketua Isi Rumah (KIR) for the project entitled Pembasmian Miskin Tegar Keluarga Malaysia (MNTKM) from 10 October 2022 until 31 December 2023.
- Acting Director of University Sustainability Centre (31 October until 4 November 2022)
- Appointment as a Judges for Smart and Sustainable City Hackathon organized by Institute of Sustainable and Renewable Energy (ISuRE) and Sarawak Multimedia Authority, 30 October 2022
- Acting Director of University Sustainability Centre (13 October until 15 October 2022)
- Appointment as a Forum Panelist for *Simposium Kesejahteraan Psikologi-Peringkat Kebangsaan 2022*, 12 October 2022

6. Internal Moderator for the Course Assessment (Final Assessment) entitled KNM6143 Supply Chain Management, Semester 2, Academic Session 2021/2022
7. Internal Moderator for the Course Assessment (Continuous and Final Assessment) entitled KNM6113 Operational and Maintenance Management, Semester 3, Academic Session 2021/2022.
8. Acting Director of University Sustainability Centre (22 August until 24 August 2022)
9. Acting Director of University Sustainability Centre (19 July until 21 July Mem 2022)
10. Acting Director of University Sustainability Centre (27 June until 6 July 2022)
11. University Supervisor, Industrial Training, Chemical Engineering Programme (1 July 2022 until 31 October 2022)
12. Research Fellow, Institute of Sustainability and Renewable Energy (ISuRE) (1 February 2022 until 31 January 2024)
13. Member of Reviewer Board, Journal of Applied Science & Process Engineerin (JASPE) (From 7 March 2022 until Present)
14. Member of Industrial Training Unit, Faculty of Engineering (2 January 2022 until 31 December 2023)
15. Member of Integrated Design Project Unit, Faculty of Engineering (2 January 2022 until 31 December 2023)
16. Co-Venue and Logistic, 14th International Engineering Conference 2022 (ENCON 2022) and The International Science Technology and Engineering Expo (i-STEEEx), 23-24 February 2022
17. Jury Judge for Video Competition International Science, Technology and Engineering Expo (i-STEEEx) 2022, 21-23 February 2022

Year 2021

1. Research Fellow, Institute of Social Informatics and Technological Innovations (ISITI) (1 September 2021 until 31 August 2023)
2. Research Project Supervisor, KNC61810 Research Project (26 July until 10 September 2021)
3. Internal Examiner, KNC61810 Research Project (Samantha Hao Baling Talek) (1 September – 31 March 2022)
4. University Supervisor, Industrial Training, Chemical Engineering Programme (26 July 2021 until 20 October 2021)
5. Course Consultant, KNC6173 Research Methodology, Master of Engineering (Energy and Environment) (1 April until 30 September 2021)
6. Speaker, CALM Sharing Session on Asynchronous and Synchronous Way of Teaching (7 April 2021)
7. Facilitator, Bengkel Pengajaran dan Pembelajaran Makmal Secara Atas Talian bagi Program Kejuruteraan Kimia (15 – 26 February 2021)
8. Committee Member, Feng Kasih, Feng Club, Faculty of Engineering (1 March – 31 December 2021)

Year 2020

1. Member of Industrial Training Unit, Faculty of Engineering (13 January 2020 until 13 January 2022)
2. Member of Integrated Design Project Unit, Faculty of Engineering (13 January 2020 until 13 January 2022)

Year 2019

1. SULAM Project Coordinator, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (6 November 2019 until 30 April 2020)
2. Research Fellow, Institute of Social Informatics and Technological Innovations (ISITI) (1 September 2019 until 31 August 2022)
3. Industrial Training Coordinator, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (1 January 2019 until 31 December 2020)
4. Integrated Design Project Coordinator, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (1 January 2019 until 31 December 2020)
5. MyRA Coordinator, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (1 January 2019 until 31 December 2020)
6. Member of Faculty Open Day Committee, Faculty of Engineering (29 April 2019 until 30 April 2019)
7. Acting Program Coordinator, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (4 March 2019 until 2 May 2019)
8. Editorial Committee FENG Research Bulletin, Faculty of Engineering (1 March 2019 until 28 February 2020)
9. Member of Industry and Community Engagement Unit, Faculty of Engineering (15 January 2019 until 14 January 2021)

Year 2017

1. Research Fellow, Institute of Social Informatics and Technological Innovations (ISITI) (1 September 2017 until 31 August 2019)

Year 2016

1. Member of Editorial Committee for FENG Research Bulletin, Faculty of Engineering (1 January 2016 until 31 December 2016)

