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**Position** : Associate Professor, CEng (MIChemE)  
**Faculty** : Faculty of Chemical and Process Engineering Technology  
**University** : Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)  
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**Scopus link** : <https://www.scopus.com/authid/detail.uri?authorId=35800852300>  
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**Google Scholar** : <https://scholar.google.com/citations?user=nVWWqo4AAAAJ&hl=en>



## AFFILIATION

1. Dean, Faculty of Chemical and Process Engineering Technology, Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia (Sept 2023 – current)
2. Associate Professor, Faculty of Chemical and Process Engineering Technology, Universiti Malaysia Pahang, Malaysia (Sept 2022 – current)
3. Associate Professor, Department of Chemical Engineering, College of Engineering, Universiti Malaysia Pahang, Malaysia (Sept 2018 – current)
4. Senior Lecturer, Faculty of Chemical and Natural Resources Engineering, Universiti Malaysia Pahang, Malaysia (Sept 2012 – Aug 2018 )
5. Principal Research Fellow, Centre for Research in Advanced Fluid & Processes (FLUID Centre), Universiti Malaysia Pahang, Malaysia (2022 – current)
6. Visiting Professor, Faculty of Chemical Engineering, Industrial University of Ho Chi Minh City, Viet Nam (Jan 2022 – current)

## ACADEMIC QUALIFICATION

PhD (Chemical Engineering), 2012- Loughborough University, Leicestershire, United Kingdom  
 M. Sc. (Chemical Engineering), 2006 – Universiti Putra Malaysia, Malaysia  
 B Eng. (Chemical Engineering, 2004 – Universiti Putra Malaysia, Malaysia

## RESEARCH EXPERTISE

1. **Expertise:** reaction engineering & catalysis (*reforming, gasification, pyrolysis, esterification, transesterification, cracking, polymerization*), advanced materials (*catalysis, adsorbent, polymeric resin, phase change material*), renewable and sustainable energy (*biodiesel, biofuels, hydrogen*), separation engineering (*crystallization, rare earth separation, adsorption, solvent extraction*).
2. **Domain:** Technology and Engineering
3. **Sub-Domain:** Chemical Engineering

## LIST OF TAUGHT SUBJECT

No	Session	Subjects & Codes
<b>BKC Program</b>		
1	SEM 2 2022 2023	BKC3463 Unit Operation <b>(31 students)</b>
2	SEM 1 2022 2023	BKC3463 Unit Operation <b>(48 students)</b> KUK2142 Engineering Economics <b>(60 students)</b>
3	SEM 2 2021 2022	BKF3463 Unit Operation <b>(42 students)</b> KUK2142 Engineering Economics <b>(57 students)</b>

4	SEM 1 2021 2022	BKF3463 Unit Operation <b>(60 students)</b> KUK2142 Engineering Economics <b>(62 students)</b>
5	SEM 2 2020 2021	BKF3463 Unit Operation <b>(42 students)</b> BKF3142 Process Engineering Economics <b>(57 students)</b>
6	SEM 1 2020 2021	BKF3463 Unit Operation <b>(60 students)</b> BKF3142 Process Engineering Economics <b>(62 students)</b>
7	SEM 2 2019 2020	BKF3463 Unit Operation <b>(52 students)</b> BKF3731 Unit Operation Lab <b>(11 students)</b>
8	SEM 1 2019 2020	BKF3463 Unit Operation <b>(45 students)</b>
9	SEM 2 2018 2019	BKF3463 Unit Operation <b>(51 students)</b>
10	SEM 1 2018 2019	BKF3463 Unit Operation <b>(45 students)</b> BKF3731 Unit Operation Lab <b>(18 students)</b>
11	SEM 2 2017 2018	BKF3463 Unit Operation <b>(31 students)</b> BKF3731 Unit Operation Lab <b>(52 students)</b>
12	SEM 1 2017 2018	BKF3463 Unit Operation <b>(45 students)</b>
13	SEM 2 2016 2017	BKF3463 Unit Operation <b>(62 students)</b>
14	SEM 1 2016 2017	BKF3463 Unit Operation <b>(74 students)</b>
15	SEM 2 2015 2016	BKF3463 Unit Operation <b>(36 students)</b>
16	SEM 1 2015 2016	BKF3463 Unit Operation <b>(58 students)</b>
17	SEM 2 2014 2015	BKF3463 Unit Operation <b>(6 students)</b>
18	SEM 1 2014 2015	BKF3463 Unit Operation <b>(38 students)</b>
19	SEM 2 2013 2014	BKF3463 Unit Operation <b>(71 students)</b>
20	SEM 1 2013 2014	BKF3463 Unit Operation <b>(64 students)</b> BKF2453 Chemical Reaction Engineering <b>(58 students)</b>
21	SEM 2 2012 2013	BKF3492 Separation Process <b>(61 students)</b> DKK2453 Unit Operation <b>(55 students)</b>
22	SEM 1 2012 2013	BKF1243 Analytical Chemistry <b>(35 students)</b> DKK1751 Basic Engineering Lab <b>(30 students)</b> DKK 3433 Unit Operation <b>(31 students)</b>
23	SEM 1 2008 2009	BKC3363 Science & Engineering Material <b>(95 students)</b> BKF2343 Material And Energy Balance <b>(27 students)</b>
24	SEM 3 2007 2008	BKF1333 Thermodynamics <b>(14 students)</b> BKC2323 Thermodynamics <b>(2 students)</b>
25	SEM 2 2007 2008	BKF3492 Unit Operation 2 <b>(33 students)</b> BKF3751 Chemical Engineering Lab 1 <b>(38 students)</b> BKU4133 Project Management & Economics <b>(34 students)</b>

26	SEM 1 2007 2008	BKU4133 Project Management & Economics <b>(62 students)</b> DKK2233 Fluid Mechanics <b>(44 students)</b>
27	SEM 2 2006 2007	BKF1112 Engineer & Society <b>(21 students)</b> BKC3423 Transport Processes & Unit Operation 2 <b>(61 students)</b>
28	SEM 1 2006 2007	BKU4113 Project Management & Economics <b>(44 students)</b> BKC1711 Science & Engineering Lab 1 <b>(24 students)</b> DKK3761 Engineering Lab 4 <b>(24 students)</b>
<b>SBKC Program</b>		
1	SEM 3 2021 2022	BKF3463 Unit Operation <b>(9 students)</b>
2	SEM 1 2021 2022	BKF3463 Unit Operation <b>(1 student)</b> KUK2142 Engineering Economics <b>(11 students)</b>
3	SEM 2 2021 2022	BKF3463 Unit Operation <b>(11 students)</b>
4	SEM 2 2020 2021	BKC3492 Separation Processes <b>(8 students)</b>
5	SEM 2 2019 2020	BKF3463 Unit Operation <b>(7 students)</b>
<b>Executive Program</b>		
1	Januari 2019	Bachelor Eksekutif Teknologi Loji Proses Kimia Module: Separation Process 1 <b>(13 students)</b>

## LIST OF PUBLICATIONS

No.	Articles	Position	Date/Year
<b>Journal Article</b>			
1.	<b>Title:</b> Two-Stage Conversion of Used Cooking Oil to Biodiesel Using Ion Exchange Resins as Catalysts <b>Authors:</b> Sumaiya Zainal Abidin, Misbahu Ladan Mohammed and Basudeb Saha <b>Journal:</b> Catalysts DOI: <a href="https://doi.org/10.3390/catal13081209">https://doi.org/10.3390/catal13081209</a>	First Author	2023
2.	<b>Title:</b> Dry reforming of methane over Co/CeO <sub>2</sub> -La <sub>2</sub> O <sub>3</sub> catalyst synthesized using needleless electrospinning. <b>Authors:</b> Siti Nor Amira Rosli, Nur Hidayati Othman, Van Cuong Nguyen, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> Chemical Engineering & Technology DOI: <a href="https://doi.org/10.1002/ceat.202300151">https://doi.org/10.1002/ceat.202300151</a>	Corresponding Author	2023
3.	<b>Title:</b> Adsorptive capacity and kinetic studies of PK216 resin for the extraction of Pr, Gd, and Dy rare earth elements. <b>Authors:</b> Hidayah, Nur Nadiatul; Roslan, Nurul Asmawati; Osazuwa, Osarieme; Cuong, Van, <b>Zainal Abidin, Sumaiya</b> <b>Journal:</b> Journal of Chemical Technology & Biotechnology DOI: <a href="http://doi.org/10.1002/jctb.7426">http://doi.org/10.1002/jctb.7426</a>	Corresponding Author	2023
4.	<b>Title:</b> Recent Progress on Catalyst Development in Biomass Tar Steam Reforming: Toluene as a Biomass Tar Model Compound <b>Authors:</b> <b>Sumaiya Zainal Abidin</b> , Osarieme Uyi Osazuwa, Nur Hidayati Othman, Herma Dina Setiabudi, Sarina Sulaiman <b>Journal:</b> Biomass Conversion and Biorefinery DOI: <a href="https://doi.org/10.1007/s13399-023-03876-9">https://doi.org/10.1007/s13399-023-03876-9</a>	Corresponding Author	2023

No.	Articles	Position	Date/Year
5.	<p><b>Title:</b> The Role of Catalyst Synthesis on the Enhancement of Nickel Praseodymium (III) Oxide for the Conversion of Greenhouse Gases to Syngas</p> <p><b>Authors:</b> Osarieme Uyi Osazuwa, <b>Sumaiya Zainal Abidin</b>, Nurul Asmawati Roslan, Xiaolei Fan, Herma Dina Setiabudi, Dai-Viet N. Vo, Jude A. Onwudili</p> <p><b>Journal:</b> Clean Technologies and Environmental Policy</p> <p><b>DOI:</b> <a href="https://doi.org/10.1007/s10098-022-02455-2">https://doi.org/10.1007/s10098-022-02455-2</a></p>	Corresponding Author	2022
6.	<p><b>Title:</b> The Synergistic Role of Ni-Co Bimetallic Catalyst for H<sub>2</sub>-Rich Syngas Production via Glycerol Dry Reforming</p> <p><b>Authors:</b> Mohd-Nasir Nor Shafiqah, <b>Sumaiya Zainal Abidin</b>, Nurul Asmawati Roslan, Osarieme Uyi Osazuwa, Issara Chanakaewsomboon</p> <p><b>Journal:</b> Journal of the Energy Institute</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.joei.2022.09.008">https://doi.org/10.1016/j.joei.2022.09.008</a></p>	Corresponding Author	2022
7.	<p><b>Title:</b> Deciphering the Imperative Role of Ruthenium in Enhancing the Performance of Ni/Nd<sub>2</sub>O<sub>3</sub>.Gd<sub>2</sub>O<sub>3</sub> in Glycerol Dry Reforming</p> <p><b>Authors:</b> William Mah Wey Lian, Mohd-Nasir Nor Shafiqah, Nurul Asmawati Roslan, Siti Nor Amira Rosli, Suganthi Subramaniam, Ahmad Faiz Malek, Osarieme Uyi Osazuwa &amp; <b>Sumaiya Zainal Abidin</b></p> <p><b>Journal:</b> Chemical Engineering Communications</p> <p><b>DOI:</b> <a href="https://doi.org/10.1080/00986445.2022.2116324">https://doi.org/10.1080/00986445.2022.2116324</a></p>	Corresponding Author	2022
8.	<p><b>Title:</b> The Effect of Oxygen Mobility/Vacancy on Carbon Gasification in Nano Catalytic Dry Reforming Of Methane: A Review</p> <p><b>Authors:</b> Siti Nor Amira Rosli, <b>Sumaiya Zainal Abidin</b>, Osarieme Uyi Osazuwa, Xiaolei Fan, Yilai Jiao</p> <p><b>Journal:</b> Journal of CO<sub>2</sub> Utilization</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.jcou.2022.102109">https://doi.org/10.1016/j.jcou.2022.102109</a></p>	Corresponding Author	2022
9.	<p><b>Title:</b> Cobalt-Based Catalysts for Hydrogen Production by Thermochemical Valorization of Glycerol: A Review</p> <p><b>Authors:</b> M. B. Bahari, C. R. Mamat, Aishah Abdul Jalil, T. J. Siang, N. S. Hassan, N. F. Khusnun, W. Nabgan, N. A. Roslan, <b>S. Z. Abidin</b>, H. D. Setiabudi &amp; D.-V. N. Vo</p> <p><b>Journal:</b> Environmental Chemistry Letters</p> <p><b>DOI:</b> <a href="https://doi.org/10.1007/s10311-022-01423-y">https://doi.org/10.1007/s10311-022-01423-y</a></p>	Co-author	2022
10.	<p><b>Title:</b> Fabrication of MoS<sub>2</sub>-rGO and MoS<sub>2</sub>-ZIF-8 Membranes Supported on Flat Alumina Substrate for Effective Oil Removal</p> <p><b>Authors:</b> Nur Hidayati Othman, Nurul Syazana Fuzil, Nur Hashimah Alias, Munawar Zaman Shahrudin, Muhammad Shafiq Mat Shayuti, Woei Jye Lau, Ahmad Fauzi Ismail, <b>Sumaiya Zainal Abidin</b>, Sarina Sulaiman, Tutuk Djoko Kusworo</p> <p><b>Journal:</b> Emergent Materials</p> <p><b>DOI:</b> <a href="https://doi.org/10.1007/s42247-021-00343-x">https://doi.org/10.1007/s42247-021-00343-x</a></p>	Co-author	2022
11.	<p><b>Title:</b> Enhanced Syngas Production from Glycerol Dry Reforming over Ru Promoted Ni Catalyst Supported on Extracted Al<sub>2</sub>O<sub>3</sub></p> <p><b>Authors:</b> Nurul Asmawati Roslan, <b>Sumaiya Zainal Abidin</b>, Osarieme Uyi Osazuwa, Sim Yee Chin, Y.H.Taufiq-Yap</p> <p><b>Journal:</b> Fuel</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.fuel.2021.123050">https://doi.org/10.1016/j.fuel.2021.123050</a></p>	Corresponding Author	2022
12.	<p><b>Title:</b> Esterification Reaction of Free Fatty Acid in Used Cooking Oil using Sulfonated Hypercrosslinked Exchange Resin as Catalyst</p> <p><b>Authors:</b> NA Roslan, <b>SZ Abidin</b>, N Abdullah, OU Osazuwa, NM Yunus</p> <p><b>Journal:</b> Chemical Engineering Research and Design</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.cherd.2021.10.020">https://doi.org/10.1016/j.cherd.2021.10.020</a></p>	Corresponding Author	2022
13.	<p><b>Title:</b> Improvements in Hydrogen Production from Methane Dry Reforming on Filament-Shaped Mesoporous Alumina-Supported Cobalt Nanocatalyst</p> <p><b>Authors:</b> Ngoc Thang Tran, Thong Le Minh Pham, Trinh Duy Nguyen, Nguyen Van Cuong, Tan Ji Siang, Pham TT Phuong, AA Jalil, Quang Duc Truong, <b>Sumaiya Zainal Abidin</b>, Ftwi Y Hagos, Sonil Nanda, Dai-Viet N Vo</p> <p><b>Journal:</b> International Journal of Hydrogen Energy, 46(48), 24781-24790</p>	Corresponding Author	2021

