

# **CURRICULUM VITAE**



#### **PERSONAL DETAILS**

Tel

Name : DAYANG NORULFAIRUZ BINTI ABANG ZAIDEL

Gender : FEMALE

Date of Birth/Age : 16 APRIL 1981 / 42 YEARS

Nationality : MALAYSIAN Marital Status : MARRIED

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**ID Staff** : 9554

**Expertise** Bioprocess Engineering, Food Processing & Technology, Enzyme

Technology, Food Rheology

H-Index (WOS) : 9 H-Index (SCOPUS) : 11 H-Index (G. Scholar) : 16 H-Index (Researchgate) : 8

#### **ACADEMIC QUALIFICATIONS**

NO	LEVEL OF EDUCATION	COURSE	UNIVERSITY	STARTING DATE	ENDING DATE
1	Doctor of	Bioprocess	Technical University of	4 Aug 2008	26 Jun 2012
	Philosophy	Engineering	Denmark, Denmark		
2	Master of	Food	Universiti Putra Malaysia,	5 Sep 2005	21 Feb 2008
	Science	Engineering	Serdang		
3	Bachelor of	Chemical	University of Manchester	1 Sep 2020	7 Jul 2003
	Engineering	Engineering	Institute of Science and		
			Technology, United Kingdom		

#### **WORKING EXPERIENCE**

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT/ORGANISATION
1	Associate Professor	20 March 2022	present	Department of Chemical and Environmental Engineering, Malaysia- Japan International Institute of Technology, UTM Kuala Lumpur
		10 Feb 2021	19 March 2022	Department of Bioprocess & Polymer Engineering, School of Chemical and Energy Engineering, UTM Johor Bahru
2	Senior Lecturer	27 Jun 2012	9 Feb 2021	Department of Bioprocess & Polymer Engineering, Faculty of Chemical and Energy Engineering, UTM Johor Bahru

3	Industrial Trainee	1 Feb 2017	31 Jan 2018	Optimal Systems Engineering Sdn. Bhd. (OPTIMISE), Johor Bahru, Malaysia
4	PhD Student	4 Aug 2008	2 Feb 2012	The Technical University of Denmark, Denmark
5	Master Student	5 Sep 2005	21 Feb 2008	Universiti Putra Malaysia, Serdang
6	Tutor	1 Sep 2004	26 Jun 2012	Department of Bioprocess Engineering, Faculty of Chemical Engineering, UTM Johor Bahru
7	Research Assistant	1 Feb 2004	30 Aug 2004	Department of Bioprocess Engineering, Faculty of Chemical & Natural Resources Engineering, UTM Johor Bahru

### **ADMINISTRATIVE EXPERIENCE**

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT/ FACULTY/ DIVISION
1	Acting Deputy Dean (Research, Innovation, Commercialization and Linkages)	25 Apr 2023	29 May 2023	Malaysia-Japan International Institute of Technology, UTM Kuala Lumpur
2	iKohza Coordinator	1 Apr 2022	31 Dec 2023	Malaysia-Japan International Institute of Technology, UTM Kuala Lumpur
3	Director of Bioprocess and Polymer Engineering Program	1 Jul 2018	19 Mar 2022	School of Chemical and Energy Engineering, Faculty of Engineering, UTM
4	Program Coordinator for Master of Engineering (Bioprocess) (Mixed mode)	1 Oct 2017	30 Jun 2018	Faculty of Chemical and Energy Engineering, UTM
5	Program Coordinator for Master in Bioprocess Engineering (Mixed mode)	1 Jul 2012	30 Jun 2016	Faculty of Chemical Engineering, UTM

### PROFESSIONAL MEMBERSHIP / QUALIFICATIONS / RECOGNITION

Summary	
International Professional Membership / Qualifications / Recognition	5
National Professional Membership / Qualifications / Recognition	3

NO	NAME OF PROFESIONAL MEMBERSHIP	LEVEL (FACULTY /UTM /NATIONAL /INTERNATION AL)	ROLE	YEAR
1	Board of Engineers Malaysia Professional Engineer. P122210	National	Professional Engineer	2022 - present
2	Engineering Council United Kingdom (ECUK), Registrant No. 681569	International	Chartered Engineer	2020 - present
3	Institute of Chemical Engineers (IChemE UK), Membership No. 99881121	International	Chartered Member	2020 - present
4	Malaysian Institute of Food Technology (MIFT), Membership No. P01306	National	Member	2018 - 2021
5	ASEAN Energy Management (AEMAS), Certificate No.: CEM-MY-1141-0417	International	Certified Energy Manager	2017 - present

