CURICULUM VITAE

Name : **Sumaiya Zainal Abidin @ Murad**
Position : **Associate Professor, CEng (MIChemE)**
Faculty : **Faculty of Chemical and Process Engineering Technology**
College of Engineering Technology
University : **Universiti Malaysia Pahang**
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Google Scholar : **https://scholar.google.com/citations?user=nVWWqo4AAAAJ&hl=en&oi=ao**

ACADEMIC QUALIFICATION

PhD (Chemical Engineering), 2012- Loughborough University, Leicestershire, United Kingdom
M. Sc. (Chemical Engineering), 4.00/4.00, 2006 – Universiti Putra Malaysia, Malaysia
B Eng. (Chemical Engineering – 3.55/4.00 – Universiti Putra Malaysia, Malaysia

RESEARCH EXPERTISE

1. **Expertise:** reaction engineering & catalysis *(reforming, gasification, esterification, transesterification, cracking, polymerization)*, advanced materials *(metal based catalyst, 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

Session/ Semester/Year	Course code & Name	Credit Points	Formal classroom contact hours per semester.
SEM 2 2020 2021	BKF3463 Unit Operation BKF3142 Process Engineering Economics	3 2	56 hours Lecture 28 hours Lecture
SEM 1 2020 2021	BKF3463 Unit Operation BKF3142 Process Engineering Economics	3 2	56 hours Lecture 28 hours Lecture
SEM 2 2019 2020	BKF3463 Unit Operation BKF3731 Unit Operation Lab	3 1	56 hours Lecture 42 hours Lab
SEM 1 2019 2020	BKF3463 Unit Operation	3	56 hours Lecture
SEM 2 2018 2019	BKF3463 Unit Operation		56 hours Lecture
SEM 1 2018 2019	BKF3463 Unit Operation BKF3731 Unit Operation Lab	3 1	56 hours Lecture 42 hours Lab
SEM 2 2017 2018	BKF3463 Unit Operation BKF3731 Unit Operation Lab	3 1	56 hours Lecture 42 hours Lab
SEM 1 2017 2018	BKF3463 Unit Operation	3	56 hours Lecture
SEM 2 2016 2017	BKF3463 Unit Operation	3	56 hours Lecture
SEM 1 2016 2017	BKF3463 Unit Operation	3	56 hours Lecture
SEM 2 2015 2016	BKF3463 Unit Operation	3	56 hours Lecture
SEM 1 2015 2016	BKF3463 Unit Operation	3	56 hours Lecture
SEM 2 2014 2015	BKF3463 Unit Operation	3	56 hours Lecture
SEM 1 2014 2015	BKF3463 Unit Operation	3	56 hours Lecture
SEM 2 2013 2014	BKF3463 Unit Operation	6	112 hours Lecture
SEM 1 2013 2014	BKF3463 Unit Operation BKF2453 Chemical Reaction Engineering	3 3	56 hours Lecture 56 hours Lecture
SEM 2 2012 2013	BKF3492 Separation Process DKK2453 Unit Operation	3 3	28 hours Lecture 56 hours Lecture

SEM 1 2012 2013	BKF1243 Analytical Chemistry DKK1751 Basic Engineering Lab DKK 3433 Unit Operation	3 1 3	42 hours Lecture 42 hours Lab 56 hours Lecture
SEM 1 2008 2009	BKC3363 Science & Engineering Material BKF2343 Material And Energy Balance	3 3	42 hours Lecture 56 hours Lecture
SEM 3 2007 2008	BKF1333 Thermodynamics BKC2323 Thermodynamics	3 3	56 hours Lecture
SEM 2 2007 2008	BKF3492 Unit Operation 2 BKF3751 Chemical Engineering Lab 1 BKU4133 Project Management & Economics	2 1 3	28 hours Lecture 42 hours Lab 42 hours Lecture
SEM 1 2007 2008	BKU4133 Project Management & Economics DKK2233 Fluid Mechanics	3 2	42 hours Lecture 42 hours Lecture
SEM 2 2006 2007	BKF1112 Engineer & Society BKC3423 Transport Processes & Unit Operation 2	2 3	28 hours Lecture 42 hours Lecture
SEM 1 2006 2007	BKU4113 Project Management & Economics BKC1711 Science & Engineering Lab 1 **(**DKK3761 Engineering Lab 4	3 1 1	42 hours Lecture 42 hours Lab 42 hours Lab

LIST OF PUBLICATIONS

Journal Title	**Year/Vol (Issue)/Page/Publication**	**Authors**
Development of nanosilica-based catalyst for syngas production via CO2 reforming of CH4: A review	2021, 46 (48), 24687-24708, International Journal of Hydrogen Energy	Chi Cheng Chong, Yoke Wang Cheng, Mahadi B Bahari, Lee Peng Teh, **Sumaiya Zainal Abidin**, Herma Dina Setiabudi
Improvements in hydrogen production from methane dry reforming on filament-shaped mesoporous alumina-supported cobalt nanocatalyst	2021, 46(48), 24781-24790, International Journal of Hydrogen Energy	Ngoc Thang Tran, Thong Le Minh Pham, Trinh Duy Nguyen, Nguyen Van Cuong, Tan Ji Siang, Pham TT Phuong, AA Jalil, Quang Duc Truong, **Sumaiya Zainal Abidin**, Ftwi Y Hagos, Sonil Nanda, Dai-Viet N Vo
CO_2 Reforming of CH_4 on Mesoporous Alumina-Supported Cobalt Catalyst: Optimization of Lanthana Promoter Loading	2021, 1-10, Topics in Catalysis	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, **Sumaiya Zainal Abidin**, Dai-Viet N Vo
Extracted γ-Al_2O_3 from aluminum dross as a catalyst support for glycerol dry reforming reaction	2021, 42, 63-68, Materials Today: Proceedings	NA Roslan, **SZ Abidin**, NS Nasir, SY Chin, YH Taufiq-Yap
H_2-rich syngas from glycerol dry reforming over Ni-based catalysts supported on alumina from aluminum dross	2021, 46, (60), 30959-30975, International Journal of Hydrogen Energy	NA Roslan, **SZ Abidin**, OU Osazuwa, SY Chin, YH Taufiq-Yap
Synergistic catalysis of bi-metals in the reforming of biomass-derived hydrocarbons: A Review	2021, 46, (60) 31000-31023, International Journal of Hydrogen Energy	Nor Shafiqah Mohd-Nasir, Osarieme Uyi Osazuwa, **Sumaiya Zainal Abidin**
An insight into the effects of synthesis methods on catalysts properties for methane reforming	2021, 9, 105052, Journal of Environmental Chemical Engineering	Osarieme Uyi Osazuwa, **Sumaiya Zainal Abidin**, Xiaolei Fan, Andrew Nosakhare Amenaghawon, Mohammad Tazli Azizan