No.	Articles	Position	Date/Year
	DOI: <a href="https://doi.org/10.1016/j.ijhydene.2020.06.142">https://doi.org/10.1016/j.ijhydene.2020.06.142</a>		
14.	<b>Title:</b> CO <sub>2</sub> Reforming of CH <sub>4</sub> on Mesoporous Alumina-Supported Cobalt Catalyst: Optimization of Lanthana Promoter Loading <b>Authors:</b> Ngoc Thang Tran, P Senthil Kumar, Quyet Van Le, Nguyen Van Cuong, Pham TT Phuong, AA Jalil, Gaurav Sharma, Amit Kumar, Ajit Sharma, Bamidele Victor Ayodele, <b>Sumaiya Zainal Abidin</b> , Dai-Viet N Vo <b>Journal:</b> Topics in Catalysis <b>DOI:</b> <a href="https://doi.org/10.1007/s11244-021-01428-x">https://doi.org/10.1007/s11244-021-01428-x</a>	Corresponding Author	2021
15.	<b>Title:</b> H <sub>2</sub> -rich Syngas from Glycerol Dry Reforming over Ni-Based Catalysts Supported on Alumina from Aluminum Dross <b>Authors:</b> NA Roslan, <b>SZ Abidin</b> , OU Osazuwa, SY Chin, YH Taufiq-Yap <b>Journal:</b> International Journal of Hydrogen Energy <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2021.03.162">https://doi.org/10.1016/j.ijhydene.2021.03.162</a>	Corresponding Author	2021
16.	<b>Title:</b> Synergistic Catalysis of Bi-Metals in the reforming of Biomass-Derived Hydrocarbons: A Review <b>Authors:</b> Nor Shafiqah Mohd-Nasir, Osarieme Uyi Osazuwa, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> International Journal of Hydrogen Energy <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2021.01.144">https://doi.org/10.1016/j.ijhydene.2021.01.144</a>	Corresponding Author	2021
17.	<b>Title:</b> An Insight into the Effects of Synthesis Methods on Catalysts Properties For Methane Reforming <b>Authors:</b> Osarieme Uyi Osazuwa, <b>Sumaiya Zainal Abidin</b> , Xiaolei Fan, Andrew Nosakhare Amenaghawon, Mohammad Tazli Azizan <b>Journal:</b> Journal of Environmental Chemical Engineering <a href="https://doi.org/10.1016/j.jece.2021.105052">https://doi.org/10.1016/j.jece.2021.105052</a>	Corresponding Author	2021
18.	<b>Title:</b> Development of Nanosilica-Based Catalyst for Syngas Production via CO <sub>2</sub> Reforming of CH <sub>4</sub> : A Review <b>Authors:</b> Chi Cheng Chong, Yoke Wang Cheng, Mahadi B Bahari, Lee Peng Teh, <b>Sumaiya Zainal Abidin</b> , Herma Dina Setiabudi <b>Journal:</b> International Journal of Hydrogen Energy <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2020.01.086">https://doi.org/10.1016/j.ijhydene.2020.01.086</a>	Co-author	2020
19.	<b>Title:</b> Catalytic Reforming of Oxygenated Hydrocarbons for the Hydrogen Production: An Outlook <b>Authors:</b> MT Azizan, A Aqsha, M Ameen, A Syuhada, H Klaus, <b>SZ Abidin</b> , F Sher <b>Journal:</b> Biomass Conversion and Biorefinery <b>DOI:</b> <a href="https://doi.org/10.1007/s13399-020-01081-6">https://doi.org/10.1007/s13399-020-01081-6</a>	Co-author	2020
20.	<b>Title:</b> The Functionality of Ion Exchange Resins for Esterification, Transesterification and Hydrogenation Reactions <b>Authors:</b> OU Osazuwa, <b>SZ Abidin</b> <b>Journal:</b> Chemistry Select <b>DOI:</b> <a href="https://doi.org/10.1002/slct.202001381">https://doi.org/10.1002/slct.202001381</a>	Corresponding Author	2020
21.	<b>Title:</b> An Overview on the Role of Lanthanide Series (Rare Earth Metals) in H <sub>2</sub> and Syngas Production from CH <sub>4</sub> Reforming Processes <b>Authors:</b> OU Osazuwa, <b>SZ Abidin</b> <b>Journal:</b> Chemical Engineering Science <b>DOI:</b> <a href="https://doi.org/10.1016/j.ces.2020.115863">https://doi.org/10.1016/j.ces.2020.115863</a>	Corresponding Author	2020
22.	<b>Title:</b> Waste Materials as the Potential Phase Change Material Substitute in Thermal Energy Storage System: A Review <b>Authors:</b> Siti Amirah Abdul Ghani, Saidatul Shima Jamari, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> Chemical Engineering Communications <a href="https://doi.org/10.1080/00986445.2020.1715960">https://doi.org/10.1080/00986445.2020.1715960</a>	Corresponding Author	2020
23.	<b>Title:</b> La-doped Cobalt Supported on Mesoporous Alumina Catalysts for Improved Methane Dry Reforming and Coke Mitigation <b>Authors:</b> Ngoc Thang Tran, Quyet Van Le, Nguyen Van Cuong, Trinh Duy Nguyen, Nguyen Huu Huy Phuc, Pham TT Phuong, Minhaj Uddin Monir, Azrina Abd Aziz, Quang Duc Truong, <b>Sumaiya Zainal Abidin</b> , Sonil Nanda, Dai-Viet N Vo <b>Journal:</b> Journal of Energy Institute <b>DOI:</b> <a href="https://doi.org/10.1016/j.joei.2020.01.019">https://doi.org/10.1016/j.joei.2020.01.019</a>	Corresponding Author	2020

No.	Articles	Position	Date/Year
24.	<p><b>Title:</b> Hydrogen Production by Glycerol Dry Reforming over Rhenium Promoted Ni-Based Catalyst Supported on Santa Barbara Amorphous 15 (SBA-15)</p> <p><b>Authors:</b> Nurul Asmawati Roslan, Nur Nabillah Mohd Arif, Jessy Lynn Jaspin, Nurul Aini Mohamed Razali, <b>Sumaiya Zainal Abidin</b></p> <p><b>Journal:</b> Energy Sources, Part A: Recovery, Utilization, and Environmental Effects</p> <p><b>DOI:</b> <a href="https://doi.org/10.1080/15567036.2019.1645762">https://doi.org/10.1080/15567036.2019.1645762</a></p>	Corresponding Author	2019
25.	<p><b>Title:</b> A Review on Glycerol Reforming Processes Over Ni-Based Catalyst for Hydrogen and Syngas Productions</p> <p><b>Authors:</b> NA Roslan, <b>SZ Abidin</b>, A Ideris, DVN Vo</p> <p><b>Journal:</b> International Journal of Hydrogen Energy</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2019.08.211">https://doi.org/10.1016/j.ijhydene.2019.08.211</a></p>	Corresponding Author	2019
26.	<p><b>Title:</b> The Synthesis of Sulphonated Hypercrosslinked Exchange Resin for Free Fatty Acid Esterification</p> <p><b>Authors:</b> NA Roslan, N Abdullah, <b>SZ Abidin</b></p> <p><b>Journal:</b> Comptes Rendus Chimie</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.crci.2019.08.004">https://doi.org/10.1016/j.crci.2019.08.004</a></p>	Corresponding Author	2019
27.	<p><b>Title:</b> Extraction of Light, Medium and Heavy Rare Earth Elements using Synergist Extractants Developed from Ionic Liquid and Conventional Extractants</p> <p><b>Authors:</b> NN Hidayah, <b>SZ Abidin</b></p> <p><b>Journal:</b> Comptes Rendus Chimie</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.crci.2019.10.006">https://doi.org/10.1016/j.crci.2019.10.006</a></p>	Corresponding Author	2019
28.	<p><b>Title:</b> Kinetic Studies of the Esterification of Acrylic Acid with 2-Ethyl Hexanol Catalyzed by Diaion Resins</p> <p><b>Authors:</b> MAAB Ahmad, SY Chin, <b>SBZ Abidin</b></p> <p><b>Journal:</b> Journal of Chemical Engineering of Japan</p> <p><b>DOI:</b> <a href="https://doi.org/10.1252/jcej.17we063">https://doi.org/10.1252/jcej.17we063</a></p>	Co-author	2019
29.	<p><b>Title:</b> Hydrogen Production via CO<sub>2</sub> Dry Reforming of Glycerol over Re-Ni/CaO Catalysts</p> <p><b>Authors:</b> Nur Nabillah Mohd Arif, <b>Sumaiya Zainal Abidin</b>, Osarieme Uyi Osazuwa, Dai-Viet N. Vo, Mohammad Tazli Azizan, Yun Hin Taufiq-Yap</p> <p><b>Journal:</b> International Journal of Hydrogen Energy <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2018.06.084">https://doi.org/10.1016/j.ijhydene.2018.06.084</a></p>	Corresponding Author	2019
30.	<p><b>Title:</b> Hydrogen Production from Glycerol Dry Reforming over Ag-Promoted Ni/Al<sub>2</sub>O<sub>3</sub></p> <p><b>Authors:</b> Norazimah Harun, <b>Sumaiya Zainal Abidin</b>, Osarieme Uyi Osazuwa, Yun Hin Taufiq-Yap, Mohammad Tazli Azizan</p> <p><b>Journal:</b> International Journal of Hydrogen Energy</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2018.03.093">https://doi.org/10.1016/j.ijhydene.2018.03.093</a></p>	Corresponding Author	2019
31.	<p><b>Title:</b> Studies on the Performance of Tubular Flow Reactor for Esterification of Free Fatty Acid from Used Cooking Oil Using Highly Porous Cation Exchange Resin as Catalyst</p> <p><b>Authors:</b> N. M. Yunus, <b>S. Z. Abidin</b>, Chin S.Y.</p> <p><b>Journal:</b> Energy Sources, Part A: Recovery, Utilization, and Environmental Effects</p> <p><b>DOI:</b> <a href="https://doi.org/10.1080/15567036.2018.1503757">https://doi.org/10.1080/15567036.2018.1503757</a></p>	Corresponding Author	2018
32.	<p><b>Title:</b> The Evolution of Mineral Processing in Extraction of Rare Earth Elements using Liquid-Liquid Extraction: A Review</p> <p><b>Authors:</b> Nur Nadiatul Hidayah, <b>Sumaiya Zainal Abidin</b></p> <p><b>Journal:</b> Minerals Engineering</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.mineng.2018.03.018">https://doi.org/10.1016/j.mineng.2018.03.018</a></p>	Corresponding Author	2018
33.	<p><b>Title:</b> The Evolution of Mineral Processing in Extraction Of Rare Earth Elements using Solid-Liquid Extraction over Liquid-Liquid Extraction: A Review</p> <p><b>Authors:</b> Hidayah, N.N., <b>Abidin, S.Z.</b></p> <p><b>Journal:</b> Minerals Engineering</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.mineng.2017.07.014">https://doi.org/10.1016/j.mineng.2017.07.014</a></p>	Corresponding Author	2017
34.	<p><b>Title:</b> Syngas Production from Methane Dry Reforming over Ni/SBA-15 Catalyst: Effect of Operating Parameters</p> <p><b>Authors:</b> Osaze Omoregbe, Huang T. Danh, Chinh Nguyen-Huy, Setiabudi, H.D., <b>Abidin, S.Z.</b>, Quang Duc Truong, Dai-Viet N. Vo</p> <p><b>Journal:</b> International Journal of Hydrogen Energy <b>DOI:</b> <a href="https://doi.org/10.1016/j.ijhydene.2017.03.146">https://doi.org/10.1016/j.ijhydene.2017.03.146</a></p>	Co-author	2017