6	Asia-Pacific Institute of Food Professionals (APIFP), Membership No.	International	Member	2016 - present
	2016-00078			
7	The Institution of Engineers, Malaysia (IEM). Membership No. 66802	National	Graduate Member	2014 - present
8	Asia-Pacific Chemical, Biological and Environmental Engineering Society, Member No. : 200936	International	Member	2014 - present
9	Board of Engineers Malaysia. Membership No. 80893A	National	Graduate Member	2012 - 2021
10	Institute of Chemical Engineers (IChemE UK), Membership No. 99881121	International	Associate Member	2012 - 2020

# AWARD AND HONORS RECEIVED

Summary				
International Awards/Honors	11			
National Awards/Honors	4			
UTM Awards/Honors	7			
Faculty Awards/Honors	1			

NO	AWARD	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	YEAR
1	Gold Medal Award in Virtual International Research and Innovation Symposium and Exposition 2022 (RISE 2022), 26 Oct 2022, co-researcher	International	2022
2	Bronze Medal Award in Invention, Innovation and Design Exposition 2022, 21-25 Nov 2022, co-researcher	National	2022
3	Excellent Researcher Award in the 4 <sup>th</sup> International Conference on Biosciences and Medical Engineering, 21-22 June 2022	International	2022
4	Silver Medal in International Alumni Convention and Innovation Exhibition (INACIX) 2021,18-20 Sept 2021, Coresearcher	International	2021
5	"Best Presenter" Award in the 6th International Conference on Low Carbon Asia (ICLCA) 2020	International	2020
6	Bronze Medal in 21st Industrial Art and Technology Exhibition (INATEX 2019) for project 'Go Green Go Swiet: Tunjuk Langit Soft Gel', 30 Sept-2 Oct 2019, Co-researcher	UTM	2019
7	"Anugerah Perkhidmatan Cemerlang (Excellent Service) for 2018"	UTM	2019
8	Bronze Medal in 20th Industrial Art and Technology Exhibition (INATEX 2018) for project 'Niomahogel-Swietenia Mahagoni Wound Healing Gel', 28-30 Oct 2018, Co-researcher	UTM	2018
9	"Anugerah Inovasi Staf Akademik (Berkumpulan-FoBERG)" in Faculty of Chemical and Energy Engineering UTM Staff Appreciation Event	Faculty	2018
10	Gold Award for the invention Herb Based Mosquito and Rodent Repellent, at the SIRIM Invention, Innovation and Technology Expo 2018, AMREC Complex, Kulim Hi-tech Park, Kedah, 17-18 April 2018, Co-researcher	International	2018
11	Gold Medal in the 1 <sup>st</sup> International Malaysia-Indonesia- Thailand Symposium on Innovation and Creativity (iMIT SiC 2017), UiTM Perlis Branch, Perlis, 26-27 July 2017, Coresearcher	International	2017

12	Silver Medal in Kuala Lumpur Engineering Science Fair (KLESF) International Challenge 2016, Ministry of Education Malaysia, 4-6 Nov 2016, Co-researcher	International	2016
13	Gold Medal in 18 <sup>th</sup> Industrial Art and Technology Exhibition (INATEX 2016) for project 'Meal-2-Heal designed food for emergency relief', Project Leader	UTM	2016
14	Award of Excellent for valuable contribution in Active Blended Learning Course for 2015/16	UTM	2016
15	'Best Paper Award' at the 1st International Conference Innovation in Science and Technology 2015, organized by Universiti Teknologi Malaysia, 20 April 2015	International	2015
16	'Best Paper Award' at the 2 <sup>nd</sup> International Conference on Agricultural and Food Engineering, organized by Universiti Putra Malaysia, 1-3 Dec 2014	International	2014
17	Bronze Medal at the Innovative Practices in Higher Education Expo 2014 (I-PHEX 2014), organized by Centre for Engineering Education UTM, 23 May 2014	International	2014
18	Bronze Medal in Bioinnovation Awards 2014 for project 'NatriFC-Natural, highly nutritious formulated colorant for health and wealth, 21 Nov 2014, Co-researcher	National	2014
19	Outstanding Contribution Award from Alliance of BEE Centers for Beyond Engineering Education in recognition of outstanding contribution as Team Manager of Creativity Station 2013 in Trawas, Indonesia, 1 Nov 2013	International	2013
20	Silver Medal in 15 <sup>th</sup> Industrial Art and Technology Exhibition (INATEX 2013) for project 'PS-Pra: Margarine containing perah seed oil and anthocyanins from purple sweet potato', 2-4 Oct 2013, Co-researcher	UTM	2013
21	'Anugerah Perkhidmatan Cemerlang (Excellent Service) for 2012'	UTM	2013
22	Gold Medal in Malaysia Technology Expo (MTE 2012) for project 'DuoAbs- Synergistically Antibacterial Solution', 15-17 Feb 2012, Co-researcher	National	2012
23	Silver Medal in Pameran Rekacipta Penyelidikan dan Inovasi (PRPI) 2009, Universiti Putra Malaysia for project 'Laboratory Set-up for Rheological Characterization of Gluten Extensibility', 28-30 July 2009, Co-researcher	UPM	2009