Year 2015

1. Member of Special Task Force for EAC Visit, Faculty of Engineering (2 January 2015 until 27 February 2015)
2. Coordinator, Process Control Laboratory, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (2 January 2015 until 2 January 2017)
3. Member of Working Committee STEM Education Forum and Workshop, UNIMAS STEM EnCon 2015 (26 May 2015)
4. Member of Editorial Committee for FENG Research Bulletin, Faculty of Engineering (1 January 2015 until 31 December 2015)
5. Research Fellow, Institute of Social Informatics and Technological Innovations (ISITI) (1 September 2015 until 31 August 2017)
6. Member of Industrial and Community Laboratory Unit, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (1 October 2015 until 30 September 2016)

Year 2014

1. Head, Programme and Protocol Unit, UNIMAS STEM EnCon 2014 (8 – 9 December 2014)
2. Member of Editorial Committee for FENG Research Bulletin, Faculty of Engineering (1 January 2014 until 31 December 2014)
3. Appointment as Speaker for Basic Principle of Chemical Process Safety for Scheme J (7 May 2014)
4. Chairperson Final Year Project Technical Session, Faculty of Engineering (30 June 2014)

Year 2013

1. Research Assistant for Consultation Project entitled Biomass Removal Plan for Murum Hydroelectric (17 September 2013 until 16 November 2013)
2. Head of E-Learning Unit, Faculty of Engineering (2 January 2013 until 31 December 2015)
3. Acting Programme Coordinator, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (1 February 2013 until 31 May 2013)
4. Reviewer for EnCon 2013, Faculty of Engineering (17 April 2013)
5. Member of Sub-Accreditation Unit, Faculty of Engineering (3 April 2013 until 31 December 2015)
6. Member of Internal Auditing Unit, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (1 April 2013 until 30 May 2013)
7. Appointment as Speaker for Basic Proses Instrumentation for Scheme J (25 June 2013)
8. Appointment as Speaker for Basic Process Control for Scheme J (28 August 2013)
9. Appointment as Speaker for Fundamentals of Refrigeration & Air Conditioning for Scheme J (6 November 2013)
10. Member of Editorial Committee for FENG Research Bulletin, Faculty of Engineering (1 January 2013 until 31 December 2013)

Year 2012

1. Member of UNIMAS E-Learning Unit, Centre of Applied Learning and Multimedia, 17 April 2012 until 17 April 2014
2. Member of Competency Development Programme for Supporting and Administrative Staff, Department of Chemical Engineering and Energy Sustainability, Faculty of Engineering (1 January 2012 until 31 December 2012)
3. Appointment as Speaker for Motivational Talk at SK Kampung Baru (7 March 2012)

Year 2011

1. Member of E-Learning Unit, Faculty of Engineering (8 March 2011 until 31 December 2012)
2. Member of Sub-Accreditation Unit, Faculty of Engineering (4 July 2011)
3. Appointment as Speaker for Safety in Chemical Handling for Scheme J (13 July 2011)
4. Appointment as Speaker for Basic Arc Welding for Scheme J (20 July 2011)
5. Appointment as Speaker for Motivational Talk Year 6 Jagoi Group (29 July 2011)