No.	Articles	Position	Date/Year
35.	<p><b>Title:</b> Reforming of Glycerol for Hydrogen Production over Ni Based Catalysts: Effect of Support Type</p> <p><b>Authors:</b> Nur Nabillah Mohd Arif, Nursafia Mohd Yunus, Norazimah Harun, Mohammad Tazli Azizan, Vo Nguyen Dai Viet, <b>Sumaiya Zainal Abidin</b></p> <p><b>Journal:</b> Energy Sources, Part A: Recovery, Utilization, and Environmental Effects</p> <p><b>DOI:</b> <a href="https://doi.org/10.1080/15567036.2016.1244580">https://doi.org/10.1080/15567036.2016.1244580</a></p>	Corresponding Author	2017
36.	<p><b>Title:</b> Comparison of Novozyme 435 and Purolite D5081 as Heterogeneous Catalysts for the Pretreatment of Used Cooking Oil for Biodiesel Production</p> <p><b>Authors:</b> Haigh, K. F., <b>Abidin, S. Z.</b>, Saha, B., Vladislavljević, G. T.</p> <p><b>Journal:</b> Fuel</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.fuel.2013.04.056">https://doi.org/10.1016/j.fuel.2013.04.056</a></p>	Co-author	2013
37.	<p><b>Title:</b> Quantitative Analysis of Fatty Acids Composition in the Used Cooking Oil (UCO) by Gas Chromatography-Mass Spectrometry (GC-MS)</p> <p><b>Authors:</b> <b>Abidin, S. Z.</b>, Patel, D., Saha, B.</p> <p><b>Journal:</b> Canadian Journal of Chemical Engineering</p> <p><b>DOI:</b> <a href="https://doi.org/10.1002/cjce.21848">https://doi.org/10.1002/cjce.21848</a></p>	First Author	2013
38.	<p><b>Title:</b> Esterification of Free Fatty Acids in Used Cooking Oil Using Ion-Exchange Resins as Catalysts: An Efficient Pretreatment Method for Biodiesel Feedstock</p> <p><b>Authors:</b> <b>Abidin, S. Z.</b>, Haigh, K. F., Saha, B.</p> <p><b>Journal:</b> Industrial and Engineering Chemistry Research</p> <p><b>DOI:</b> <a href="https://doi.org/10.1021/ie3007566">https://doi.org/10.1021/ie3007566</a></p>	First Author	2012
39.	<p><b>Title:</b> Effects of Temperature and Solvent Concentration on the Solvent Crystallization of Palm-Based Dihydroxystearic Acid with Isopropyl Alcohol</p> <p><b>Authors:</b> Koay, G. F. L., Chuah, T. G., <b>Zainal-Abidin, S.</b>, Ahmad, S. &amp; Choong, T. S. Y.</p> <p><b>Journal:</b> Particoulogy</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.partic.2011.04.011">https://doi.org/10.1016/j.partic.2011.04.011</a></p>	Co-author	2012
40.	<p><b>Title:</b> Development, Characterization and Commercial Application of Palm Based Dihydroxystearic Acid and its Derivative: An Overview</p> <p><b>Authors:</b> Koay, G. F. L., Chuah, T. G., <b>Zainal-Abidin, S.</b>, Ahmad, S., Choong, T. S. Y.</p> <p><b>Journal:</b> Journal of Oleo Science</p> <p><b>DOI:</b> <a href="https://doi.org/10.5650/jos.60.237">https://doi.org/10.5650/jos.60.237</a></p>	Co-author	2011
41.	<p><b>Title:</b> Solvent Crystallization of Palm Based Dihydroxystearic Acid with Isopropyl Alcohol: Effects of Solvent Quantity and Concentration on Particle Size Distribution, Crystal Habit and Morphology, and Resultant Crystal Purity</p> <p><b>Authors:</b> Koay, G. F. L., Chuah, T. G., <b>Zainal-Abidin, S.</b>, Ahmad, S., Choong, T. S. Y.</p> <p><b>Journal:</b> Industrial Crops and Products</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.indcrop.2011.03.030">https://doi.org/10.1016/j.indcrop.2011.03.030</a></p>	Co-author	2011
42.	<p><b>Title:</b> Effect of Solvent Concentration and Cooling Modes on Morphology, Particle Size Distribution, and Yield of Dihydroxystearic Acid (DHSA) Crystals</p> <p><b>Authors:</b> Sumaiya, Z. A., Luqman Chuah, A., Koay, G. F. L., Salmiah, A., Choong, T. S. Y.</p> <p><b>Journal:</b> Particulate Science and Technology</p> <p><b>DOI:</b> <a href="https://doi.org/10.1080/02726351.2010.481583">https://doi.org/10.1080/02726351.2010.481583</a></p>	First author	2010
43.	<p><b>Title:</b> Habit and Morphology Study on the Palm-Based 9,10-Dihydroxystearic Acid (DHSA) Crystals</p> <p><b>Authors:</b> Koay, G. F. L., Chuah, T. G., <b>Zainal-Abidin, S.</b>, Ahmad, S., Choong, T. S. Y.</p> <p><b>Journal:</b> Materials Chemistry and Physics</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.matchemphys.2008.09.069">https://doi.org/10.1016/j.matchemphys.2008.09.069</a></p>	Co-author	2009
44.	<p><b>Title:</b> Liquid-liquid Extraction of Cerium using Synergist Extractant</p> <p><b>Authors:</b> N.N. Hidayah, M.F.S. Nurihan and <b>S.Z. Abidin</b></p> <p><b>Journal:</b> Journal of Mechanical Engineering and Sciences</p> <p><b>DOI:</b> <a href="https://doi.org/10.15282/jmes.12.1.2018.2.0296">https://doi.org/10.15282/jmes.12.1.2018.2.0296</a></p>	Corresponding Author	2018
45.	<p><b>Title:</b> Studies on Free Fatty Acid Esterification of Used Cooking Oil: Investigation on the Performance of Sulphonated Cation Exchange Resins</p>	Corresponding Author	2018

No.	Articles	Position	Date/Year
	<b>Authors:</b> S. Z. Abidin, N. M. Yunus, S. A. A. Ghani, N. A. R. Roslan & Chin S.Y. <b>Journal:</b> Biofuels <b>DOI:</b> <a href="https://doi.org/10.1080/17597269.2017.1378990">https://doi.org/10.1080/17597269.2017.1378990</a>		
46.	<b>Title:</b> A Preliminary Study: Esterification of Free Fatty Acids (FFA) in Artificially Modified Feedstock using Ionic Liquids as Catalysts <b>Authors:</b> Nurul Asmawati Roslan, Mohammad Haniff Che Hasnan, Norhayati Abdullah, Syamsul Bahari Abdullah, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> Bulletin of Chemical Reaction Engineering & Catalysis <b>DOI:</b> <a href="https://doi.org/10.9767/bcrec.11.2.549.182-190">https://doi.org/10.9767/bcrec.11.2.549.182-190</a>	Corresponding Author	2016
47.	<b>Title:</b> Carbon Dioxide Dry Reforming Of Glycerol for Hydrogen Production using Ni/ZrO <sub>2</sub> and Ni/Cao as Catalysts <b>Authors:</b> Nur Nabillah Mohd Arif, Dai-Viet N. Vo, Mohammad Tazli Azizan, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> Bulletin of Chemical Reaction Engineering & Catalysis, 11, 200-209, <b>DOI:</b> <a href="https://doi.org/10.9767/bcrec.11.2.551.200-209">https://doi.org/10.9767/bcrec.11.2.551.200-209</a>	Corresponding Author	2016
48.	<b>Title:</b> Characterization of Ag-Promoted Ni/SiO <sub>2</sub> Catalysts for Syngas Production via Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol <b>Authors:</b> Norazimah Harun, Jolius Gimbut, Mohammad Tazli Azizan, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> Bulletin of Chemical Reaction Engineering & Catalysis <b>DOI:</b> <a href="http://dx.doi.org/10.9767/bcrec.11.2.553.220-229">http://dx.doi.org/10.9767/bcrec.11.2.553.220-229</a>	Corresponding Author	2016
49.	<b>Title:</b> Pretreatment of Used Cooking Oil for the Preparation of Biodiesel using Heterogeneous Catalysis <b>Authors:</b> Kathleen F. Haigh, <b>Sumaiya Zainal Abidin</b> , Basu Saha, Goran T. Vladisavljević <b>Journal:</b> Progress in Colloids and Polymer <b>DOI:</b> <a href="https://doi.org/10.1007/978-3-642-28974-3_4">https://doi.org/10.1007/978-3-642-28974-3_4</a>	Co-author	2012
50.	<b>Title:</b> Synthesis and Characterization of Modified Sago Starch Films for Drug Delivery Application <b>Authors:</b> Shabirah Ezan, <b>Sumaiya Zainal Abidin</b> , Fatmawati Adam <b>Journal:</b> Australian Journal of Basic and Applied Sciences e-ISSN: : 2309-8414	Co-author	Jan 2017
51.	<b>Title:</b> Biodiesel in Holy Quran: Among the Review of the Arabic Lexicography and Modern Science <b>Author:</b> Ramli, S., <b>Abidin, S.Z.</b> , Husin, A. F. H. <b>Journal:</b> Mediterranean Journal of Social Sciences <b>DOI:</b> <a href="https://doi.org/10.5901/mjss.2014.v5n19p336">https://doi.org/10.5901/mjss.2014.v5n19p336</a>	Co-author	Aug 2014
<b>Proceedings</b>			
1.	<b>Title:</b> Synthesis and characterization of stearic acid/waste filler materials as composite phase change material in thermal energy storage application <b>Author:</b> SAA Ghani, MNN Shafiqah, <b>SZ Abidin</b> <b>Journal:</b> Materials Today: Proceedings <b>DOI:</b> <a href="https://doi.org/10.1016/j.matpr.2023.06.363">https://doi.org/10.1016/j.matpr.2023.06.363</a>	Corresponding Author	2023
2.	<b>Title:</b> Syngas Production from Glycerol Dry Reforming using Nd <sub>2</sub> RuO <sub>5</sub> Perovskite Catalysts <b>Author:</b> Ahmad Faiz Malek, Siti Nor Amira Rosli, Nurul Asmawati Roslan, Mohd-Nasir Nor Shafiqah, William Mah Wey Lian, Nur Aqilah Mohd Razali, Osarieme Uyi Osazuwa and <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> AIP Conference Proceeding <b>DOI:</b> <a href="https://doi.org/10.1063/5.0100097">https://doi.org/10.1063/5.0100097</a>	Corresponding Author	2022
3.	<b>Title:</b> Comparison on the Physicochemical Properties of Alumina Extracted from Various Aluminum Wastes <b>Authors:</b> SM Mohamad, NA Roslan, <b>SZ Abidin</b> <b>Journals:</b> Materials Today: Proceedings <b>DOI:</b> <a href="https://doi.org/10.1016/j.matpr.2021.09.561">https://doi.org/10.1016/j.matpr.2021.09.561</a>	Corresponding Author	2021
4.	<b>Title:</b> Extracted $\gamma$ -Al <sub>2</sub> O <sub>3</sub> from Aluminum Dross as a Catalyst Support for Glycerol Dry Reforming Reaction	Corresponding Author	2021