Catalytic reforming of oxygenated hydrocarbons for the hydrogen production: an outlook	2020, 1-24, Biomass Conversion and Biorefinery	MT Azizan, A Aqsha, M Ameen, A Syuhada, H Klaus, **SZ Abidin**, F Sher
Characterization of Stearic Acid and Paraffin Incorporated with Aluminium as Filler for the Development of Phase Change Material Composite in Thermal Energy Storage	2020, 991 (1), 012077, IOP Conference Series: Materials Science and Engineering	**SZ Abidin**, SAA Ghani, UO Osarieme, SS Jamari
The Functionality of Ion Exchange Resins for Esterification, Transesterification and Hydrogenation Reactions	2020, 5 (25), 7658-7670, Chemistry Select	OU Osazuwa, **SZ Abidin**
An overview on the role of lanthanide series (rare earth metals) in H2 and syngas production from CH4 reforming processes	2020, 227, Chemical Engineering Science	OU Osazuwa, **SZ Abidin**
Waste materials as the potential phase change material substitute in thermal energy storage system: a review	2020, 1-21, Chemical Engineering Communications	Siti Amirah Abdul Ghani, Saidatul Shima Jamari, **Sumaiya Zainal Abidin**
La-doped Cobalt Supported on Mesoporous Alumina Catalysts for Improved Methane Dry Reforming and Coke Mitigation	2020, 93 (4),1571-1580, Journal of Energy Institute	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, **Sumaiya Zainal Abidin,** Sonil Nanda, Dai-Viet N Vo
Synthesis and characterization of phase change material integrated with aluminium waste as the thermal energy storage medium	2020, 736, 1-10, IOP Conference Series: Materials Science and Engineering	S A A Ghani, S SJamari, **S Z Abidin**
Hydrogen production by glycerol dry reforming over rhenium promoted Ni-based catalyst supported on Santa Barbara Amorphous 15 (SBA-15)	2019, 1-13, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Nurul Asmawati Roslan, Nur Nabillah Mohd Arif, Jessy Lynn Jaspin, Nurul Aini Mohamed Razali, **Sumaiya Zainal Abidin**
A review on glycerol reforming processes over Ni-based catalyst for hydrogen and syngas productions	2019, 45 (36), 17, 18466-18489, International Journal of Hydrogen Energy	NA Roslan, **SZ Abidin**, A Ideris, DVN Vo
Preface: Energy Security and Chemical Engineering Conference	2019, 22 (11-12), 713, Comptes Rendus Chimie	DVN Vo, **SZ Abidin**, LG Bach
The synthesis of sulphonated hypercrosslinked exchange resin for free fatty acid esterification	2019, 22 (11-12), 761-770, Comptes Rendus Chimie	NA Roslan, N Abdullah, **SZ Abidin**
Extraction of light, medium and heavy rare earth elements using synergist extractants developed from ionic liquid and conventional extractants	2019, 22 (11-12), 728-744, Comptes Rendus Chimie	NN Hidayah, **SZ Abidin**
Kinetic Studies of the Esterification of Acrylic Acid with 2-Ethyl Hexanol Catalyzed by Diaion Resins	2019, , 52 (4), 342-348, Journal of Chemical Engineering of Japan	MAAB Ahmad, SY Chin, **SBZ Abidin**
Hydrogen production via CO_2 dry reforming of glycerol over Re-Ni/CaO catalysts	2019, 44 (37), 20857-20871 International Journal of Hydrogen Energy	Nur Nabillah Mohd Arif, **Sumaiya Zainal Abidin**, Osarieme Uyi Osazuwa, Dai-Viet N. Vo, Mohammad Tazli Azizan, Yun Hin Taufiq-Yap
Hydrogen production from glycerol dry reforming over Ag-promoted Ni/Al_2O_3	2019, 44(1), 213-225 International Journal of Hydrogen Energy	Norazimah Harun, **Sumaiya Zainal Abidin**, Osarieme Uyi Osazuwa, Yun Hin Taufiq-Yap, Mohammad Tazli Azizan
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	2018, 40 (21), 2518-2527, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	N. M. Yunus, **S. Z. Abidin,** Chin S.Y.