11. EXTERNAL APPOINTMENTS

Year 2024

1. Reviewer for the paper entitled "Emotional Intelligence and Implicit Interdisciplinary Skills: Key Components for Effective Digital and AI-Enhanced Learning", The 18th International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2024, 2 July 2024.
2. Reviewer for the paper entitled "Comparative Analysis of Electricity Grid Tariffs versus Generator Costs in Nigeria", International Journal of Latest Technology in Engineering Management & Applied Science, 21 June 2024.
3. Reviewer for the paper entitled "Perception of Architecture Lecturers on the Effectiveness of CPD Practices in Community Colleges", Advanced Sustainable Technology International Conference 2024, 19 June 2024.
4. Reviewer for the paper entitled "Development of carbon fiber composite material blades for vertical axis wind turbines as an alternative energy source for street lights for a speed range of 2-8 m/s", Advanced Sustainable Technology International Conference 2024, 12 June 2024.
5. Reviewer for the paper entitled "Evaluating the Effect of Electromagnetic Field from Electrical Distribution Substations in Aguata, Nigeria", International Journal of Research and Innovation in Applied Science, 1 June 2024.
6. Reviewer for the paper entitled "Transesterification of Castor Oil for Biodiesel Production Using H₂SO₄ Wet Impregnated Snail, Egg and Crab Shell Catalyst", International Journal of Research and Innovation in Applied Science, 25 May 2024.
7. Reviewer for the paper entitled "Igniting Potential_How Key Antecedents Shape Employee Participation in Knowledge Management Systems", The 18th International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2024, 22 May 2024.
8. Appointment as 2nd Process Control Virtual Symposium as Technical Committee, from 17th May until 5th September 2024.
9. Reviewer for the paper entitled "Evolution of Smart Air Monitoring System and its Role in Supporting SDG", Advanced Sustainable Technology International Conference 2024, 16 May 2024.
10. Reviewer for the paper entitled "Assessment of Hand-Dug Wells Water Quality in Apeinumbu Community of Yandev, Gboko Local Government Area, Benue State, Nigeria: Implications for Public Human", International Journal of Research and Scientific Innovation, 1 May 2024.
11. Reviewer for the paper entitled "The Impact of IT Evolution on Industries and Workforce Skills: A Systematic Literature Review", InSITE 2024: Informing Science + IT Education Conferences, 20 April 2024.
12. Reviewer for the paper entitled "Information Technology and the Complexity Cycle", InSITE 2024: Informing Science + IT Education Conferences, 3 April 2024.
13. Copyediting and Production for the paper entitled "Comparison of Neural Capabilities of Hammerstein, Neural-Wiener, Hammerstein-Wiener Model In Modeling Limiting Current of The Lanthanum - Electro Deposition", ASEAN Journal of Process Control, 28 March 2024.
14. Copyediting and Production for the paper entitled "Production of Monoethylene Glycol via Reactive Distillation Column", ASEAN Journal of Process Control, 28 March 2024.
15. Reviewer for the paper entitled "The Effect of Thermal and Zero-Point Energy of Quantum Vacuum on Spectra of Finite-Sized Nucleus of Hydrogen-Like Atoms", Journal of Applied Science & Process Engineering, 11 March 2024.
16. Copyediting and Production for the paper entitled "Abstracts of the presentations made at PCVS2023 without full papers", ASEAN Journal of Process Control, 8 March 2024.
17. Reviewer for the revised paper entitled "Multiscale Modeling of Non-catalytic Gas-solid Reactions Applied to the Hydrogen Direct Reduction of Iron Ore in Moving-bed Reactor", International Journal of Hydrogen Energy, 4 March 2024.
18. Copyediting and Production for the paper entitled "Comparison of Neural Capabilities of Hammerstein, Neural-Wiener, Hammerstein-Wiener Model In Modeling Limiting Current of The Lanthanum - Electro Deposition", ASEAN Journal of Process Control, 27 February 2024.
19. Reviewer for the paper entitled "Review of Bio-Interaction Mechanism and the Potential Effects of Occupational Extremely Low Frequency (ELF) Magnetic Field", Journal of Applied Science & Process Engineering, 14 February 2024.
20. Reviewer for the revised paper entitled "Gompertz model for describing biohydrogen production kinetics: Origin, modification, application and solving methods", International Journal of Hydrogen Energy, 9 February 2024.
21. Reviewer for the paper entitled "Prospect of Biodiesel from Sludge Palm Oil in Malaysia", Journal of Applied Science & Process Engineering, 1 February 2024.
22. Reviewer for the paper entitled "Viscosity for Some Organic Binary Liquid Systems: A Theoretical Study on Correlative Modeling", Journal of Applied Science & Process Engineering, 26 January 2024.
23. Copyediting and Production for the paper entitled "Bayesian-ANN controller for pH-control", ASEAN Journal of Process Control, 25 January 2024.
24. Copyediting and Production for the paper entitled "Model Predictive Control for Efficient Process Control: A Case Study for Absorber-Stripper System with MEA in Hydrogen Plant", ASEAN Journal of Process Control, 25 January 2024.
25. Reviewer for the paper entitled "Advanced Process Control for Production of Influenza Vaccine Shariah Compliance using Acutase in Batch Reactor", ASEAN Journal of Process Control, 18 January 2024.
26. Reviewer for the paper entitled "A Study of Correlative Modeling on Viscosity for Some Organic Binary Liquid Systems", Journal of Applied Science & Process Engineering, 17 January 2024.
27. Reviewer for the revised paper entitled "Experimental investigation of emissions analysis on Norouzak (Salvia lerifolia) seeds oil biodiesel blends in single-cylinder DI diesel engine", Energy Science, 16 January 2024.
28. Reviewer for the revised paper entitled "Factors Affecting Hydrogen Production in Microbial Electrolysis Cell (MEC): A Review", International Journal of Hydrogen Energy, 16 January 2024.
29. Reviewer for the paper entitled "Performance Evaluation of Unconventional Index for Controllability and Stability Analysis: Application on a Patented Reactor for Renewable Hydrogen Production", ASEAN Journal of Process Control, 8 January 2024.
30. Reviewer for the paper entitled "Modeling and Control of Steam Methane Reforming Process Using Model Predictive Control", ASEAN Journal of Process Control, 4 January 2024.
31. Reviewer for the revised paper entitled "Multiscale Modeling of Non-catalytic Gas-solid Reactions Applied to the Hydrogen Direct Reduction of Iron Ore in Moving-bed Reactor", International Journal of Hydrogen Energy, 4 January 2024.
32. Reviewer for the paper entitled "The absorption experience of Gen Y beginning teachers in elementary schools, from the point of view of the beginning teachers and their mentors", InSITE 2024: Informing Science + IT Education Conferences, 3 January 2024