No.	Articles	Position	Date/Year
	<b>Authors:</b> NA Roslan, <b>SZ Abidin</b> , NS Nasir, SY Chin, YH Taufiq-Yap <b>Journals:</b> Materials Today: Proceedings <b>DOI:</b> <a href="https://doi.org/10.1016/j.matpr.2020.09.390">https://doi.org/10.1016/j.matpr.2020.09.390</a>		
5.	<b>Title:</b> Characterization of Stearic Acid and Paraffin Incorporated with Aluminium as Filler for the Development of Phase Change Material Composite in Thermal Energy Storage <b>Authors:</b> <b>SZ Abidin</b> , SAA Ghani, UO Osarieme, SS Jamari <b>Journal:</b> IOP Conference Series: Materials Science and Engineering <b>DOI:</b> <a href="https://doi.org/10.1088/1757-899X/991/1/012077">https://doi.org/10.1088/1757-899X/991/1/012077</a>	Corresponding Author	2020
6.	<b>Title:</b> Synthesis and Characterization of Phase Change Material Integrated with Aluminium Waste as the Thermal Energy Storage Medium <b>Authors:</b> S A A Ghani, S SJamari, <b>S Z Abidin</b> <b>Journal:</b> IOP Conference Series: Materials Science and Engineering <b>DOI:</b> <a href="https://doi.org/10.1088/1757-899X/736/3/032004">https://doi.org/10.1088/1757-899X/736/3/032004</a>	Corresponding Author	2020
7.	<b>Title:</b> Aqueous Phase Reforming of Sorbitol over Ca Doped Ni/Al <sub>2</sub> O <sub>3</sub> for Value-Added Chemicals Production <b>Authors:</b> Mohamad Razlan Md Radzi, Mohammad Tazli Azizan, Nur Fatin Dariah Mohamad Daud, Muhammad Azizi Topek, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> Materials Today: Proceeding <b>DOI:</b> <a href="https://doi.org/10.1016/j.matpr.2018.07.025">https://doi.org/10.1016/j.matpr.2018.07.025</a>	Co-author	2018
8.	<b>Title:</b> Esterification of Free Fatty Acid in Used Cooking Oil using Gelular Exchange Resin as Catalysts <b>Authors:</b> Nursofia Binti Mohd Yunus, Nurul Asmawati Binti Roslan, Chin Sim Yee, <b>Sumaiya Zainal Abidin</b> <b>Journal:</b> Procedia Engineering <b>DOI:</b> <a href="https://doi.org/10.1016/j.proeng.2016.06.450">https://doi.org/10.1016/j.proeng.2016.06.450</a>	Corresponding Author	2016
9.	<b>Title:</b> Influence of Lanthanide Promoters on Ni/SBA-15 Catalysts for Syngas Production by Methane Dry Reforming <b>Authors:</b> Osaze Omoregbe, Huong T. Danh, <b>Abidin, S.Z.</b> , Setiabudi, H.D. Bawadi Abdullah, Khanh B. Vu & Dai-Viet N. Vo <b>Journal:</b> Procedia Engineering <b>DOI:</b> <a href="https://doi.org/10.1016/j.proeng.2016.06.556">https://doi.org/10.1016/j.proeng.2016.06.556</a>	Co-author	2016
10.	<b>Title:</b> Synthesis and Characterization of Stearic Acid/Waste Filler Materials as Composite Phase Change Material in Thermal Energy Storage Application <b>Conference:</b> 6 <sup>th</sup> National Conference for Postgraduate Research (NCON-PGR 2022)	Corresponding Author	15/11/22
11	<b>Conference:</b> 6 <sup>th</sup> International Conference of Chemical Engineering and Industrial Biotechnology (ICCEIB2022)	Corresponding Author	15/08/22 – 16/08/22
12	<b>Title:</b> Hydrogen Production via Glycerol Dry Reforming Reaction Over Ru-Ni-Supported on Extracted Alumina from Aluminum Dross: A Kinetic Evaluation <b>Conference:</b> 2 <sup>nd</sup> Energy Security And Chemical Engineering Congress (ESChE 2021)	Corresponding Author	03/11/21 – 05/11/21
13	<b>Title:</b> Comparison on Physicochemical Properties of Mesoporous Alumina Extracted from Various Aluminum Wastes <b>Conference:</b> International Symposium of Reaction Engineering, Catalysis & Sustainable Energy (RECaSE2021)	Corresponding Author	06/04/21
14	<b>Title:</b> Effective Combination of Metal-Support for Bimetallic Catalysts System in Ethanol and Glycerol Reforming: A Review <b>Conference:</b> 5 <sup>th</sup> International Conference of Chemical Engineering and Industrial Biotechnology (ICCEIB2020)	Corresponding Author	9/08/20 – 11/08/20
15	<b>Title:</b> The Utilization of Phase Change Material Composite Derived from Fatty Acid and Waste Materials as Thermal Energy Storage Medium <b>Conference:</b> Energy Security and Chemical Engineering Congress 2019 (ESChE 2019)	Corresponding Author	17/07/19 – 19/07/19
16	<b>Title:</b> Review on the Utilization of Waste Material as a Potential Substitute for the Phase Change Material used in Thermal Energy Storage System <b>Conference:</b> 4 <sup>th</sup> International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB) 2018	Corresponding Author	01/08/18 – 02/08/18

No.	Articles	Position	Date/Year
17	<b>Title:</b> Hydrogen Production via CO <sub>2</sub> Dry Reforming of Glycerol over Re-Ni/Cao Catalysts <b>Conference:</b> 4 <sup>th</sup> International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB) 2018	Corresponding Author	01/08/18 – 02/08/18
18	<b>Title:</b> Aqueous Phase Refroming of Sorbitol over Snosynthesized Ca Doped Ni Supported on Al <sub>2</sub> O <sub>3</sub> and TiO <sub>2</sub> for Production of Value Added Chemicals <b>Conference:</b> 4 <sup>th</sup> International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB) 2018	Co-author	01/08/18 – 02/08/18
19	<b>Title:</b> Syngas Production for Glycerol Dry Reforming over Ag-promoted Ni/Al <sub>2</sub> O <sub>3</sub> <b>Conference:</b> 3 <sup>rd</sup> International Conference on Hydrogen Energy	Corresponding Author	11/09/17 – 13/09/17
20	<b>Title:</b> Investigation on Performance of Tubular Flow Reactor on FFA Esterification from Used Cooking Oil using Highly Porous Cation Exchange Resin as Catalyst <b>Conference:</b> The 17th Congress Asian Pacific Confederation of Chemical Engineering 2017	Corresponding Author	23/08/17 – 27/08/17
21	<b>Title:</b> The Comparison on the Extraction Effects of Dy, Gd and Pr using Synergist Extractants and Independent Extractants in Liquid-Liquid Extraction <b>Conference:</b> The 17th Congress Asian Pacific Confederation of Chemical Engineering 2017	Corresponding Author	23/08/17 – 27/08/17
22	<b>Title:</b> Adsorption of Dy using Synergist Extractant Immobilised on Resin <b>Conference:</b> 2 <sup>nd</sup> International Conference of Separation Technology (ICOST 2017)	Corresponding Author	15/04/17 – 16/04/17
23	<b>Title:</b> Kinetic Studies of Free Fatty Acid Esterification Using Cation Exchange Resins as Catalyst <b>Conference:</b> International Conference on Fluids and Chemical Engineering (FluidsChE 2017)	Corresponding Author	04/04/17 – 6/04/17
24	<b>Title:</b> Application of Modified Sago Starch as an Alternative for Drug Delivery Carrier <b>Conference:</b> 3 <sup>rd</sup> International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB) 2016	Co-author	28/11/16 – 30/11/16
25	<b>Title:</b> Liquid-liquid Extraction of Cerium using Synergist Extractant <b>Conference:</b> 3 <sup>rd</sup> International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB) 2016	Corresponding Author	28/11/16 – 30/11/16
26	<b>Title:</b> Esterification of Free Fatty Acid in Used Cooking Oil Using Gelular Exchange Resin as Catalysts <b>Conference:</b> 4 <sup>th</sup> International Conference on Process Engineering and Advanced Materials (ICPEAM 2016)	Corresponding Author	15/08/16 – 17/08/16
27	<b>Title:</b> Influence of Lanthanide Promoters on Ni/SBA-15 Catalysts for Syngas Production by Methane Dry Reforming <b>Conference:</b> 4 <sup>th</sup> International Conference on Process Engineering and Advanced Materials (ICPEAM 2016)	Corresponding Author	15/08/16 – 17/08/16
28	<b>Title:</b> Syngas Production from Methane Dry Reforming over Ni/SBA-15 Catalyst: Effect of Operating Parameters <b>Conference:</b> 251 <sup>st</sup> ACS National Meeting & Explosion	Corresponding Author	13/03/16 – 17/03/16
29	<b>Title:</b> Effect of Different Oxides Support on Ni-Based Catalysts to the Syngas Production for Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol <b>Conference:</b> 3 <sup>rd</sup> International Conference on Catalysis for Renewable Sources: Fuel, Energy, Chemicals	Corresponding Author	6/09/15 – 11/09/15
30	<b>Title:</b> Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol for Hydrogen Production using Ni/ZrO <sub>2</sub> and Ni/CaO as Catalysts <b>Conference:</b> International Conference on Fluids and Chemical Engineering (FluidsChE 2015)	Corresponding Author	25/11/15 – 27/11/15
31	<b>Title:</b> Esterification of Free Fatty Acids (FFAs) from Highly Acidified Oil using Ionic Liquid Polymer as Catalyst <b>Conference:</b> International Conference on Fluids and Chemical Engineering (FluidsChE 2015)	Corresponding Author	25/11/15 – 27/11/15
31	<b>Title:</b> Production of Syngas through Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol using Ag-promoted on Ni/SiO <sub>2</sub> as Catalysts <b>Conference:</b> International Conference on Fluids and Chemical Engineering (FluidsChE 2015)	Corresponding Author	25/11/15 – 27/11/15
32	<b>Title:</b> Kinetics of Free Fatty Acid Esterification in Used Cooking Oil using Ion Exchange Resin as Catalyst	Corresponding Author	15/09/14 – 16/09/14