Liquid-liquid extraction of cerium using synergist extractant	2018, 12, 3302-3312, Journal of Mechanical Engineering and Sciences	N.N. Hidayah, M.F.S. Nurihan and **S.Z. Abidin**
The evolution of mineral processing in extraction of rare earth elements using liquid-liquid extraction: A review	2018, 121, 146-157, Minerals Engineering	Nur Nadiatul Hidayah, **Sumaiya Zainal Abidin**
Studies On Free Fatty Acid Esterification of Used Cooking Oil: Investigation On The Performance Of Sulphonated Cation Exchange Resins	2018, 40 (21), Biofuels	**S. Z. Abidin,** N. M. Yunus, S. A. A. Ghani, N. A. R.Roslan & Chin S.Y.
The Evolution of Mineral Processing in Extraction Of Rare Earth Elements using Solid-Liquid Extraction over Liquid-Liquid Extraction: A Review	2017,112, 103-113, Minerals Engineering	Hidayah, N.N., **Abidin, S.Z.**
Syngas Production from Methane Dry Reforming over Ni/SBA-15 Catalyst: Effect of Operating Parameters	2017, 42, 11283-11294International Journal of Hydrogen Energy	Osaze Omoregbe, Huang T. Danh, Chinh Nguyen-Huy, Setiabudi, H.D., **Abidin, S.Z.,** Quang Duc Truong, Dai-Viet N. Vo
Reforming of Glycerol for Hydrogen Production over Ni Based Catalysts: Effect of Support Type	2017,39, 657–663, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Nur Nabillah Mohd Arif, Nursofia Mohd Yunus, Norazimah Harun, Mohammad Tazli Azizan, Vo Nguyen Dai Viet, **Sumaiya Zainal Abidin**
Esterification of Free Fatty Acid in Used Cooking Oil Using Gelular Exchange Resin as Catalysts	2016, 148,1274 – 1281, Procedia Engineering	Nursofia Binti Mohd Yunus, Nurul Asmawati Binti Roslan, Chin Sim Yee, **Sumaiya Zainal Abidin**
Influence of Lanthanide Promoters on Ni/SBA-15 Catalysts for Syngas Production by Methane Dry Reforming	2016, 148, 1388 – 1395, Procedia Engineering	Osaze Omoregbe, Huong T. Danh, **Abidin, S.Z.,** Setiabudi, H.D. Bawadi Abdullah, Khanh B. Vu & Dai-Viet N. Vo
A Preliminary Study: Esterification of Free Fatty Acids (FFA) in Artificially Modified Feedstock using Ionic Liquids as Catalysts	2016, 11,182-190, Bulletin of Chemical Reaction Engineering & Catalysis	Nurul Asmawati Roslan, Mohammad Haniff Che Hasnan, Norhayati Abdullah, Syamsul Bahari Abdullah**, Sumaiya Zainal Abidin**
Carbon Dioxide Dry Reforming Of Glycerol for Hydrogen Production using Ni/Zro_2 and Ni/Cao as Catalysts	2016, 11, 200-209, Bulletin of Chemical Reaction Engineering & Catalysis	Nur Nabillah Mohd Arif, Dai-Viet N. Vo, Mohammad Tazli Azizan, **Sumaiya Zainal Abidin**
Characterization of Ag-Promoted Ni/SiO_2 Catalysts for Syngas Production via Carbon Dioxide (CO_2) Dry Reforming of Glycerol	2016, 11, 220-229, Bulletin of Chemical Reaction Engineering & Catalysis	Norazimah Harun, Jolius Gimbun, Mohammad Tazli Azizan, **Sumaiya Zainal Abidin**
Comparison of Novozyme 435 and Purolite D5081 as Heterogeneous Catalysts for the Pretreatment of Used Cooking Oil for Biodiesel Production	2013, 111,186-193, Fuel	Haigh, K. F., **Abidin, S. Z.**, Saha, B., Vladisavljević, G. T.
Quantitative Analysis of Fatty Acids Composition in the Used Cooking Oil (UCO) by Gas Chromatography-Mass Spectrometry (GC–MS)	2013, 91,1896-1903, The Canadian Journal of Chemical Engineering	**Abidin, S. Z**., Patel, D., Saha, B.
Esterification of Free Fatty Acids in Used Cooking Oil Using Ion-Exchange Resins as Catalysts: An Efficient Pretreatment Method for Biodiesel Feedstock	2012, 51, 14653-14664, Industrial and Engineering Chemistry Research	**Abidin, S. Z.,** Haigh, K. F., Saha, B.
Pretreatment of Used Cooking Oil for the Preparation of Biodiesel using Heterogeneous Catalysis	2012, 139, 1, 19-22, Progress in Colloids and Polymer	Kathleen F. Haigh, **Sumaiya Zainal Abidin**, Basu Saha, Goran T. Vladisavljević
Effects of Temperature and Solvent Concentration on the Solvent Crystallization of Palm-Based Dihydroxystearic Acid with Isopropyl Alcohol	2012, 10 (1), 127-131, Particoulogy	Koay, G. F. L., Chuah, T. G., **Zainal-Abidin, S.,** Ahmad, S. & Choong, T. S. Y.
Development, Characterization and Commercial Application of Palm Based Dihydroxystrearic Acid and Its Derivative: An Overview	2011, 60, 237-265, Journal of Oleo Science	Koay, G. F. L., Chuah, T. G., **Zainal-Abidin, S.**, Ahmad, S., Choong, T. S. Y.