Year 2023

1. Reviewer for the paper entitled "Comparison of Neural Capabilities of Hammerstein, Neural-Wiener, Hammerstein-Wiener Model In Modeling Limiting Current of The Lanthanum -Electro Deposition", ASEAN Journal of Process Control, 10 December 2023.
2. Reviewer for the paper entitled "Production of Monoethylene Glycol via Reactive Distillation Column", ASEAN Journal of Process Control, 10 December 2023.
3. Panellist (Judge) for Process Control Virtual Symposium 2023 (PCVS 2023) on 2nd December 2023.
4. Panellist Academia Assembly 4 November 2023, Malaysia Urban Forum 2023, Kuching from 4th until 8th November 2023.
5. Reviewer for the paper entitled "Self-supervised Probe Pose Regression via Optimized Ultrasound Representations for US-CT Fusion", 4th International Conference on Medical Imaging and Computer-Aided Diagnosis, 9 October 2023.
6. Reviewer for the paper entitled "Implementation of Sashimi Waterfall Model: A Development of Online Ordering System", 2023 11th IEEE Conference on Systems, Process & Control, 4 October 2023.
7. Reviewer for the paper entitled "Optimisation of Electrical Discharge Machining Processing for AZ91 Magnesium Alloy using Coupled AHP-Taguchi Analyses-GA Method with the Rank Selection Approach", Journal of Applied Science & Process Engineering, 22 September 2023.
8. Reviewer for the paper entitled "Progress of intelligent diagnosis via multiple brain features in Alzheimer's disease", 4th International Conference on Medical Imaging and Computer-Aided Diagnosis, 18 September 2023.
9. Reviewer for the paper entitled "The Evaluation of the efficiency of okra waste for heavy metals removal from wastewater in natural gas production", Journal of Applied Science & Process Engineering, 15 September 2023.