No.	Articles	Position	Date/Year
	<b>Conference:</b> 6 <sup>th</sup> International Conference on Chemical, Biological and Environmental Engineering (ICBEE 2014)		
33	<b>Title:</b> Industry Involvement in Undergraduate Research Project for Chemical Engineering (Biotechnology) Programme <b>Conference:</b> International Conference on Teaching and Learning in Computing and Engineering, Sarawak, Malaysia	Co-author	10/04/14 – 14/04/14
34	<b>Title:</b> Two Stage Esterification Transesterification Process for Synthesis of Biodiesel from Used Cooking Oil (UCO) using Novel Heterogenous Catalysts <b>Conference:</b> 9 <sup>th</sup> World Congress of Chemical Engineering	Corresponding Author	18/08/13 – 23/08/13
35	<b>Title:</b> Esterification of Free Fatty Acids using Ion Exchange Resin as a Catalyst: An Efficient Pre-Treatment Method for Biodiesel Production <b>Conference:</b> 3 <sup>rd</sup> International Congress on Green Process Engineering, Kuala Lumpur	Corresponding Author	6/12/11 – 8/12/11
36	<b>Title:</b> Esterification of Free Fatty Acids in Used Cooking Oil using Ion-Exchange Resins as Catalysts <b>Conference:</b> 8 <sup>th</sup> European Congress of Chemical Engineering together with ProcessNet-Annual Meeting Berlin, Germany	Corresponding Author	25/09/11 – 29/09/11
37	<b>Title:</b> Controlled and Natural Cooling Crystallization of Palm Based Dihydroxystearic Acid (DHSA) – Effect on the Yield, Purity and Crystal Size Distribution <b>Conference:</b> 15 <sup>th</sup> Regional Symposium on Chemical Engineering (RSCE) - 22 <sup>nd</sup> Symposium of Malaysian Chemical Engineers (SoMChE) 2008	Corresponding Author	2/12/08 – 3/12/08
38	<b>Title:</b> Seeded Crystallization of Dihydroxystearic Acid (DHSA) – Effect on Yield, Purity and Crystal Size Distribution <b>Conference:</b> Regional Symposium of Chemical Engineering (RSCE 2007), Jogjakarta, Indonesia	Corresponding Author	4/12/07 – 5/12/07
39	<b>Title:</b> Solvent Crystallization of Palm Based Dihydroxystearic Acid (DHSA) – Effects on Crystal Morphology and Particle Size Distribution <b>Conference:</b> Asian Particle Technology Symposium 2007 (APT 2007), Beijing, China	Corresponding Author	3/09/07 – 5/09/07

## RESEARCH GRANTS

No.	Project ID	Research Title	Jumlah (RM)	Duration	Position
<b>International Grants</b>					
1	UIC 171513 (14-337)	Investigation on the Performance of Packed Bed Reactor (PBR) in the Continuous Catalytic Esterification of Highly Acidified Oil using Heterogeneous Catalyst.	4000 USD	01/07/15-30/06/17	Project leader
<b>National Grants</b>					
1	RDU220119	Elucidation of the Kinetics and Reaction Pathways of Biomass Tar Reforming with In-Situ CO <sub>2</sub> Capture over CaO Waste-Derived Bifunctional Catalyst Sorbent	170694	01/09/22-31/08/25	Project leader
2	RDU190197	Reaction Kinetics and Mechanism of Glycerol Dry Reforming over Bimetallic Nickel-Based Catalyst Supported on Calcined Aluminum Dross	89270	01/01/19 – 31/12/20	Project leader
3	RDU150115	Studies on Isotherm, Kinetic and Mechanism of Rare Earth Elements (REE) Adsorption on Polymeric Resin Supported Ionic Liquid (PSIL).	127500	2/11/15 – 1/05/18	Project leader
4	RDU130108	Synthesis of Novel Catalysts for Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol for	92300	1/4/13 – 31/9/15	Project leader

No.	Project ID	Research Title	Jumlah (RM)	Duration	Position
		Syngas Production using Noble Metal-Based Catalysts Supported on Oxides.			
5	RDU210143	Elucidation of Reaction Kinetics of Methane Dry Reforming over Ni/EFB Biochar Catalysts	123101	07/09/21 -06/09/23	Co-researcher
6	RDU210137	Elucidation of the Micro-Mixing and Micro-Separation Controlling Mechanisms in a Membrane-Less Microfluidic Desalination Chip	97029	07/09/21 - 06/09/23	Co-researcher
7	RDU210134	Elucidation of Reaction Mechanism and Kinetic Study of Photocatalytic Degradation of Poultry Wastewater using Zinc Oxide Nanoparticles Derived From Pineapple Waste	150845	07/09/21 -06/09/24	Co-researcher
8	RDU1901163	Elucidating the Metallic and Basic Sites of Ni-Supported Fibrous Nanosilica on Reaction Mechanism of Glycerol Dry Reforming	111530	01/09/19 - 31/08/21	Co-researcher
9	RDU1901100	Elucidate The Kinetic Mechanism of Air-Steam Downdraft Gasification Process to Enhance Product Gas Yield With Low Tar Content	71511	01/09/19 - 31/08/21	Co-researcher
10	RDU190106	The Role of Nanoparticle-Gemini Surfactant as Wax Deposition Suppressant in Malaysian Crude Oil using Molecular Dynamics (MD)Simulation	92000	01/01/19 - 31/12/20	Co-researcher
11	RDU170119	Metal-Support Interaction of Ni-Supported Palm Oil Fuel Ash Catalyst Produced from Self-Combustion Technique for Methane Cracking	84000	15/08/17 - 14/08/19	Co-researcher
12	RDU160120	Active Drag Reduction Technique for Enhancing the Liquid-Liquid Mixing Intensity in Micromixers	75000	1/08/16 - 31/07/18	Co-researcher
13	KTP-UPM	Oily Wastewater Treatment and Water Reuses in Oil and Gas Industry	110500	01/03/16 - 28/02/18	Co-researcher
14	RDU150804	Development of a Reactive Distillation Column Prototype to Convert Acrylic Acid in the Petrochemical Wastewater to Valuable Butyl Acrylate through Esterification	161418	1/12/15 - 30/11/17	Co-researcher
15	RDU150114	Photocatalytic Study of Rare-Earth Doped Oxides for Hydrogen Production via Photoreforming Process	119400	2/11/15 - 1/11/17	Co-researcher
16	FRGS-UTP	Determination of Kinetic Model And Reaction Pathway for Aqueous Phase Reforming of Sorbitol to Hydrogen over Ni/Al <sub>2</sub> O <sub>3</sub> Catalysts Doped Group II Metal Oxides	129800	2/11/15 - 1/11/18	Co-researcher
17	RDU140133	Synthesis and Characterisation of High Specific Surface Area Hydrophilic Polymer Particles	113000	1/7/14 - 30/6/17	Co-researcher
18	RDU140504	From molecule to product: Development of Stable Kappa-Carrageenan Capsule through Molecular Properties Manipulation	200000	15/5/14 - 14/12/16	Co-researcher

No.	Project ID	Research Title	Jumlah (RM)	Duration	Position
19	RDU130110	Effect of Surfactants-Polymers Physio-Chemical Interaction on the Mechanical Degradation of the Polymeric Drag Reducing Agents	82000	1/4/13 – 31/3/15	Co-researcher
<b>Internal Grants</b>					
1	RDU223207	Aqueous Phase Reforming of Glycerol over Ni/CeO <sub>2</sub> Doped with Noble Metal for the Production Of 1,3-Propanediol	20000	01/04/22 -31/03/24	Project leader
2	PDU203219	Development of 1L Prototype Reactor for the Production of Alumina from Aluminum Dross	40000	31/12/20 - 30/12/22	Project leader
3	RDU203304	Dry Reforming of Methane Over Promoted Nickel Based Catalyst Supported on Lanthanide Series Metals for Hydrogen-Rich Syngas Production	40000	10/11/20 - 09/11/22	Project leader
4	RDU1803118	Glycerol Dry Reforming over Bimetallic Nickel-Based Catalyst Supported on Calcined Aluminum Dross for Syngas Production	36600	15/06/18 – 14/06/20	Project leader
5	RDU170347	Synthesis, Characterization and Studies on the Thermal Storage Performance of Encapsulated Phase Change Material Composite Derived from Waste Materials	34500	01/4/17 – 01/4/19	Project leader
6	RDU140357	Investigation on the Performance of Tubular Flow Reactor on the Esterification of Highly Acidified Oil Using Heterogeneous Catalyst	29044	15/05/14 – 14/11/16	Project leader
7	RDU130311	Synthesis and Characterization of Heterogeneous Catalyst for the Esterification of Free Fatty Acid in Acidified Oil	38650	15/5/13 – 14/5/15	Project leader
8	RDU070374	Development of Novel Catalyst for Biodiesel Production from Waste Cooking Oil	20000	3/09/07 – 02/09/08	Project leader
9	RDU223218	Synthesis of Sustainable Fuel from Oil Palm Residue	20000	01/09/22 - 31/08/24	Co-researcher
10	RDU220332	Correlation Between Surface Properties and Catalytic Performance of Palm Oil Kernel Shell-Derived Carbon Catalyst for CO <sub>x</sub> -Free H <sub>2</sub> Production	35020	15/07/22 - 14/07/24	Co-researcher
11	RDU200765	Ethylene Production from Ethanol Dehydration over SBA-15 Derived from Palm Oil Fly Ash	25000	01/11/20 - 30/10/22	Co-researcher
12	RDU200734	Elucidating the Mechanism of Biomass to Solid Fuel via Microwave Assisted Oxidative Torrefaction	20000	23/12/20 - 22/12/22	Co-researcher
13	RDU1903142	Investigating the Effect of Ionic Resins on the Seawater Desalination Performance using Microfluidics Technology	34000	26/12/19 - 25/03/22	Co-researcher
14	RDU182204-2	Antioxidant and Protease from Local Fish Processing Industry Waste	73800	15/10/18 – 14/10/21	Co-researcher

No.	Project ID	Research Title	Jumlah (RM)	Duration	Position
15	RDU180326	Synthesis of Alumina from Aluminium Can Waste in Producing High Surface Alumina as Photocatalyst Support for the Treatment of Palm Oil Mill Effluent (POME)	34500	05/04/18 – 31/03/20	Co-researcher
16	RDU172202	Catalytic Conversion of Palm Oil Mill Effluent into Biogasoline	98232	28/06/17 – 27/06/19	Co-researcher
17	RDU170326	Bi-Reforming of Methane for Syngas Production via Promoted Ni/SBA-15 Catalyst	35000	01/03/17 – 01/03/19	Co-researcher
18	RDU170330	Synthesis of Ni Promoted Mesoporous Silica from Sedge as an Agriculture Waste for CO <sub>2</sub> Conversion	36900	01/03/17 – 01/03/19	Co-researcher
19	UIC160906	Vegetarian Capsule for Drug Delivery Carrier	80000	15/01/17 – 14/01/18	Co-researcher
20	RDU160331	Green Synthesis: Photo-Initiated Polymer Dispersion Polymerization	32568	25/05/16 – 24/05/18	Co-researcher
21	RDU160339	Extraction of Lanthanide using Ionic Liquid	34500	25/05/16 – 24/05/18	Co-researcher
22	RDU150382	Synthesis and Characterization of Ni-Based Catalysts Modified with rare Earth and Alkaline Metal Oxides (CeO <sub>2</sub> , La <sub>2</sub> O <sub>3</sub> , BaO) for Methane Cracking	35000	01/10/15 – 30/09/17	Co-researcher
23	RDU140374	Fundamental Investigation of Methane Dry Reforming over Lanthanide-Group Promoted Co/Al <sub>2</sub> O <sub>3</sub> Catalysts	39000	01/06/14 – 31/05/16	Co-researcher
24	RDU140315	Synthesis and Characterization of EFB-Clinker Supported Nickel Catalyst for Syngas Production from Reactive Fluid Mixture of CO <sub>2</sub> -CH <sub>4</sub>	24900	01/04/14 – 31/03/16	Co-researcher
25	RDU070301	Development of Chitosan based Adsorbent for Removal of Oil from Industrial Wastewater	150000	30/03/07 – 30/03/08	Co-researcher
26	PGRS210382	Methane Dry Reforming over Electrospun Nanofibrous Ni-Based Catalyst for Hydrogen-Rich Syngas Production	4200	01/06/21 - 31/05/24	Project leader
27	PGRS200361	Glycerol Dry Reforming over Ni-Based Bimetallic Catalysts for Syngas Production	4300	26/06/20 - 25/06/23	Project leader
28	PGRS1903121	The CO <sub>2</sub> Reforming of Glycerol over Supported Bi-Metallic Ni-Based Catalyst for Syngas	3500	15/10/19 - 14/10/22	Project leader
29	PGRS1803101	Synthesis and Characterization of Encapsulated Phase Change Material Composite Derived from Waste Materials as the Thermal Energy Storage (TES) Medium	2500	01/03/18 - 28/02/20	Project leader
30	PGRS170324	Studies on the Absorption Mechanism of Rare Earth Elements Extraction using Extractant Immobilised Resin	3000	01/03/17 - 01/03/19	Project leader
31	PGRS170320	Investigation on the Performance of Tubular Flow Reactor on the Esterification of Highly Acidified Oil using Heterogeneous Catalyst	2500	01/03/17 - 01/03/19	Project leader
32	PGRS160351	Modified Sago Starch Application for Pharmaceutical Drug Capsule	3000	01/05/16 - 30/04/18	Project leader