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	2011, 34, 1135-1140, Industrial Crops and Products.	Koay, G. F. L., Chuah, T. G., **Zainal-Abidin, S.,** Ahmad, S., Choong, T. S. Y.
Effect of Solvent Concentration and Cooling Modes on Morphology, Particle Size Distribution, and Yield of Dihydroxystearic Acid (DHSA) Crystals	2010, 28, 236-246, Particulate Science and Technology	**Sumaiya, Z. A.,** Luqman Chuah, A., Koay, G. F. L., Salmiah, A., Choong, T. S. Y.
Habit and Morphology Study on the Palm-Based 9,10-Dihydroxystearic Acid (DHSA) Crystals	2009, 114, 14-17, Materials Chemistry and Physics	Koay, G. F. L., Chuah, T. G., **Zainal-Abidin, S.**, Ahmad, S., Choong, T. S. Y.
Book Title	**Year/Date**	**Authors**
Book Chapter: Recent progress in ethanol steam reforming for hydrogen generation	2020, 57	Tan Ji Siang, Aishah Abdul Jalil, Mohd-Nasir Nor Shafiqah, Mahadi B Bahari, Herma Dina Setiabudi, **Sumaiya Zainal Abidin**, Trinh Duy Nguyen, Abdulrasheed Abdulrahman, Quyet Van Le, Sonil Nanda, Dai-Viet N Vo
Book Chapter: Recent Advances in Steam Reforming of Glycerol for Syngas Production: Biorefinery of Alternative Resources: Targeting Green Fuels and Platform Chemicals	2020, 399-425	Tan Ji Siang, Nurul Asmawati Roslan, Herma Dina Setiabudi, **Sumaiya Zainal Abidin**, Trinh Duy Nguyen, Chin Kui Cheng, Aishah Abdul Jalil, Minh Thang Le, Prakash K Sarangi, Sonil Nanda, Dai-Viet N Vo
Book Chapter: 3 Recent Advances in CO2 Bi-Reforming of Methane for Hydrogen and Syngas Productions	2020, 49-75	Hamidah Abdullah, Chin Sim Yee, Chi Cheng, Tan Ji Siang Chong, Osarieme Uyi Osazuwa, Herma Dina Setiabudi, Dai-Viet N Vo, **Sumaiya Zainal Abidin**
Book Chapter: A Short Review on Production of Syngas via Glycerol Dry Reforming: Conversion of Carbon Dioxide into Hydrocarbons Vol. 2 Technology,	2020, 185-197	**SZ Abidin**, A Ideris, N Ainirazali, M Ismail,
Book Chapter: Applications of Ion Exchange Materials in Chemical and Food Industries: Use of ion exchange resins in hydrogenation reactions	2019, 19-33	Osarieme Uyi Osazuwa, **Sumaiya Zainal Abidin**
Book: Dihydroxystearic Acid – Purification, Derivatives and Applications	2018 ISBN: 978-967-344-833-3	Gregory Koay F.L, Luqman Chuah A, **Sumaiya Z.A**.
Book Chapter: The Water-Food-Energy Nexus: Processes, Technologies, and Challenges: Environmentally Benign Biodiesel Production from Renewable Sources	2017	**Sumaiya Zainal Abidin** and Basudeb Saha

RESEARCH GRANTS

Title	Granting Agency	Grant Duration	Total (RM)	Description of role
International Grants				
Vot. No: UIC 171513 (14-337) **Title:** Investigation on the Performance of Packed Bed Reactor (PBR) in the Continuous Catalytic Esterification of Highly Acidified Oil using Heterogeneous Catalyst.	Public TWAS-COMSTECH Joint Research Grants	01/07/15-30/06/17	4000 USD	Project leader

National Grants				
Title: Reaction Kinetics and Mechanism of Glycerol Dry Reforming Over Bimetallic Nickel-Based Catalyst Supported On Calcined Aluminum Dross	Fundamental Research Grant Scheme	01/01/19 – 31/03/21	89270	Project leader
Vot No.:RDU150115 **Title:** Studies on Isotherm, Kinetic And Mechanism of Rare Earth Elements (REE) Adsorption on Polymeric Resin Supported Ionic Liquid (PSIL).	Fundamental Research Grant Scheme	02/11/15 – 01/05/18	127500	Project leader
Vot No.:RDU130108 **Title:** Synthesis of Novel Catalysts for Carbon Dioxide (CO_2) Dry Reforming of Glycerol for Syngas Production using Noble Metal-Based Catalysts Supported on Oxides.	Fundamental Research Grant Scheme	01/04/13 – 31/09/15	92300	Project leader
Vot No.: RDU200765 **Title**: Ethylene Production From Ethanol Dehydration Over Sba-15 Derived From Palm Oil Fly Ash	UTP Flagship Grant	01/11/20 - 30/10/22	25000	Co-researcher
Vot No.: RDU1901163 **Title:** Elucidating the metallic and basic sites of Ni-supported fibrous nanosilica on reaction mechanism of glycerol dry reforming	Fundamental Research Grant Scheme	01/09/19 – 31/08/21	111530	Co-researcher
Vot No.:RDU1901190 **Title**: Elucidate The Kinetic Mechanism of Air-Steam Downdraft Gasification Process To Enhance Product Gas Yield With Low Tar Content	Fundamental Research Grant Scheme	01/09/19 – 31/08/21	71511	Co-researcher
Vot No: RDU190196 **Title:** The Role of Nanoparticle-Gemini Surfactant as Wax Deposition Suppressant in Malaysian Crude Oil using Molecular Dynamics (MD)Simulation	Fundamental Research Grant Scheme	01/01/19 – 31/12/20	92000	Co-researcher
Vot No.:RDU170119 **Title:** Metal-Support Interaction of Ni-Supported Palm Oil Fuel Ash Catalyst Produced from Self-Combustion Technique for Methane Cracking	Fundamental Research Grant Scheme	15/08/17 – 14/08/19	84000	Co-researcher
Vot. No.: RDU160120 **Title:** Active Drag Reduction Technique for Enhancing the Liquid-Liquid Mixing Intensity in Micromixers	Fundamental Research Grant Scheme	01/08/16 – 31/07/18	75000	Co-researcher
Vot. No.: KTP-UPM **Title:** Oily Wastewater Treatment and Water Reuses in Oil and Gas Industry	Knowledge Transfer Programme	01/03/16 – 28/02/18	110500	Co-researcher
Vot. No.: RDU150804 **Title:** Development of a Reactive Distillation Column Prototype to Convert Acrylic Acid in the Petrochemical Wastewater to Valuable Butyl Acrylate through Esterification	Prototype Research Grant Scheme	01/12/15 – 30/11/17	161418	Co-researcher
Vot. No.: RDU150114 **Title:** Photocatalytic Study of Rare-Earth Doped Oxides for Hydrogen Production via Photoreforming Process	Fundamental Research Grant Scheme	02/11/15 – 01/11/17	119400	Co-researcher
Vot. No.: FRGS-UTP **Title:** Determination of Kinetic Model And Reaction Pathway for Aqueous Phase Reforming of Sorbitol to Hydrogen over Ni/Al_2O_3 Catalysts Doped Group II Metal Oxides	Fundamental Research Grant Scheme	02/11/15 – 01/11/18	129800	Co-researcher
Vot. No.: RDU140113 **Title:** Synthesis and Characterization of High Specific Surface Area Hydrophilic Polymer Particles	Fundamental Research Grant Scheme	01/07/14 – 30/06/17	113000	Co-researcher
Vot. No.: RDU140504 **Title:** From molecule to product: Development of Stable Kappa-Carrageenan Capsule through Molecular Properties Manipulation	E-Science Research Grant	15/05/14 – 14/12/16	200000	Co-researcher