10. Reviewer for the paper entitled "Effect of Ethrel as a Flower Induction Agent on the Growth and Quality of Fresh Golden Pineapple (MD2) in Malaysia", *Journal of Applied Science & Process Engineering*, 8 September 2023.
 11. Reviewer for the revised paper entitled "A Comprehensive Review on The Role of Hydrogen in Renewable Energy Systems", *International Journal of Hydrogen Energy*, 6 September 2023.
 12. Reviewer for the revised paper entitled "Development of A Locally Sourced Miniature Facility Capable of Transforming Bio-Waste into Renewable Energy", *International Journal of Latest Technology in Engineering, Management & Applied Science*, 5 September 2023.
 13. Reviewer for the revised paper entitled "A review of typical transition metal phosphides electrocatalysts for hydrogen evolution reaction", *International Journal of Hydrogen Energy*, 27 August 2023.
 14. Reviewer for the paper entitled "Analysis method of binary concentration-inhomogeneous systems", *Qeios*, 18 August 2023.
 15. Reviewer for the paper entitled "A Hybrid Machine Learning-Based Model For Predicting Rice Yield To Enhance Food Security And Nutrition In Malaysia", 2023 IEEE International Conference on Agrosystem Engineering, Technology & Applications, 27 July 2023.
 16. Reviewer for the paper entitled "A review of typical transition metal phosphide electrocatalysts for hydrogen evolution reaction", *International Journal of Hydrogen Energy*, 18 July 2023.
 17. Reviewer for the paper entitled "Domotic system for the control and monitoring of electronic equipment", *The 21st International Conference on Education and Information Systems, Technologies and Applications: EISTA 2023*, 8 July 2023.
 18. Reviewer for the revised paper entitled "Fixed bed in dark fermentative reactors: is it imperative for enhanced biomass retention, biohydrogen evolution and substrate conversion", *International Journal of Hydrogen Energy*, 26 June 2023.
 19. Reviewer for the paper entitled "Modelling and Analysis of Salient-Pole Rotor Interior Permanent Magnet Synchronous Motor for Oil and Gas Pump Applications", *Journal of Applied Science & Process Engineering*, 15 June 2023.
 20. Reviewer for the paper entitled "Self-Physical Fitness Training Program with Sit up Sensor to Enhance the Abdominal Muscle Strength", *The 21st International Conference on Education and Information Systems, Technologies and Applications: EISTA 2023*, 15 June 2023.
 21. Reviewer for the paper entitled "Fixed bed in dark fermentative reactors: is it imperative for enhanced biomass retention, biohydrogen evolution and substrate conversion", *International Journal of Hydrogen Energy*, 18 May 2023.
 22. Reviewer for the paper entitled "Cybersecurity Issues in the Secondary and Higher Education Systems", *InSITE 2023: Informing Science + IT Education Conferences*, 28 March 2023.
 23. Reviewer for the paper entitled "Let's Get Ready For Work - Employability Skills Development in an is Capstone Project", *InSITE 2023: Informing Science + IT Education Conferences*, 21 March 2023.
 24. Reviewer for the paper entitled "The Potential of Multi-Stage Pressure Retarded Osmosis for Blue Energy Harvesting", *Journal of Modern Green Energy*, 21 March 2023.
 25. Editorial Board for the Clean Energy Technology and Application from 9 February 2023 until 8 February 2025.
 26. Reviewer for the revised paper entitled "Model-Based Optimal and Robust Control of Renewable Hydrogen Gas Production in a Fed-Batch Microbial Electrolysis Cell", *International Journal of Hydrogen Energy*, 15 March 2023.
 27. Reviewer for the paper entitled "SVU-VERNO, an open collaborative content platform based on interaction", *InSITE 2023: Informing Science + IT Education Conferences*, 6 February 2023.
 28. Reviewer for the paper entitled "A thoughtful review of a manuscript is a gift. It is a gift of expertise, of time, and of careful consideration. It is a gift for authors, editors, and the field", *InSITE 2023: Informing Science + IT Education Conferences*, 5 February 2023.
 29. Reviewer for the paper entitled "Encryption Challenges", 14th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2023, 1 February 2023.
 30. Reviewer for the paper entitled "Integrating Quantum Computing into De Novo Metabolite Identification", 14th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2023, 28 January 2023.
 31. Reviewer for the revised paper entitled "A comprehensive review on enhanced biohydrogen production strategies: pre-treatment, applied and future perspective", *BioEnergy Research*, 22 January 2023.
 32. Reviewer for the revised paper entitled "Model-Based Optimal and Robust Control of Renewable Hydrogen Gas Production in a Fed-Batch Microbial Electrolysis Cell", *International Journal of Hydrogen Energy*, 22 January 2023.
 33. Reviewer for the paper entitled "Comparing real time student situational engagement in traditional and active learning classrooms using non-invasive electrodermal measurements", 14th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2023, 22 January 2023.
 34. Reviewer for the paper entitled "To Practice SDG4 and Solve the Issues of Students with Different Learning Preferences and Minority with Special Needs in Education Through Interdisciplinary Innovation", 14th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2023, 21 January 2023.
 35. Publication Committee Member for the ASEAN Journal of Process Control (AJPC) from January 2022 until December 2023.
- Year 2022**
1. Reviewer for the paper entitled "Detecting Scaling Potential in Oilfield Waters", *Journal of Applied Science & Process Engineering (JASPE)*, 28 November 2022.
 2. Reviewer for the paper entitled "A Creative Combination of Time Series Models for Accurate Forecasting of Monthly Rainfall: A Case Study in Northeast India", *Journal of King Saud University - Science*, 13 November 2022.
 3. Reviewer for the paper entitled "Low carbon hydrogen production in Canada via natural gas pyrolysis", *International Journal of Hydrogen Energy*, 26 October 2022.
 4. Reviewer for the paper entitled "Application of Mahalanobis-Taguchi system in liver function profile of methadone flexi dispensing program", *Journal of Applied Science & Process Engineering (JASPE)*, 28 September 2022.
 5. Reviewer for the paper entitled "Model-Based Optimal and Robust Control of Renewable Hydrogen Gas Production in a Fed-Batch Microbial Electrolysis Cell", *International Journal of Hydrogen Energy*, 21 September 2022.
 6. Reviewer for the paper entitled "Challenges of Developing Digital Twin for Additive Layer Manufacturing in the Aerospace Industry", 10th IEEE Conference on Systems, Process & Control (ICSPC2022), 29 August 2022.
 7. Copy-Editing and Production Editor for the paper entitled "Feedforward Artificial Neural Networks-Model Prediction Control (FANN-MPC) for Semi-Simultaneous Saccharification and Fermentation (SSSF) Bioethanol Process", *ASEAN Journal of Process Control*, 23 August 2022.
 8. Production Editor for the paper entitled "Locally weighted kernel partial least square model for nonlinear processes: A case study", *ASEAN Journal of Process Control*, 23 August 2022.
 9. Reviewer for the paper entitled "Comparative Studies of RSM, RSM-GA and ANFILS for Modeling and Optimization of Naphthalene Adsorption on Chitosan-CTAB-Sodium Bentonite Clay Matrix", *Journal of Applied Science & Process Engineering (JASPE)*, 30 June 2022.
 10. Reviewer for the paper entitled "Efficiency parameters that effectively correspond with hydrogen production from VFAs in microbial electrolysis cells", *Revista Mexicana de Ingeniería Química*, 24 June 2022.
 11. Guest Editor for the Special Issue Topic on Green Polymers for Energy Production. *Journal of Modern Energy*. From 1 June 2022 until 30 September 2022.
 12. Reviewer for the paper entitled "Sustainable Development in Low Carbon, Cleaner and Greener Energies and the Environment", *Journal of Modern Energy*, 26 May 2022.
 13. Reviewer for the paper entitled "Scenario Specification: Structuring Effective Collaborative Communication", 20th International Conference on Education and Information Systems, Technologies and Applications (EISTA 2022), 13 May 2022.
 14. Reviewer for the paper entitled "Improving the Instructional Effectiveness of Environmental Education through Digital Games", 20th International Conference on Education and Information Systems, Technologies and Applications (EISTA 2022), 12 May 2022.
 15. Reviewer for the paper entitled "A Review Based On Spinel Ferrite Nanomaterials - MgFe₂O₄ - Synthesis of Photocatalytic Dye Degradation in Sunlight Response", *International Journal of Latest Technology in Engineering, Management & Applied Science*, 18 April 2022.
 16. Reviewer for the paper entitled "Review of Models for Particle Detachment and Attachment in Porous Media", *Journal of Applied Science & Process Engineering (JASPE)*, 18 March 2022.
 17. Member of Peer Reviewer Board, *Journal of Modern Green Energy (JMGE, ISSN 2790-3206)*. From 16 March 2022 until Present.
 18. Reviewer for the paper entitled "Teaching Industrial Robot Programming using FANUC ROBOGUIDE and iRVision Software",