### **CONSULTATION WORKS**

Summary			
Consultation Project-UTM	3 projects (RM 491,581)		
Consultation Project- Others	3 projects (RM 48,713)		

No.	Year	Title	Value	Vot
1	2020	Consultancy project for Uni-Technologies Sdn. Bhd., UTM Summer School SS14 Accelerating Green Development in Asia, Project member	RM 359,593	1285
2	2019	Consultancy project for Uni-Technologies Sdn. Bhd., Development of Technical and Non-Technical Parameters of Renewable Energy and Energy Efficiency in Malaysia, Project member	RM 10,000	1387
3	2018	Consultancy project in collaboration with Asia-Pacific Institute of Food Professionals, International Conference on Probiotics and Food Sustainability 2018, Project member	RM 20,555	-
4	2016	Consultancy project for Uni-Technologies Sdn. Bhd., The 9 <sup>th</sup> Regional Conference on Chemical Engineering 2016 and the 1st Postgraduate International Symposium on Chemical and Energy Engineering 2016, Project member	RM 121,988	1076

5	2016	Consultancy project in collaboration with Asia-Pacific Institute of Food Professionals, International Workshop of Food Safety and Security 2016, Project leader	RM 10,350	-
6	2015	Consultancy project for Universiti Tun Hussein Onn on Preparation of Food Technology Lab Module, Project member	RM 17,808	-

### **RESEARCH ACTIVITIES**

Summary				
Principal Investigator- International Grants	0 project (RM0)			
Principal Investigator- National Grants	4 projects (RM275,200)			
Principal Investigator- UTM Grants	11 projects (RM532,100)			
Member- International Grants	2 projects (RM63,000)			
Member- National Grants	18 projects (RM3,656,792)			
Member- UTM Grants	28 projects (RM2,713,040)			

# Principal investigator

NO.	NAME OF GRANT	ROLE	CATEGORY OF GRANT (UTM/ OTHERS)	TYPE OF GRANT	AMOUNT (RM)	STARTING DATE	ENDING DATE
1	UTMSPC 2.11: Optimization of Enzymatic Hydrolysis Technique of Collagen From Mahseer Skin	Project leader	UTM SPACE	QUICK WIN	40,000	15 Mac 2023	14 Mac 2025
2	Enzymatic hydrolysis of collagen from barramundi skin aided with ultrasoundassisted pre-treatment and their potential bioactivities	Project leader	UTM	UTM FR	120,000	1 Jun 2022	31 May 2025
3	Optimal Mycelial conditions and its Spawn Production Potential for its Mycelial Biofoam	Project leader	Others	CRG	20,000	1 Nov 2019	31 Oct 2021
4	Nanoencapsulation of xanthones using emulsion- based delivery system for improved bioavailability and absorption efficiency	Project leader	KPT	FRGS	91,000	1 Jan 2019	30 Sep 2021
5	Formulation and encapsulation of functional ingredient in high-energy nutrient-dense (HEN-D) functional food as energy and brain booster	Project leader	UTM	TDRG	63,000	1 Dec 2018	30 May 2021
6	Optimization of encapsulation of essential oil from swietenia mahagoni seeds by using microfluidizer method	Project leader	UTM	RUG Tier 1	40,000	1 July 2017	30 Jun 2019
7	Optimization of <i>Plectranthus Amboinicus</i> essential oil extraction using microwave- assisted extraction and characterization of its bioactive compounds and larvacidal activity	Project leader	UTM	RUG Tier 1	50,000	1 July 2016	30 Jun 2018
8	Health and safety: Nutrition dense ready-to-eat meal to heal (M2H) as energy and	Project leader	KPT	FRGS	80,000	1 Apr 2015	31 Dec 2015

	immunity booster for flood disaster victims						
9	Profiling of the release of volatile flavour compounds and the structural stability in multi-layer food emulsion system containing sweet potato pectin	Project leader	KPT	FRGS	84,200	1 Jul 2014	30 Jun 2016
10	Characterization and functional properties of rice bran protein hydrolysates modified by exoproteases and endoproteases	Project leader	UTM	RUG Tier 1	55,000	1 Apr 2014	31 Mar 2016
11	Drug delivery system in microfluidic device for CVD application: Microneedles Design and fabrication	Project leader	UTM	Flagship	29,100	1 Apr 2014	31 Mar 2015
12	Feasibility study of protein hydrolysates from fermented soy bean as supplement for medium of human skin fibroblast cell culture	Project leader	UTM	RUG Tier 2	50,000	1 Dec 2012	31 Dec 2013
13	Development of measurement and control routine for a microbioreactor system via LabVIEW software	Project leader	UTM	RUG Tier 2	45,000	1 Dec 2012	31 Dec 2013