Vot. No.: RDU130110 **Title:** Effect of Surfactants-Polymers Physio-Chemical Interaction on the Mechanical Degradation of the Polymeric Drag Reducing Agents	Fundamental Research Grant Scheme	01/04/13 – 31/03/15	82000	Co-researcher
Internal Grants (Universiti Malaysia Pahang)				
PDU203219 **Vot No.:** **Title:** Development Of 1l Prototype Reactor For The Production Of Alumina From Aluminum Dross	UMP Product Development Grant	31/12/20 - 30/11/22	40,000	Project leader
RDU203304 **Vot No.:** **Title:** Dry Reforming Of Methane Over Promoted Nickel Based Catalyst Supported On Lanthanide Series Metals For Hydrogen-Rich Syngas Production	UMP International Publication Grant	10/11/20 - 09/11/22	40,000	Project leader
Vot. No.: RDU1803118 **Title:** Glycerol Dry Reforming over Bimetallic Nickel-Based Catalyst Supported on Calcined Aluminum Dross for Syngas Production	UMP Internal Research Grant	15/06/18 – 14/06/20	36600	Project leader
Vot. No.: RDU170347 **Title:** Synthesis, Characterization and Studies on the Thermal Storage Performance of Encapsulated Phase Change Material Composite Derived from Waste Materials	UMP Internal Research Grant	01/4/17 – 01/4/19	34500	Project leader
Vot. No.: RDU140357 **Title:** Investigation on the Performance of Tubular Flow Reactor on the Esterification of Highly Acidified Oil Using Heterogeneous Catalyst	UMP Internal Research Grant	15/05/14 – 14/11/16	29044	Project leader
Vot. No.: RDU130311 **Title:** Synthesis and Characterization of Heterogeneous Catalyst for the Esterification of Free Fatty Acid in Acidified Oil	UMP Internal Research Grant	15/5/13 – 14/5/15	38650	Project leader
Vot. No.: RDU070374 **Title:** Development of Novel Catalyst for Biodiesel Production from Waste Cooking Oil	UMP Internal Research Grant	3/09/07 – 02/09/08	20000	Project leader
Vot. No.: RDU200734 **Title:** Elucidating The Mechanism Of Biomass To Solid Fuel Via Microwave Assisted Oxidative Torrefaction	UMP Internal Research Grant	23/12/20 - 22/12/22	20000	Co-researcher
Vot. No.: RDU1903142 **Title:** Investigating The Effect Of Ionic Resins On The Seawater Desalination Performance Using Microfluidics Technology	UMP Internal Research Grant	26/12/19 - 25/03/22	34000	Co-researcher
Vot No.: RDU182204-2 **Title:** Antioxidant and Protease From Local Fish Processing Industry Waste	UMP Flagship Grant	15/10/18 – 14/10/21	73800	Co-researcher
Vot. No.: RDU180326 **Title**: Synthesis of Alumina from Aluminium Can Waste in Producing High Surface Alumina as Photocatalyst Support for the Treatment of Palm Oil Mill Effluent (POME)	UMP Internal Research Grant	05/04/18 – 31/03/20	34500	Co-researcher
Vot. No.: RDU172202 **Title:** Catalytic Conversion of Palm Oil Mill Effluent into Biogasoline	UMP Leap 3 Flagship	28/06/17 – 27/06/19	98232	Co-researcher
Vot. No.: RDU170326 **Title:** Bi-Reforming of Methane for Syngas Production via Promoted Ni/SBA-15 Catalyst	UMP Internal Research Grant	01/03/17 – 01/03/19	35000	Co-researcher
Vot. No.: RDU170330 **Title:** Synthesis of Ni Promoted Mesoporous Silica from Sedge as an Agriculture Waste for CO_2 Conversion	UMP Internal Research Grant	01/03/17 – 01/3/19	36900	Co-researcher

Vot. No.: UIC160906 **Title:** Vegetarian Capsule for Drug Delivery Carrier	UMP Pre-Commercialization Fund	15/01/17 – 14/01/18	80000	Co-researcher
Vot. No.: RDU160331 **Title:** Green Synthesis: Photo-Initiated Polymer Dispersion Polymerization	UMP Internal Research Grant	25/05/16 – 24/05/18	32568	Co-researcher
Vot. No.: RDU160339 **Title:** Extraction of Lanthanide using Ionic Liquid	UMP Internal Research Grant	25/05/16 – 24/05/18	34500	Co-researcher
Vot. No.: RDU150382 **Title:** Synthesis and Characterization of Ni-Based Catalysts Modified with rare Earth and Alkaline Metal Oxides (Ceo_2, La_2O_3, Bao) for Methane Cracking	UMP Internal Research Grant	01/10/15 – 30/09/17	35000	Co-researcher
Vot. No.: RDU140374 **Title:** Fundamental Investigation of Methane Dry Reforming over Lanthanide-Group Promoted Co/Al_2O_3 Catalysts	UMP Internal Research Grant	01/06/14 – 31/05/16	39000	Co-researcher
Vot. No.: RDU140315 **Title:** Synthesis and Characterization of EFB-Clinker Supported Nickel Catalyst for Syngas Production from Reactive Fluid Mixture of CO_2-CH_4	UMP Internal Research Grant	01/04/14 – 31/03/16	24900	Co-researcher
Vot. No.: RDU070343 **Title:** Production of Biodiesel from Used Cooking Oil	UMP Internal Research Grant	16/05/07 – 15/05/08	20000	Co-researcher
Vot. No.: RDU070301 **Title:** Development of Chitosan based Adsorbent for Removal of Oil from Industrial Wastewater	UMP Internal Research Grant	30/03/07 – 30/03/08	150000	Co-researcher