- 20th International Conference on Education and Information Systems, Technologies and Applications (EISTA 2022), 18 March 2022.
19. Reviewer for the paper entitled "Modeling, Optimization and Relative Importance Analysis of Process Parameter of Heterocyclic Aromatic Compound Dye (Methylene Blue) on Chitosan Adsorbent: Application of RSM and ANN Techniques with Genetic Algorithm", Journal of Applied Science & Process Engineering (JASPE), 8 March 2022.
 20. Reviewer for the paper entitled "Plantwide Design and Control of Sulfur-Iodine Thermochemical Cycle Plant for Hydrogen Production", ASEAN Journal of Process Control, 1 March 2022.
 21. Reviewer for the paper entitled "Semi Autonomous Detection of Bite Points for a Surgical Needle", 8th IEEE International Colloquium on Signal Processing & Applications (CSPA 2022), 25 February 2022.
 22. Reviewer for the paper entitled "The journey from isolation to community", InSITE 2022: Informing Science + IT Education Conferences, 10 February 2022.
 23. Reviewer for the paper entitled "Exploring Strategies Enterprise Information Systems Specialists Need to Integrate Novel Neural Network Algorithms into an Imaging Application – A Design Science Study", InSITE 2022: Informing Science + IT Education Conferences, 27 January 2022.
 24. Reviewer for the paper entitled "Teacher-Student Interaction in Distance Learning in Emergency Situations", InSITE 2022: Informing Science + IT Education Conferences, 23 January 2022.
 25. Reviewer for the paper entitled "Facilitating scientific events guided by Complex Thinking: A case study of an online Inter/Transdisciplinary Advanced Training School", InSITE 2022: Informing Science + IT Education Conferences, 17 January 2022.
 26. Programme Committee, 5th International Conference on Soft Computing and Data Mining 2022 (SCDM 2022) (3 October 2021 – 31st May 2022)
 27. Industrial Training Supervisor for Politeknik Kuching Student, Shahida Binti Idris from 27 September 2021 until 11 February 2022.