No.	Project ID	Research Title	Jumlah (RM)	Duration	Position
33	GRS150351	Synthesis of Novel Catalyst for Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol for Syngas Production using Noble Metal Promoted on Ni-Based Catalyst Supported on Oxide	2650	15/03/15 – 14/03/17	Project leader
34	GRS150344	Investigations on the Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol for Syngas Production using Promoted-Nickel (Ni) Based Catalyst Supported on Oxides	2000	15/03/15 – 14/03/17	Project leader
35	GRS1403159	Esterification of Free-Fatty Acids from Highly Acidified Oil using Hypercrosslinked Polymer as Catalyst	1500	15/03/15 – 14/03/17	Project leader
<b>Industry Grants</b>					
1	UIC220827	Techno Economic analysis of Alumina Production from Aluminum Dross <b>Company:</b> EPIC Sdn. Bhd.	30000	01/10/22 - 28/02/23	Principal Investigator
2	UIC170807	Waste to Wealth Project with MERCU Resolution <b>Company:</b> MERCU Resolution	15000	24/06/17 24/06/19	Co-Investigator
3	UIC150705	Developing CMSS Application in Pharmaceutical as HALAL Binder, Thickener and Soft and Hard Capsule <b>Company:</b> My Synergy Sdn. Bhd. (PPRN)	30093	01/06/15 -31/03/16	Co-Investigator
4	UIC150704	CMSS (Carboxymethylated Sago Starch) as Halal Thickener for Food and Beverages Industry <b>Company:</b> My Synergy Sdn. Bhd. (PPRN)	25200	11/06/15 -30/03/16	Co-Investigator

## INTELLECTUAL PROPERTY

No.	Products	Status	Position	Level
1	A Novel Process for Alumina Production	Application Date: 15 Sept 2022 Application No.: PI2022005051	Main	National
2	Preparation of 2-Ethyl Acrylate from Wastewater	Application Date: 4 Dec 2018 Application No.: PI2018400028	Co-patentee'	National
3	A Method of Producing a Diol from Renewable Resources	Application Date: 26 Apr 2018 Application No.: PI2018701675 Granted Date: 20 Sep 2022 Grant No.: MY-192977-A	Co-patentee'	National
4	An Immobilized Extractant and a Method Producing The Same	Application Date: 14 May 2018 Application No.: PI2018000708	Main	National
5	Sulphonated Crosslinked Polymer	Application Date: 18 Aug 2016 Application No.: UI 2016703017 Granted Date: 18 May 2021 Grant No.: MY-185408-A	Main	National
6	Recycling of Used Cooking Oil to Biodiesel	Application Date: 30 Jan 2008 Application No.: PI20080176 Granted Date: 10 Nov 2020 Grant No: MY-179537-A	Co-patentee'	National

## POSTGRADUATE SUPERVISION

Student's Name	Program	Title of Thesis/Project	Role		Progress Supervision
			Main	Co	

Siti Nor Amira	PhD	CO <sub>2</sub> Reforming of Methane over Fibrous Metal Catalyst for Syngas Production	√		In Progress
Nor Shafiqah Mohd Nasir	PhD	CO <sub>2</sub> Reforming of Glycerol over Supported Bimetallic Nickel Based Catalyst for Syngas Production	√		In Progress
Nurul Asmawati Roslan	PhD	CO <sub>2</sub> Reforming of Glycerol over Promoted Nickel-Based Catalyst for Syngas Production	√		Completed
Tran Ngoc Thang	PhD	Methane Dry Reforming of Syngas Generation over Promoted Co-based Catalyst	√		Completed
Amirul Asyraf b Ahmad	PhD	Kinetics and Mass Transfer of Esterification of Diluted Acrylic Acid with 2-Ethyl Hexanol in a Tubular Packed Bed Reactor		√	Completed
Nur Nadiatul Hidayah Shaikh Rohmat	PhD	Studies on Isotherm, Kinetics and Mechanism of Rare Earth Elements Adsorption on Polymeric Resin Supported Ionic Liquid	√		Completed
Nursofia Mohd Yunus	MSc	Kinetic Studies on the Esterification of Free Fatty Acid in Used Cooking Oil using Cation Exchange Resins as Catalyst	√		Completed
Nurul Asmawati Roslan	MSc	Esterification of Free Fatty Acid in Used Cooking Oil using Sulphonated Hypercrosslinked Exchange Resin as Catalyst	√		Completed
Nur Nabillah Mohd Arif	MSc	Glycerol Dry Reforming for Hydrogen-Rich Production using 5%Re Promoted on Ni Based Catalyst Supported on Cao and ZrO <sub>2</sub>	√		Completed
Norazimah Harun	MSc	Glycerol Dry Reforming for Syngas Production Using Ag Promoted on Ni Based Catalyst Supported on Al <sub>2</sub> O <sub>3</sub> and SiO <sub>2</sub>	√		Completed
Osaze Omaregbe	MSc	Hydrogen Production from Ethanol Dry Reforming Over Ni-Based Catalysts		√	Completed

#### CONSULTATION WORK (INDUSTRY/PRIVATE/INTERNATIONAL)

Project Title	Year	Company	Classification	Total (RM)
<b>Technical Services</b> Title: Kinetic Investigation of Liquid-liquid Separation	2022	Lynas (Malaysia) Sdn. Bhd.	Consultation	450/hour (6 hours)
<b>Vot No.:</b> UCT22015 <b>Title:</b> Ester Products Development And Synthesis Optimisation Strategies	2022	Petronas Research Sdn. Bhd. (PRSB)	Consultation	1.8 million
<b>Vot No:</b> CTS190196 <b>Title:</b> Scale-up activities using batch reactor unit and sample testing associated.	2019	Petronas Research Sdn. Bhd. (PRSB)	Consultation	190700
<b>Vot No:</b> CTS190172 <b>Title:</b> Short Path Distillation Process and Sample Testing Analysis for PETRONAS Research Sdn Bhd	2019	Petronas Research Sdn. Bhd.(PRSB)	Consultation	28267
<b>Vot No.:</b> UCT140115 <b>Title:</b> Production of Biodiesel from Highly Acidified Oil	2014	Temasek Growth Sdn. Bhd.	Consultation	1500

#### ACADEMIC AWARD

No.	Academic Awards	Level
1	<b>Award:</b> FTKKP Achievement Award 2022 <b>Title:</b> Kategori RDCI (Penerbitan Terbilang)	UMP
2	<b>Award:</b> FTKKP Achievement Award 2022 <b>Title:</b> Kategori RDCI Pameran Penyelidikan	UMP
3	<b>Award:</b> FTKKP Achievement Award 2022 <b>Title:</b> Kategori RDCI Pencapaian Kumpulan Kerja (RISE Cluster)	UMP
4	<b>Award:</b> Cendekia Bitara Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2021, Universiti Malaysia Pahang <b>Title:</b> An Insight into the Effects of Synthesis Methods on Catalysts Properties for Methane Reforming	UMP



No.	Academic Awards	Level
5	<b>Award:</b> Merit Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2021, Universiti Malaysia Pahang <b>Title:</b> H <sub>2</sub> -rich Syngas from Glycerol Dry Reforming over Ni-Based Catalysts Supported on Alumina from Aluminum Dross	UMP
6	<b>Award:</b> Merit Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2021, Universiti Malaysia Pahang <b>Title:</b> Synergistic catalysis of bi-metals in the reforming of biomass-derived hydrocarbons: A Review	UMP
7	<b>Award:</b> FTKKP Achievement Award 2019 <b>Title:</b> Kategori RDCI (Penerbitan Terbanyak)	UMP
8	<b>Award:</b> FTKKP Achievement Award 2019 <b>Title:</b> Kategori Akademik Inovasi P&P (Flipped Classroom-Unit Operation)	UMP
9	<b>Award:</b> Cendekia Bitara Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2019, Universiti Malaysia Pahang <b>Title:</b> The Evolution of Mineral Processing in Extraction of Rare Earth Elements using Liquid-Liquid Extraction: A Review	UMP
10	<b>Award:</b> Cendekia Bitara Award ( <i>Research Product Category</i> ), Malam Cendekia Bitara 2019, Universiti Malaysia Pahang <b>Title:</b> Extraction of Rare Earth Element using Synergist Extractant Immobilized Resin (SEIR)	UMP
11	<b>Award:</b> Outstanding Women in Engineering (Major Area of Study - Chemical Engineering), Venus International Foundation, India, 2019	International
12	<b>Award:</b> FKKSA Achievement Award 2018 <b>Title:</b> Kategori Akademik Khidmat Masyarakat/Komuniti/ Sukan (Q-Gen)	UMP
13	<b>Award:</b> FKKSA Achievement Award 2018 <b>Title:</b> Kategori RDCI Geran Kebangsaan (FRGS)	UMP
14	<b>Award:</b> FKKSA Achievement Award 2018 <b>Title:</b> Kategori RDCI Penerbitan Journal	UMP
15	<b>Award:</b> FKKSA Achievement Award 2018 <b>Title:</b> Kategori RDCI Pameran Penyelidikan	UMP
16	<b>Award:</b> FKKSA Achievement Award 2018 <b>Title:</b> Kategori RDCI Penerbitan Buku dan Modul	UMP
17	<b>Award:</b> Cendekia Bitara Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2018, Universiti Malaysia Pahang <b>Title:</b> The Evolution of Mineral Processing in Extraction of Rare Earth Elements using Solid-Liquid Extraction over Liquid-Liquid Extraction: A Review	UMP
18	<b>Award:</b> Merit Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2018, Universiti Malaysia Pahang <b>Title:</b> Reforming of Glycerol for Hydrogen Production over Ni Based Catalysts: Effect of Support Type	UMP
19	<b>Award:</b> FKKSA Achievement Award 2017 <b>Title:</b> Kategori Akademik Pencapaian Kumpulan Kerja	UMP
20	<b>Award:</b> FKKSA Achievement Award 2017 <b>Title:</b> Kategori RDCI Penerbitan Journal	UMP
21	<b>Award:</b> Merit Award ( <i>Research Product Category</i> ), Malam Cendekia Bitara 2017, Universiti Malaysia Pahang <b>Title:</b> Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst in Reaction Process.	UMP
22	<b>Award:</b> Cendekia Bitara Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2014, Universiti Malaysia Pahang <b>Title:</b> Comparison of Novozyme 435 and Purolite D5081 as Heterogeneous Catalysts for the Pretreatment of Used Cooking Oil for Biodiesel Production.	UMP
23	<b>Award:</b> Merit Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2014, Universiti Malaysia Pahang <b>Title:</b> Quantitative Analysis of Fatty Acids Composition in the Used Cooking Oil (UCO) by Gas Chromatography Mass Spectrometry (GC-MS).	UMP
24	<b>Award:</b> Anugerah Pengajaran Cemerlang 2013	UMP
25	<b>Award:</b> Merit Award ( <i>Journal Publication Category</i> ), Malam Cendekia Bitara 2013, Universiti Malaysia Pahang <b>Title:</b> Effect of Temperature and Solvent Concentration on the Solvent Crystallization of Palm-Based Dihydroxystearic Acid with Isopropyl Alcohol.	UMP
26	<b>Award:</b> Merit Award ( <i>Kategori Penerbitan Journal</i> ), Malam Cendekia Bitara 2013, Universiti Malaysia Pahang <b>Title:</b> Esterification of Free Fatty Acids in Used Cooking Oil using Ion Exchange Resin as Catalysts: An Efficient Pre-Treatment Method for Biodiesel Feedstock.	UMP
27	<b>Award:</b> Pemenang Pertama <b>Title:</b> Anugerah Pengajaran Cemerlang 2007	UMP
28	<b>Award:</b> Pingat Emas <b>Title:</b> Anugerah Projek Penyelidikan Terbaik 2007	UMP