INTELLECTUAL PROPERTY

Patent Title	Registration No.	Date/Year of patent	Level
Preparation of 2-ethyl acrylate from Wastewater	PI2018400028	4 Dec 2018	National
A Method of Producing a Diol from Renewable Resources	PI 2018701675	26 April 2018	National
An Immobilized Extractant and a Method Producing The Same	PI2018000708	14 May 2018	National
Sulphonated Crosslinked Polymer	PI 2016703017	18 August 2016	National
Recycling of Used Cooking Oil to Biodiesel	PI 20080176	30 January 2008	National

POSTGRADUATE SUPERVISION

Student's Name	Program	Title of Thesis/Project	Role		Progress Supervision
			Main	Co	
Siti Nor Amira	PhD	CO_2 Reforming of Methane over Fibrous Metal Catalyst for Syngas Production	√		In Progress
Nurul Asmawati Roslan	PhD	CO_2 Reforming of Glycerol over Promoted Nickel Based Catalyst for Syngas Production	√		In Progress
Tran Ngoc Thang	PhD	Methane Dry Reforming of Syngas Generation over Promoted Co-based Catalyst	√		In Progress
Nor Shafiqah Mohd Nasir	PhD	CO_2 Reforming of Glycerol over Supported Bimetallic Nickel Based Catalyst for Syngas Production	√		In Progress
Siti Amirah bt. Abdul Ghani	MSc	Synthesis and Characterization of Encapsulated Phase Change Material Composite Derived from Waste Materials as the Thermal Storage Medium	√		In Progress
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_2	√		**Completed**
Norazimah Harun	MSc	Glycerol Dry Reforming for Syngas Production Using Ag Promoted on Ni Based Catalyst Supported on Al_2O_3 and SiO_2	√		**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)
Vot No: CTS190196 **Title:** Scale-up activities using batch reactor unit and sample testing associated.	2019	Petronas Research (PRSB)	Consultation	190700
Vot No: CTS190172 **Ttile:** Short Path Distillation Process and Sample Testing Analysis for PETRONAS Research Sdn Bhd	2019	Petronas Research (PRSB)	Consultation	28267
Vot No.: UIC170807 **Title**: Waste to Wealth Project with Mercu Resolution	2017	MERCU Resolution	Industry Contract Research	15000
Vot No.: UIC150705 **Title**: Developing CMSS Application in Pharmaceutical as HALAL Binder, Thickener and Soft and Hard Capsule	2015	My Synergy Sdn. Bhd.	Industry Research Grant (PPRN)	30093
Vot No.: UIC150704 **Title**: CMSS (Carboxymethylated Sago Starch) as Halal Thickener for Food and Beverages Industry	2015	My Synergy Sdn. Bhd.	Industry Research Grant (PPRN)	25200
Vot No.: UCT140115 **Title**: Production of Biodiesel from Highly Acidified Oil	2014	Temasek Growth Sdn. Bhd.	Consultation	1500

RESEARCH AWARD

Awards Title	***Date/Year***	***Organizer***	***Level***
Exhibition - International			
Achievement: Obelisk Award (The World Invention Award) ***Title:*** A Technology for Efficient Extraction of Rare Earth Metals Using Synergised Extractant Immobilized Resin (SEIR) ***List of Inventors:*** Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	24/10/18 – 27/10/18	British Invention Show (BIS) 2018	International
Achievement: Diamond Award - International Invention of the Year (Industrial Category) ***Title:*** A Technology for Efficient Extraction of Rare Earth Metals Using Synergised Extractant Immobilized Resin (SEIR)	24/10/18 – 27/10/18	British Invention Show (BIS) 2018	International

List of Inventors: Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat			
Achievement: Gold Medal (Industrial Category) ***Title:*** A Technology for Efficient Extraction of Rare Earth Metals Using Synergised Extractant Immobilized Resin (SEIR) ***List of Inventors:*** Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	24/10/18 – 27/10/18	British Invention Show (BIS) 2018	International
Achievement: Gold Medal ***Title:*** Extraction of Rare Earth Element Using Synergist Extractant Immobilized Resin (SEIR) ***List of Inventors:*** Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	10/05/18 – 13/05/18	29th International Invention, Innovation & Technology Exhibition 2018 (ITEX 2018)	International
Achievement: Silver Medal ***Title:*** Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst. ***List of Inventors:*** Nurul Asmawati Roslan, Norhayati Abdullah, Sumaiya Zainal Abidin	1/12/16 – 4/12/16	Seoul International Invention Fair (SIIF 2016)	International
Achievement: Gold Medal ***Title:*** Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst in Reaction Processes. ***List of Inventors:*** Nurul Asmawati Roslan, Norhayati Abdullah, Sumaiya Zainal Abidin	12/05/16 – 14/05/16	27th International Invention, Innovation & Technology Exhibition 2016 (ITEX 2016)	International
Achievement: Gold Medal ***Title:*** Acousto Cyclo Reactor Scheme (ACORIS) for Biodiesel Production from Waste Cooking Oil. ***List of Inventors:*** Rosli Mohd Yunus, Zulkifly Jemaat, Ruzinah Isha, Sumaiya Zainal Abidin ,Ruwaida Abdul Rasid	11/12/08 – 15/12/08	Seoul International Invention Fair (SIIF 2008)	International
Exhibition – National			
Achievement: Silver Medal ***Title:*** Acousto Cyclo Reactor Scheme (Acoris) For Biodiesel Production from Waste Cooking Oil ***List of Inventors:*** Rosli Mohd Yunus, Ruzinah Isha, Sumaiya Zainal Abidin, Ruwaida Abdul Rasid, Hairul Hisham Ismail, Mohd Hafiz Abd Latif	29/03/07 – 31/03/07	Malaysian Technology Exposition (MTE 2007)	National
Exhibition - Internal (University Malaysia Pahang)			
Achievement: Silver Medal ***Title:*** Recovery of Alumina from Hazardous Aluminum Dross using AD-TRAC System Integrated Technological Solution for Aluminum Dross Valorisation & Recycling: A Zero Waste Concept ***List of Inventors:*** Sumaiya Zainal Abidin,Herma Dina Setiabudi, Nurul Asmawati Roslan	7/04/2021	Creation, Innovation, Technology & Research Exposition 2021 (CITREX 2021), UMP	UMP
Achievement: Silver Medal ***Title:***	12/02/20 – 13/02/20	Creation, Innovation, Technology & Research Exposition 2020 (CITREX 2020), UMP	UMP