Year 2021

1. Reviewer for the paper entitled "A Study of University Students' Adoption of 3D Online Immersive Worlds", InSITE 2022: Informing Science + IT Education Conferences, 26 November 2021.
2. Reviewer for the paper entitled "Digital Literacy in the Core: The Emerging Higher Education Landscape", InSITE 2022: Informing Science + IT Education Conferences, 5 November 2021.
3. Reviewer for the paper entitled "High Speed Decoding by collaboration between the Hartmann Rudolph and Information Set Decoding algorithms", 5th International Conference on Soft Computing and Data Mining 2022 (SCDM 2022), 30 October 2021.
4. Reviewer for the paper entitled "The Data Imputation Impact in Predicting Future River Flow Values", 5th International Conference on Soft Computing and Data Mining 2022 (SCDM 2022), 17 October 2021.
5. Member of Reviewer Board, International Journal of Research and Scientific Innovation (IJRSI), ISSN: 2321-2705, From 7 October 2021 until Present.
6. Programme Committee, 5th International Conference on Soft Computing and Data Mining 2022 (SCDM 2022) (3 October 2021 – 31st May 2022)
7. Industrial Training Supervisor for Politeknik Kuching Student, Shahida Binti Idris from 27 September 2021 until 11 February 2022.
8. Reviewer for the paper entitled "Viscosity Measurement of Olive Oil under Pressure", Food Science & Nutrition Technology, 8 September 2021.
9. Reviewer for the paper entitled "Insurance and Performance of Hydroelectric Energy Projects in Kenya", International Journal of Research and Scientific Innovation (IJRSI) ISSN: 2321-2705, 26 June 2021
10. Reviewer for the paper entitled "Power Budget Analysis of a Distributed 5G EPON Network", 19th International Conference on Education and Information Systems, Technologies and Applications (EISTA 2021), 20 May 2021
11. Reviewer for the paper entitled "Factors Associated With Waste Disposal Practices among Residents of Agbowo, Ibadan North Local Government, Oyo State, Nigeria", International Journal of Research and Scientific Innovation (IJRSI) ISSN: 2321-2705, 18 May 2021
12. Reviewer for the paper entitled "Interoperable Digital Skills for Foreign Languages Education in the COVID-19 Paradigm", 19th International Conference on Education and Information Systems, Technologies and Applications (EISTA 2021), 17 May 2021
13. Reviewer Board Member, International Journal of Research and Innovation in Applied Science (IJRIAS), From 1 January until 31 December 2021

14. Reviewer for the paper entitled "Perceived Ease of Use, Perceived Usefulness, and Behavioral Intention to Use Multimedia Teaching Methods for SAP ERP: Application of the Technology Acceptance Model", 19th International Conference on Education and Information Systems, Technologies and Applications (EISTA 2021), 5 May 2021
15. Reviewer for the paper entitled "Developed Face Recognition System Based Haar Cascade Frontal Face Algorithm", 2021 IEEE International Conference on Automatic Control & Intelligent Systems (I2CACIS2021), 26 June 2021
16. Publication Committee, Asia-Pacific Journal of Process Control (APJPC)/PSE. From 1 March 2021 until Present
17. Reviewer for the paper entitled "An Empirical Examination of the Effects of CTO Leadership on the Alignment of the Governance of Big Data and Information Security Risk Management Effectiveness", InSITE 2021: Informing Science + IT Education Conferences, 6 -7 July 2021.
18. Reviewer for the abstract entitled "Developing a Big Data Success Model in Organizations: A Grounded Theory Method", InSITE 2021: Informing Science + IT Education Conferences, 6 -7 July 2021.
19. Reviewer for the paper entitled "Mitigation of Harmonic Distortion for Grid Connected PV Solar Using MPPT Controller", 17th IEEE International Colloquium on Signal Processing & Applications (CSPA 2021), 5 – 6 March 2021
20. Reviewer for the paper entitled "The impact of e-learning on students: measuring the acceptance of the technology between undergraduates' students in business studies", The 12th International Conference on Education, Training and Informatics: ICETI 2021, 9 - 12 March 2021.
21. Reviewer for the paper entitled "A Design Science Tool to Improve Code Maintainability for Hypertext Pre-processor (PHP) Programs", InSITE 2021: Informing Science + IT Education Conferences, 6 -7 July 2021.
22. Reviewer for the abstract entitled "A Class Purposed to Teach the Scientific Method Applied to the Business Discipline", InSITE 2021: Informing Science + IT Education Conferences, 6 -7 July 2021.
23. Publication Committee Member, Asia Pacific Journal of Process Control, 1 March 2021 until Present