**RESEARCH AWARD**

No.	Research/Academic Exhibitions	Level	Date/Year	Awards
<b>International Exhibition</b>				
1	<b>Event:</b> British Invention Show (BIS) 2018, UK <b>Title:</b> A Technology for Efficient Extraction of Rare Earth Metals Using Synergised Extractant Immobilized Resin (SEIR) <b>List of Inventors:</b> Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	International	24/10/18 – 27/10/18	Obelisk Award (The World Invention Award)
2	<b>Event:</b> British Invention Show (BIS) 2018, UK <b>Title:</b> A Technology for Efficient Extraction of Rare Earth Metals Using Synergised Extractant Immobilized Resin (SEIR) <b>List of Inventors:</b> Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	International	24/10/18 – 27/10/18	Diamond Award - International Invention of the Year (Industrial Category)
3	<b>Event:</b> British Invention Show (BIS) 2018, UK <b>Title:</b> A Technology for Efficient Extraction of Rare Earth Metals Using Synergised Extractant Immobilized Resin (SEIR) <b>List of Inventors:</b> Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	International	24/10/18 – 27/10/18	Gold Medal (Industrial Category)
4	<b>Event:</b> 29 <sup>th</sup> International Invention, Innovation & Technology Exhibition 2018 (ITEX 2018), Malaysia <b>Title:</b> Extraction of Rare Earth Element Using Synergist Extractant Immobilized Resin (SEIR) <b>List of Inventors:</b> Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	International	10/05/18 – 13/05/18	Gold Medal
5	<b>Event:</b> Seoul International Invention Fair (SIIF 2016), South Korea <b>Title:</b> Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst. <b>List of Inventors:</b> Nurul Asmawati Roslan, Norhayati Abdullah, Sumaiya Zainal Abidin	International	1/12/16 – 4/12/16	Silver Medal
6	<b>Event:</b> 27 <sup>th</sup> International Invention, Innovation & Technology Exhibition 2016 (ITEX 2016), Malaysia <b>Title:</b> Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst in Reaction Processes. <b>List of Inventors:</b> Nurul Asmawati Roslan, Norhayati Abdullah, Sumaiya Zainal Abidin	International	12/05/16 – 14/05/16	Gold Medal
7	<b>Event:</b> Seoul International Invention Fair (SIIF 2008), South Korea <b>Title:</b> Acousto Cyclo Reactor Scheme (ACORIS) for Biodiesel Production from Waste Cooking Oil. <b>List of Inventors:</b> Rosli Mohd Yunus, Zulkifly Jemaat, Ruzinah Isha, Sumaiya Zainal Abidin Ruwaida Abdul Rasid	International	11/12/08 – 15/12/08	Gold Medal
<b>National Exhibition</b>				
1	<b>Event:</b> Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (PECIPTA 22) <b>Title:</b> Intensified Aluminum Dross Recycling System for Alumina Production <b>List of Inventors:</b> Sumaiya Zainal Abidin, Nurul Asmawati Roslan, Noor Intan Shafinas Muhammad, Rosli Mohd Yunus	National	01/11/22 – 03/11/22	Gold Medal
2	<b>Event:</b> Kimia Invensi dan Inovasi Malaysia (KI <sub>2</sub> M 2022) <b>Title:</b> Deciphering the Imperative Role of Ruthenium in Enhancing the Performance of Ni/Nd <sub>2</sub> O <sub>3</sub> .Gd <sub>2</sub> O <sub>3</sub> in Glycerol Dry Reforming <b>List of Inventors:</b> Sumaiya Zainal Abidin, William Mah Wey Lian	National	25/05/22	Silver Medal
3	<b>Event:</b> Kimia Invensi dan Inovasi Malaysia (KI <sub>2</sub> M 2022)	National	25/05/22	Silver Medal

No.	Research/Academic Exhibitions	Level	Date/Year	Awards
	<b>Title:</b> Bioengineered Zinc Oxide Nanoparticle (ZONOMAT) using Pineapple Waste Extract as Antibacterial Material <b>List of Inventors:</b> Jun Haslinda Shariffuddin, Sumaiya Zainal Abidin, Nur Aqilah Mohd Razali			
4	<b>Event:</b> Malaysian Technology Exposition (MTE 2007) <b>Title:</b> Acousto Cyclo Reactor Scheme (Acoris) for Biodiesel Production from Waste Cooking Oil <b>List of Inventors:</b> Rosli Mohd Yunus, Ruzinah Isha, Sumaiya Zainal Abidin, Ruwaida Abdul Rasid, Hairul Hisham Ismail, Mohd Hafiz Abd Latif	National	29/03/07 – 31/03/07	Silver Medal
<b>Internal Exhibition</b>				
1	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2023 (CITREX 2023), UMP <b>Title:</b> Innovative Technology For Sustainable Production Of Alumina From Aluminium Dross: An Optimization Study <b>List of Inventors:</b> Mohamad Jamil Arif Bin Mansor, Assoc. Prof. Ts. Dr. Sumaiya Binti Zainal Abidin , Dr. Noor Intan Shafinas Binti Muhammad, Dr. Shanmuga Suntharam	Internal (UMP)	13/03/23-14/03/23	Gold
	<b>Title:</b> Optimization of Syngas via Methane Bi-Reforming Using Promoted Cu/MnO <sub>2</sub> Catalyst. <b>List of Inventors:</b> Irna Haslina Ibrahim, Sumaiya Zainal Abidin, Nuremirah Syafiqah Suhaimi, Nor Shafiqah Mohd Nasir, Siti Nor Amira Rosli	Internal (UMP)	13/03/23-14/03/23	Silver
1	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2021 (CITREX 2021), UMP <b>Title:</b> Recovery of Alumina from Hazardous Aluminum Dross using AD-TRAC System <b>List of Inventors:</b> Sumaiya Zainal Abidin, Herma Dina Setiabudi, Nurul Asmawati Roslan	Internal (UMP)	07/04/2021	Silver Medal
2	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2020 (CITREX 2020), UMP <b>Title:</b> Integrated Technological Solution for Aluminum Dross Valorisation & Recycling: A Zero Waste Concept <b>List of Inventors:</b> Sumaiya Zainal Abidin, Herma Dina Setiabudi, Nurul Asmawati Roslan	Internal (UMP)	12/02/20 – 13/02/20	Silver Medal
3	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2020 (CITREX 2020), UMP <b>Title:</b> EFW: Utilization of Fish Waste Produce Biodiesel <b>List of Inventors:</b> Muhammad Iqmal Muhammad, Sharifah Amanda Syed Othman, Nur Mar Atull Afifah Amzah, Sumaiya Zainal Abidin, Ruwaida Abdul Rasid, Aainaa Izyan Nafsun	Internal (UMP)	02/02/20 – 03/02/20	Silver Medal
4	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2018 (CITREX 2018), UMP <b>Title:</b> Extraction of Rare Earth Element Using Synergist Extractant Immobilized Resin (SEIR) <b>List of Inventors:</b> Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	Internal (UMP)	07/02/18 – 08/02/18	Special Award (Green Technology Award)
5	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2018 (CITREX 2018), UMP <b>Title:</b> Extraction of Rare Earth Element using Synergist Extractant Immobilized Resin (SEIR) <b>List of Inventors:</b> Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	Internal (UMP)	07/02/18 – 08/02/18	Gold Medal
6	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2018 (CITREX 2018), UMP <b>Title:</b> Development of Thermal Energy Storage Material using PCM Derived from Waste Materials <b>List of Inventors:</b> Mohamad Asyren Mat Riffin, Mazaleeia Azman, Siti Amirah Abdul Ghani, Saidatul Shima Jamari, Sumaiya Zainal Abidin	Internal (UMP)	07/02/18 – 08/02/18	Silver Medal
7	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2017 (CITREX 2017), UMP	Internal (UMP)	15/03/17 – 16/03/17	Silver Medal

No.	Research/Academic Exhibitions	Level	Date/Year	Awards
	<b>Title:</b> Adsorption of Dysprosium (Dy) using Extractant Immobilized Resin <b>List of Inventors:</b> Tang Siew Kee, Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat			
8	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2017 (CITREX 2017), UMP <b>Title:</b> Studies on the Adsorption Behaviour of Dysprosium using Silica Supported Ionic Liquid <b>List of Inventors:</b> Muhammad Syham b. Ab. Malek, Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	Internal (UMP)	15/03/17 – 16/03/17	Silver Medal
9	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2016 (CITREX 2016), UMP <b>Title:</b> Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst in Reaction Processes <b>List of Inventors:</b> Nurul Asmawati Roslan, Norhayati Abdullah, Sumaiya Zainal Abidin	Internal (UMP)	07/03/16 – 08/03/16	Gold medal
10	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2016 (CITREX 2016), UMP <b>Title:</b> Esterification of Free Fatty Acids (FFA) in Highly Acidified Oil using Ion Exchange Resin as Catalysts <b>List of Inventors:</b> Siti Amirah Abdul Ghani, Sumaiya Zainal Abidin, Nursafia Mohd Yunus, Nurul Asmawati Roslan	Internal (UMP)	07/03/16 – 08/03/16	Gold Medal
11	<b>Event:</b> Innovation, Technology & Research Exposition 2016 (CITREX 2016), UMP <b>Title:</b> Halal V-Capsule <b>List of Inventors:</b> Fatmawati Adam, Mohd Noor b. Nawi, Nur Syuhada' Asmar, Joharizal Johari, Ruwaida Abdul Rasid, Sumaiya Zainal Abidin, Farhan Mohd Said, Shabirah Ezan	Internal (UMP)	07/03/16 – 08/03/16	Bronze Medal
12	<b>Event:</b> International Festival Innovation on Green Technology (i-FINOG 2016) <b>Title:</b> Esterification of Free Fatty Acids (FFA) in Highly Acidified Oil using Ion Exchange Resin as Catalysts <b>List of Inventors:</b> Siti Amirah Abdul Ghani, Sumaiya Zainal Abidin	Internal (UMP)	15/04/16 – 17/04/16	Silver Medal
13	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2015 (CITREX 2015), UMP <b>Title:</b> Novel Vegetarian Drug Deliver Carrier <b>List of Inventors:</b> Fatmawati Adam, Mohd Noor b. Nawi, Nur Syuhada' Asmar, Joharizal Johari, Ruwaida Abdul Rasid, Sumaiya Zainal Abidin, Farhan Mohd Said, Siti Hana Abu Bakar	Internal (UMP)	09/03/15 – 10/03/15	Gold Medal
14	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2015 (CITREX 2015), UMP <b>Title:</b> Syngas Production from Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol using Nickel Based Catalyst Supported on Oxide <b>List of Inventors:</b> Sumaiya Zainal Abidin, Jolius Gimbut, Cheng Chin Kui, Nursafia Mohd Yunus, Norazimah Harun, Nur Nabillah Mohd Arif	Internal (UMP)	09/03/15 – 10/03/15	Silver Medal
15	<b>Event:</b> Creation, Innovation, Technology & Research Exposition 2015 (CITREX 2015), UMP <b>Title:</b> Carbon Dioxide (CO <sub>2</sub> ) Dry Reforming of Glycerol for Hydrogen Production using Ni/La <sub>2</sub> O <sub>3</sub> And CO/La <sub>2</sub> O <sub>3</sub> <b>List of Inventors:</b> Nursafia Mohd Yunus, Sumaiya Zainal Abidin, Norazimah Harun, Nur Nabillah Mohd Arif	Internal (UMP)	09/03/15 – 10/03/15	Silver Medal

No.	Committee Member	Level	Date/Year	Post / Appointment
1	Chartered Engineer (Reg. No: 660283) Institution of Chemical Engineers (IChemE), UK	International	2019- current	Chartered Engineer
2	Associate Member (Reg. No: 100151587) Institution of Chemical Engineers (IChemE). UK	International	2018 - current	Member
3	Professional Technologist (Reg. No: PT18070192) Malaysian Board of Technologists (MBOT)	National	2018 - current	Professional Technologist
4	Graduate Technologist (Reg. No: GT18075439) Malaysian Board of Technologists (MBOT)	National	2018 - current	Member
5	Graduate Member (Reg. No. GE44560) Board of Engineer Malaysia	National	2005 - current	Member
6	Affiliate Member (Reg. No. 0064378) Energy Institute (EI), UK	International	2015 - 2018	Member