Integrated Technological Solution for Aluminum Dross Valorisation & Recycling: A Zero Waste Concept ***List of Inventors:*** Sumaiya Zainal Abidin,Herma Dina Setiabudi, Nurul Asmawati Roslan			
Achievement: Silver Medal ***Title:*** EFW: Utilization of Fish Waste Produce Biodiesel ***List of Inventors:*** Muhammad Iqmal Muhammad, Sharifah Amanda Syed Othman, Nur Mar Atull Afifah Amzah, Sumaiya Zainal Abidin, Ruwaida Abdul Rasid, Aainaa Izyan Nafsun	2/02/20 – 13/02/20	Creation, Innovation, Technology & Research Exposition 2020 (CITREX 2020), UMP	UMP
Achievement: Special Award (Green Technology Award) ***Title:*** Extraction of Rare Earth Element Using Synergist Extractant Immobilized Resin (SEIR) ***List of Inventors:*** Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	07/02/18 – 08/02/18	Creation, Innovation, Technology & Research Exposition 2018 (CITREX 2018), UMP	UMP
Achievement: Gold Medal ***Title:*** Extraction of Rare Earth Element Using Synergist Extractant Immobilized Resin (SEIR) ***List of Inventors:*** Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	07/02/18 – 08/02/18	Creation, Innovation, Technology & Research Exposition 2018 (CITREX 2018), UMP	UMP
Achievement: Silver Medal ***Title:*** Development of Thermal Energy Storage Material Using PCM Derived From Waste Materials ***List of Inventors:*** Mohamad Asyren Mat Riffin, Mazaleeia Azman, Siti Amirah Abdul Ghani, Saidatul Shima Jamari, Sumaiya Zainal Abidin	07/02/18 – 08/02/18	Creation, Innovation, Technology & Research Exposition 2018 (CITREX 2018), UMP	UMP
Achievement: Silver Medal ***Title:*** Adsorption of Dysprosium (Dy) using Extractant Immobilized Resin ***List of Inventors:*** Tang Siew Kee, Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	15/03/17 – 16/03/17	Creation, Innovation, Technology & Research Exposition 2017 (CITREX 2017), UMP	UMP
Achievement: Silver Medal ***Title:*** Studies on the Adsorption Behaviour of Dysprosium using Silica Supported Ionic Liquid ***List of Inventors:*** Muhammad Syiham b. Ab. Malek, Sumaiya Zainal Abidin, Nur Nadiatul Hidayah Shaikh Rohmat	15/03/17 – 16/03/17	Creation, Innovation, Technology & Research Exposition 2017 (CITREX 2017), UMP	UMP
Achievement: Gold medal – Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst in Reaction Processes ***List of Inventors:*** Nurul Asmawati Roslan, Norhayati Abdullah, Sumaiya Zainal Abidin	07/03/16 – 08/03/16	Creation, Innovation, Technology & Research Exposition 2016 (CITREX 2016), UMP	UMP
Achievement: Gold Medal	07/03/16 – 08/03/16	Creation, Innovation, Technology &	UMP

Title: Esterification of Free Fatty Acids (FFA) in Highly Acidified Oil using Ion Exchange Resin as Catalysts ***List of Inventors:*** Siti Amirah Abdul Ghani, Sumaiya Zainal Abidin, Nursofia Mohd Yunus, Nurul Asmawati Roslan		Research Exposition 2016 (CITREX 2016), UMP	
Achievement: Bronze Medal ***Title:*** Halal V-Capsule ***List of Inventors:*** Fatmawati Adam, Mohd Noor b. Nawi, Nur Syuhada' Asmar, Joharizal Johari, Ruwaida Abdul Rasid, Sumaiya Zainal Abidin, Farhan Mohd Said, Shabirah Ezan	07/03/16 – 08/03/16	Innovation, Technology & Research Exposition 2016 (CITREX 2016), UMP	UMP
Achievement: Silver Medal ***Title:*** Esterification of Free Fatty Acids (FFA) in Highly Acidified Oil using Ion Exchange Resin as Catalysts ***List of Inventors:*** Siti Amirah Abdul Ghani, Sumaiya Zainal Abidin	15/04/16 – 17/04/16	International Festival Innovation on Green Technology (i-FINOG 2016)	UMP
Achievement: Gold Medal ***Title:*** Novel Vegetarian Drug Deliver Carrier ***List of Inventors:*** Fatmawati Adam, Mohd Noor b. Nawi, Nur Syuhada' Asmar, Joharizal Johari Ruwaida Abdul Rasid, Sumaiya Zainal Abidin , Farhan Mohd Said, Siti Hana Abu Bakar	09/03/15 – 10/03/15	Creation, Innovation, Technology & Research Exposition 2015 (CITREX 2015), UMP	UMP
Achievement: Silver Medal ***Title:*** Syngas Production from Carbon Dioxide (CO_2) Dry reforming of Glycerol using Nickel Based Catalyst Supported on Oxide ***List of Inventors:*** Sumaiya Zainal Abidin, Jolius Gimbun Cheng Chin Kui, Nursofia Mohd Yunus Norazimah Harun, Nur Nabillah Mohd Arif	09/03/15 – 10/03/15	Creation, Innovation, Technology & Research Exposition 2015 (CITREX 2015), UMP	UMP
Achievement: Silver Medal ***Title:*** Carbon dioxide CO_2 Dry Reforming of Glycerol for Hydrogen Production using Ni/La_2O_3 And CO/La_2O_3 ***List of Inventors:*** Nursofia Mohd Yunus, Sumaiya Zainal Abidin, Norazimah Harun, Nur Nabillah Mohd Arif	09/03/15 – 10/03/15	Creation, Innovation, Technology & Research Exposition 2015 (CITREX 2015), UMP	UMP
Other awards			
Award: Cendekia Bitara Award (*Journal Publication Category*) **Title:** The evolution of mineral processing in extraction of rare earth elements using liquid-liquid extraction: A review	2019	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Cendekia Bitara Award (*Research Product Category*) **Title:** Extraction Of Rare Earth Element Using Synergist Extractant Immobilized Resin (SEIR)	2019	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP

Award: Outstanding Women in Engineering (Major Area of Study - Chemical Engineering)	2019	Venus International Foundation, India	4th Venus International Women Awards (VIWA 2019)
Award: Cendekia Bitara Award (*Journal Publication Category*) **Title**: The evolution of mineral processing in extraction of rare earth elements using solid-liquid extraction over liquid-liquid extraction: A review	2018	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Merit Award (*Journal Publication Category*) **Title:** Liquid-liquid extraction of cerium using synergist extractant	2018	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Merit Award (*Journal Publication Category*) **Title:** Reforming of Glycerol for Hydrogen Production over Ni Based Catalysts: Effect of Support Type	2018	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Merit Award (*Journal Publication Category*) **Title:** Syngas Production from Methane Dry Reforming over Ni/SBA-15 Catalyst: Effect of Operating Condition	2018	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Merit Award (*Research Product Category*) **Title:** Sulphonated Hypercrosslinked Exchange Resin (SHER) as Catalyst in Reaction Process.	2017	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Cendekia Bitara Award (*Journal Publication Category*) **Title:** Comparison of Novozyme 435 and Purolite D5081 as Heterogeneous Catalysts for the Pretreatment of Used Cooking Oil for Biodiesel Production.	2014	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Merit Award (*Journal Publication Category*) **Title:** Quantitative Analysis of Fatty Acids Composition in the Used Cooking Oil (UCO) by Gas Chromatography Mass Spectrometry (GC-MS).	2014	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Merit Award (*Journal Publication Category*) **Title:** Effect of Temperature and Solvent Concentration on the Solvent Crystallization of Palm-Based Dihydroxystearic Acid with Isopropyl Alcohol.	2013	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Hadiah Sanjungan (*Kategori Penerbitan Journal*) **Title:** Esterification of Free Fatty Acids in Used Cooking Oil using Ion Exchange Resin as Catalysts: An Efficient Pre-Treatment Method for Biodiesel Feedstock.	2013	Malam Cendekia Bitara, Universiti Malaysia Pahang	UMP
Award: Gold Medal **Title:** Acousto Cyclo Reactor Scheme (Acoris) for Biodiesel Production from Waste Cooking Oil.	2007	Quality Day 2007, Universiti Malaysia Pahang	UMP

PROFESSIONAL BODIES

Professional Membership	*Date/Year*	*Organization*	*Level*	*Description of role & contribution*
Chartered Engineer (Reg. No: 660283)	2019- current	Institution of Chemical Engineers (IChemE)	International	Chartered Engineer
Associate Member (Reg. No: 100151587)	2018 - current	Institution of Chemical Engineers (IChemE)	International	Member
Professional Technologist (Reg. No: PT18070192)	2018 - current	Malaysian Board of Technologists (MBOT)	National	Professional Technologist
Graduate Technologist (Reg. No: GT18075439)	2018 - current	Malaysian Board of Technologists (MBOT)	National	Member
Graduate Member (Reg. No. GE44560)	2005 - current	Board of Engineer Malaysia	National	Member
Affiliate Member (Reg. No. 0064378)	2015 - 2018	Energy Institute (EI), UK	International	Member

JOURNAL EDITOR APPOINTMENT

Journal	**Publisher**	**Year**	**Role**	**Status**
Arabian Journal of Chemistry	Elsevier	2021	Guest Editor	In progress
Chemical Engineering and Technology	Wiley	2021	Guest Editor	In progress
Chemical Engineering Research and Design	Elsevier	2021	Managing Guest Editor	In progress
Materials Today: Proceeding	Elsevier	2021	Managing Guest Editor	In progress
International Journal of Hydrogen Energy	Elsevier	2020	Guest Editor	Published
IOP: IOP Conference Series: Materials Science and Engineering	IOP	2020	Guest Editor	Published
SN Applied Sciences Topical Collection: Current Trends in Chemical Engineering: Food, Water & Energy	Springer	2019	Guest Editor	Published
Comptes Rendus Chimie	Elsevier	2019	Guest Editor	Published

ACCREDITATION PANEL APPOINTMENT

Appointment	Appointing Bodies	Date	Role
Appointment as Accreditation Panel for Bachelor of Chemical Engineering Technology (Industrial Biotechnology) with Honours, 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

ADMINISTRATION APPOINTMENT

Appointment	Appointing Bodies	Date
Appointment as Head of Logistic and Event Management, Energy Sustainabilty & Chemical Engineering Congress (ESChE 2021)	Centre of Fluid Flow and Advanced Provcesses (FLUID)	3rd 5th November 2021
Appointment as Co-chairman for International Symposium of Reaction Engineering, Catalysis & Sustainable Energy	Faculti of Chemical and Process Engineering Technology, UMP	6th April 2021
Appointment as Co-chairman for International Conference on Chemical Engineering and Biotechnology 2020 (ICCEIB 2020)	Faculty of Chemical and Natural Resources Engineering, UMP	9th-11th August 2020
Appointment as Deputy Dean of Postgraduate and Research	Faculty of Chemical and Natural Resources Engineering, UMP	Jan 2019 – Jan 2020
Appointment as Head of Logistic and Event Management, Energy Sustainabilty & Chemical Engineering Congress (ESChE 2019)	Centre of Excellence for Advanced Research in Fluid Flow (CARIFF)	17-20th July 2019
Appointment as 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)	4th - 6th April 2017
Appointment as 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)	25th – 27th Nov 2015