Year 2020

1. Reviewer for the paper entitled "Assessing the Bioavailability and Bioaccessibility of Selenium from Selenium-Rich Algae", Food Science & Nutrition Technology, 6 October 2020.
2. Reviewer for the paper entitled "Mathematical Modelling of Drying Characteristics of Lemon Grass Leaves (*Cymbopogon Citratus*)", Food Science & Nutrition Technology, 18 September 2020.
3. Reviewer for the paper entitled "Curricular Aspects for Global Competencies in Engineering Education", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2020, 13 – 16 September 2020
4. Reviewer for the paper entitled "Foundation Doctor Training: Educating future educators - Peer led weekly foundation teaching", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2020, 13 – 16 September 2020
5. Reviewer for the paper entitled "The Impact of Current Relation between Facebook Utilization and E-Stalking towards Users Privacy", IEEE International Conference on Automatic Control and Intelligent Systems: I2CACIS 2020, 20 June 2020
6. Reviewer for the paper entitled "Digital Watermark Copyright Protection with QR Code", IEEE International Conference on Automatic Control and Intelligent Systems: I2CACIS 2020, 20 June 2020
7. Reviewer for the paper entitled "A Mathematical Model of Lung Functionality using Pressure Signal for Volume-Controlled Ventilation", IEEE International Conference on Automatic Control and Intelligent Systems: I2CACIS 2020, 20 June 2020
8. Reviewer for the paper entitled "Teaching First Year Students the Engineering Design Process with a Tupperware Shape-O® Ball Toy", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2020, 12 – 15 July 2020
9. Reviewer for the paper entitled "Exergy Analysis of the Cryogenic Air Separation Process", International Conference on Process Engineering and Advanced Materials 2020 (ICPEAM2020), 14 – 16 July 2020
10. Reviewer for the paper entitled "Research and Consulting in Data-Based Strategic Product Planning", 11th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2020, 10 – 13 March 2020

11. Reviewer for the paper entitled "Consulting via Research in IMPRESS", 11th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2020, 10 – 13 March 2020
12. Reviewer for the paper entitled "Non-Invasive Double Loop Management System for Professional Update in Higher Education Within the Framework of Industry 4.0", 11th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2020, 10 – 13 March 2020

Year 2019

1. Reviewer for the paper entitled "Electrospray flow rate influenced the size of functionalized soot nanoparticles", 26th Regional Symposium on Chemical Engineering, 30 – 31 October 2019
2. National Committee, 26th Regional Symposium on Chemical Engineering, 30 – 31 October 2019
3. Reviewer for the paper entitled "Detection of Ascorbic Acid, Acetaminophen and Caffeine -Can it Occur Simultaneously Using Electrochemistry Techniques and Bare Electrodes?", 11th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2020, 10 – 13 March 2020
4. Reviewer for the paper entitled "Leadership in education, business and community on the verge of the 4th industrial revolution", 11th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2020, 10 – 13 March 2020
5. Reviewer for the paper entitled "A Multidisciplinary Module to Improve Students' Brainstorming Sessions and Teach Students How to Better Lead the Brainstorming Process", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2019, 6 – 9 July 2019
6. Reviewer for the paper entitled "A Staggered-Start Model for Undergraduate Engineering Laboratory Sessions", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2019, 6 – 9 July 2019
7. Reviewer for the paper entitled "Is It Worth Doing Science On-line? A Reflexive View on the Online Surveys", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2019, 6 – 9 July 2019
8. Reviewer for the paper entitled "Gamification as educational strategy for STEM learning: DIGITgame project a collaborative experience between Italy and Turkey high schools around the Smartcity concept", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2019, 6 – 9 July 2019
9. Reviewer for the paper entitled "Using concept mapping through PBL to enhance lifelong knowledge of pronunciation in risk factors for cardiovascular diseases : Case university of Algiers" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019
10. Reviewer for the paper entitled "Effective Collaboration Research Project On IT Solution For Automatic Measurement Of Timber Assortment" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019
11. Reviewer for the paper entitled "A Case Study In Academic Informing Science As Applied to Environmental Remediation" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019
12. Reviewer for the paper entitled "Data Anonymization and Sampling Algorithms Using Imbalanced Datasets for Deep Learning" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019
13. Reviewer for the paper entitled "Boundary Crossing between Educational Provider and Industry: Similarity and Differences" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019

14. Reviewer for the paper entitled "A Methodology in Biomechanical Engineering Evaluations of Injury Causation Mechanisms in Slip/Trip/Fall Accidents and Claims" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019
15. Reviewer for the paper entitled "The Integrated Model for Linking Up Students Learning, Innovation and Social Impact" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019
16. Reviewer for the paper entitled "New Methods of Teaching in Primary Schools with Hungarian Language of Instruction" 10th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2019, 12 – 15 March 2019
17. Reviewer for the paper entitled "Early student access to automated summative marking tools for self learning", 17th International Conference on Education and Information Systems, Technologies and Applications: EISTA 2019, 6 – 9 July 2019
18. Member of Elsevier Advisory Panel, 10 March 2019 until Present
19. Honorary Peer Reviewer, Global Journals USA, 10 August 2019 until Present
20. Editorial Board Member, SVOA Materials Science and Technology, 9 January 2019 until Present

Year 2015

1. Reviewer for the entitled "Application of Central Composite Design for Optimization of the Removal of Humic Substances Using Coconut Copra", International Journal of Industry Chemistry, 17 March 2015.