### JOURNAL EDITOR APPOINTMENT

No.	Editorial	Type	Date/Year
1	<b>Publication:</b> AIP Conference Proceeding (AIPCP) <b>Link:</b> <a href="https://doi.org/10.1063/12.0011569">https://doi.org/10.1063/12.0011569</a>	Guest Editor	2021
2	<b>Publication:</b> Chemical Engineering and Technology (Wiley) <b>Link:</b> <a href="https://onlinelibrary.wiley.com/toc/15214125/2022/45/8">https://onlinelibrary.wiley.com/toc/15214125/2022/45/8</a>	Guest Editor	2021
3	<b>Publication:</b> Materials Today: Proceeding (Elsevier) <b>Link:</b> <a href="https://www.sciencedirect.com/journal/materials-today-proceedings/vol/57/part/P3">https://www.sciencedirect.com/journal/materials-today-proceedings/vol/57/part/P3</a>	Managing Guest Editor	2021
4	<b>Publication:</b> Chemical Engineering Research and Design (Elsevier) <b>Link:</b> <a href="https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10GXCFJ1FWX">https://www.sciencedirect.com/journal/chemical-engineering-research-and-design/special-issue/10GXCFJ1FWX</a>	Managing Guest Editor	2021
5	<b>Publication:</b> International Journal of Hydrogen Energy (Elsevier) <b>Link:</b> <a href="https://www.sciencedirect.com/journal/international-journal-of-hydrogen-energy/vol/46/issue/60">https://www.sciencedirect.com/journal/international-journal-of-hydrogen-energy/vol/46/issue/60</a>	Guest Editor	2020
6	<b>Publication:</b> IOP Conference Series: Materials Science and Engineering <b>Link:</b> <a href="https://iopscience.iop.org/issue/1757-899X/991/1">https://iopscience.iop.org/issue/1757-899X/991/1</a>	Guest Editor	2020
7	<b>Publication:</b> SN Applied Sciences Topical Collection: Current Trends in Chemical Engineering: Food, Water & Energy (Springer) <b>Link:</b> <a href="https://www.springer.com/journal/42452/updates/17272660">https://www.springer.com/journal/42452/updates/17272660</a>	Guest Editor	2019
8	<b>Publication:</b> Comptes Rendus Chimie (Elsevier) <b>Link:</b> <a href="https://www.sciencedirect.com/journal/comptes-rendus-chimie/vol/22/issue/11">https://www.sciencedirect.com/journal/comptes-rendus-chimie/vol/22/issue/11</a>	Guest Editor	2019

### CERTIFIED ASSESSOR

No	Educator Certification	Category
1	Certified MQA Assessor	Technical Professional
2	Certified ETAC Assessor	Technical Professional

### ACCREDITATION PANEL APPOINTMENT

Appointment	Appointing Bodies	Date	Role
Appointment as Accreditation Panel for Diploma in Chemical Engineering, UTMSPACE, Kuala Lumpur	Engineering Technology Accreditation Council, Board of Engineers, Malaysia	31 July 2023 – 3 Aug 2023	Panel

MBOT – Penilai Dalam Sarjana Muda Teknologi Kimpalan dengan Kepujian (BVW) di Fakulti Teknologi Kejuruteraan Mekanikal dan Automotif (FTKMA)	UMP	July 2023	Panel
Appointment as Accreditation Panel for Bachelor of Chemical Engineering Technology (Industrial Biotechnology) with Honours, Universiti Malaysia Perlis (UNIMAP)	Engineering Technology Accreditation Council, Board of Engineers, Malaysia	6-8 April 2021	Panel
Appointment as Internal Auditor for New Program (BEng Tech Mech Rekabentuk dan Analisis) for MBOT Accreditation	UMP	13 Oct 2020	Panel

## INTERNATIONAL APPOINTMENT

No.	Descriptions	Level
1	<b>Description:</b> Visiting Professor for Industrial University of Ho Chi Minh City, Viet Nam <b>Date:</b> 2 Jan 2022 – current	International
2	<b>Description:</b> China-ASEAN Scholar Program <b>Date:</b> 30 August 2022	International
3	<b>Description:</b> Virtual Visiting Professor Program - PSU Open Mobility, Prince of Songkla University <b>Date:</b> 4 Nov 2021 & 5 April 2023	International
4	<b>Description:</b> China-ASEAN Scholar Program <b>Date:</b> 26 Oct 2020 – 29 Oct 2020	International

## KEYNOTE/INVITED SPEAKERS

No.	Type	Program	Date/Year
1	Guest Lecturer	Pengajaran Kolaboratif Kod Kursus CHE544 Separation Processes, Pengajian Kejuruteraan Kimia, Kolej Pengajian Kejuruteraan, UiTM Saha Alam	25/01/23
2	Invited Speaker	FCE Seminar – Tips and Tricks for Journal Publications - Part 1: Manuscript Publication, , Industrial University of Ho Chi Minh City, Viet Nam	06/12/22
3	Invited Speaker	FCE Seminar – Tips and Tricks for Journal Publications - Part 1: Manuscript Publication, , Industrial University of Ho Chi Minh City, Viet Nam	06/12/22
4	Invited Speaker	FCE Seminar – Research Collaboration Strategies between IUH, Viet Nam and UMP, Malaysia	28/11/22
5	Invited Speaker	FCE Workshop – Advanced Catalyst and Materials, Industrial University of Ho Chi Minh City, Viet Nam	24/11/22
6	Invited Speaker	International Symposium of Science and Techology (UMP – HITS)	28/07/22
7	Invited Speaker	Penceramah Workshop “ How to Turn Your FYP Project into Journal Manuscript	23/06/22
8	Invited Speaker	International Conference on Chemistry and Application, Industrial University of Ho Chi Minh City, Viet Nam	14/07/22 – 15/07/22
9	Invited Speaker	Penceramah “Sharing Session – Managing FRGS Grant”	10 Dec 2021
10	Keynote Speaker	1 <sup>st</sup> International Conference on Pollution Prevention and Clean Technologies (ICPPCT 2021) Taiwan-India Collaboration Program	6/12/21 – 7/12/21
11	Invited Speaker	Penceramah Bengkel “Half Day Technical Workshop on Gas Chromatography” di FTKKP	19/08/21
12	Invited Speaker	BPC-UMP Collaboration – Invitation as Academic Speaker to BASF PETRONAS Chemicals Sdn Bhd	09/07/21
13	Invited Speaker	2 <sup>nd</sup> Technical Forum – Problem of Environment and How to Utilise the Hazardous Waste, Cenviro Sdn .Bhd.	17/09/19
14	Invited Speaker	2019 International Academic Forum on the High-efficiency Utilization of Coal and Green Chemical Engineering & Conference on Advancements in the Coal Chemical and Energy Materials Industries, NingXia University, China	23/08/19 – 26/08/19

## ADMINISTRATION APPOINTMENT

No.	Post	Duration
<b>Rotational Post</b>		
1	Dean, Faculty of Chemical and Process Engineering Technology (FTKKP)	1/9/23 – 31/8/25
2	Felo Penyelidik Utama (FLUID Centre )	1/12/22 – 30/11/24
3	Ketua Taskforce Peralatan Makmal Penyelidikan (Pusat Penyelidikan Bendalir dan Proses Termaju)	1/11/22 – 31/10/24
4	Appointment as Deputy Dean of Postgraduate and Research, Faculty of Chemical and Natural Resources Engineering / Faculty of Chemical and Process Engineering Technology, UMP	12/01/19 – 10/02/20
5	Research Fellow -Pusat Penyelidikan Bendalir dan Proses Termaju (FLUID Centre)	1/1/2021 - 31/12/2022
6	Research Fellow - Centre of Excellence for Advance Research in Fluid Flow (CARIFF)	1/1/2019 - 31/12/2020
7	Research Fellow - Centre of Excellence for Advance Research in Fluid Flow (CARIFF)	21/12/16 – 31/12/18
8	Research Fellow - Centre of Excellence for Advance Research in Fluid Flow (CARIFF)	21/12/14 – 20/12/16
9	Research Fellow - Centre of Excellence for Advance Research in Fluid Flow (CARIFF)	20/12/12 – 20/12/14
<b>Academic Conference</b>		
1	Chairman, 2 <sup>nd</sup> International Symposium of Reaction Engineering, Catalysis & Sustainable Energy (RECaSE 2023)	10/10/23
2	Head of Publication Committee, 3 <sup>rd</sup> Energy Sustainability & Chemical Engineering Congress (ESChE 2023)	28/08/23 – 30/08/23
3	Head of Technical Committee, 6 <sup>th</sup> National Conference for Postgraduate Research (NCON-PGR 2022), Institute of Postgraduate Studies	11/10/22
4	Publication Committee, 6 <sup>th</sup> International Conference of Chemical Engineering & Industrial Biotechnology (ICCEIB 2022), Faculty of Chemical and Process Engineering Technology, UMP	15/08/22 – 16/08/22
5	Treasurer, International Conference on Modern Transport and Frontier Materials (TFM 2022), College of Engineering, UMP	26/07/22 – 27/07/22
6	Head of Logistic and Event Management, 2 <sup>nd</sup> Energy Sustainability & Chemical Engineering Congress (ESChE 2021), Centre of Fluid Flow and Advanced Processes (FLUID), UMP	3/11/21 – 5/11/21
7	Co-chairman, International Symposium of Reaction Engineering, Catalysis & Sustainable Energy (RECaSE 2021), Faculty of Chemical and Process Engineering Technology, UMP	06/04/21
8	Co-chairman, International Conference on Chemical Engineering and Biotechnology 2020 (ICCEIB 2020), Faculty of Chemical and Natural Resources Engineering, UMP	9/08/20 – 11/08/20
9	Head of Logistic and Event Management, Energy Sustainability & Chemical Engineering Congress (ESChE 2019), Centre of Excellence for Advanced Research in Fluid Flow (CARIFF)	17/07/19 – 20/07/19
10	Journal & Proceeding Publication, Malaysian Technical Universities Conference on Engineering & Technology (MUCET 2019)	20/03/19
11	Head of Logistic and Event Management, International Conference of Fluids and Chemical Engineering (FluidsChE 2017), Centre of Excellence for Advanced Research in Fluid Flow (CARIFF)	4/04/17 –6/04/17
12	Head of Logistic and Event Management, International Conference of Fluids and Chemical Engineering (FluidsChE 2015), Centre of Excellence for Advanced Research in Fluid Flow (CARIFF)	25/11/15 – 27/11/15
13	Publicity and Protocol, International Conference on Chemical Engineering and Biotechnology 2013 (ICCEIB 2013), Faculty of Chemical and Natural Resources Engineering, UMP	28/08/13 – 29/08/13
<b>Other responsibilities</b>		
1	Coordinator, Research and Postgraduate Studies Committee, College of Engineering, UMP	01/10/21 – 01/10/22
2	Committee, Postgraduate Studies Committee KKEJ	01/01/22 – 01/10/22
3	Committee, Occupational Health, Safety and Environment Committee FTKKP	18/10/19 – 17/10/21
4	Coordinator, Undergraduate Research Project, Faculty of Chemical and Natural Resources Engineering, UMP	01/09/15 – 31/08/17
5	Coordinator, Undergraduate Research Project, Faculty of Chemical and Natural Resources Engineering, UMP	01/04/16 – 31/03/18

No.	Post	Duration
6	Head of Coordinator, Undergraduate Research Project, Faculty of Chemical and Natural Resources Engineering, UMP	27/09/14 – 26/09/16
7	Head of Coordinator, Undergraduate Research Project, Faculty of Chemical and Natural Resources Engineering, UMP	27/09/12-26/09/14
8	Committee, Pemurnian Panduan Projek Sarjana Muda, UMP	01/02/07
9	Coordinator, Undergraduate Research Project, Faculty of Chemical and Natural Resources Engineering, UMP	01/06/07 – 31/5/08
10	Committee, Dokumentasi ISO/IEC 17025 FKKSA	01/02/07
11	Kajian Strategik, Institut Tamadun dan Kajian Strategik (ITKAS), UMP	22/08/22
12	Task force Peperiksaan Khas Asas Kejuruteraan (PAKej) KKEJ	08/03/21
13	Task Force Rucric i-Bakat (Geran Penyelidikan)	25/05/21