# Project member

NO.	NAME OF GRANT	ROLE	CATEGORY OF GRANT (UTM/ OTHERS)	TYPE OF GRANT	AMOUNT (RM)	STARTING DATE	ENDING DATE
1	Fucoidan Extraction from Brown Algae using Microwave Assisted-Deep Eutectic Solvent	Project member	UTM	UTM ER	60,000	1 Nov 2022	31 Oct 2024
2	Physicochemical, Biological Characteristic And Bioavailibility Study of Liposomal Turmeric	Project member	External	Contract Research DTD	43,700	1 Mar 2022	30 Jun 2023
3	Anti-Diabetic Activity And Mechanism of Black Mulberry (Morus Nigra) Fruit Extract	Project member	UTM	UTM FR	100,000	1 Jan 2020	30 Jun 2023
4	UTM Empowerment of B40 Group through Smart Partnership in Aquaponics Freshwater Lobster (Cherax quadricarinatus) Farming	Project member	CCIN	CCIN	2,219,716	21 Feb 2021	20 Feb 2026
5	KKP_SATELIT 2 : Novel Food Resources Consortium	Project member	External	KKP	155,000	1 Jan 2021	31 Dec 2022
6	Development of Ready-to-Drink Papaya Juice, Awarded by Hua Huat Manufacturing Sdn. Bhd	Project member	External	Contract research	51,000	19 Oct 2020	18 Oct 2021
7	Extraction of Pectins from Banana Peels using Subcritical Water Extraction: Kinetics and Characterization	Project member	UTM	UTM RA Iconic Grant	250,000	1 July 2020	30 Jun 2023
8	Penggunaan Teknologi bagi Memperkasa Industri Tenusu dan Pemprosesan Makanan Tempatan	Project member	CCIN	CCIN	20,000	1 Jan 2020	31 Dec 2020
9	Influence of microorganism in seafood product on dielectric properties and resonant frequency using a fabricated microstrip patch antenna	Project member	KPT	FRGS RACER	60,070	1 Sep 2019	31 Aug 2021

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10	Optimization And Formulation Of Lemon, Habbatus Sauda And Garlic Extract On Antioxidant And Antimicrobial, Awarded by Mayyarich Sdn. Bhd.,	Project member	External	Contract research	10,000	1 Apr 2019	31 Mar 2020
11	Profiling the release kinetic of anthocyanin incorporated in active and smart packaging system	Project member	KPT	FRGS	108,000	1 Jan 2019	31 Dec 2020
12	Traceability of Food Safety Hazards And Critical Point Along The Supply Chain of Seafood Industry In Malaysia	Project member	KPT	MRUN	248,504	1 Jan 2019	31 Dec 2021
	High-energy nutrient-dense meal as supplementary functional food for undernourished urban-living children	Project member	UTM	TDRG	270,000	1 Dec 2018	30 May 2021
	Process Intensification for High- Energy Nutrient-Dense (HEN- D) Functional Food Production	Project member	UTM	TDRG	63,000	1 Dec 2018	30 May 2021
15	Poly lactic acid/cellulose nano fiber/graphene oxide hybrid nanocomposites film with thymol as insect repellent	Project member	UTM	RUG Tier 1	50,000	1 Feb 2018	31 Jan 2020
16	Thermosonication treatment for inactivation of microorganisms and degrading enzymes in black mulberry functional drink	Project member	UTM	RUG Tier 1	50,000	1 Feb 2018	31 Jan 2020
	Optimization of microwave- assisted extraction and characterization of pectin extracted from waste pineapple peels	Project member	UTM	RUG Tier 1	50,000	1 Feb 2018	31 Jan 2020
	Empowering science, technology, engineering and mathematics (STEM) education to school students through National Science Challenge 2018 (NSC2018) semi-final level	Project member	External	External	23,012	9 Jan 2018	15 Aug 2018
	Aditif Makanan Haiwan with Koperasi Pekebun Kecil Wilayah Johor Selatan Berhad	Project member	External	External	55,000	1 Jan 2018	31 Dec 2019
20	Optimization of extraction process, antioxidant activity and antimicrobial properties of Backhousia Citriodora (lemon myrtle) extract	Project member	UTM	RUG Tier 1	40,000	1 Jul 2017	30 Jun 2019
21	Encapsulation of linoleic acid in Swietenia Mahagoni essential oil emulsion-based delivery systems	Project member	UTM	RUG Tier 1	40,000	1 Jul 2017	30 Jun 2019
22	Standardization and characterization of EG tea fiber	Project member	External	External	50,000	1 Mar 2017	31 Aug 2017
23	The design of microwave sensor by using band pass filter (BPF) application for industrial application	Project member	External	Osaka Gas in Cultural Exchange Foundation Research Grant Scheme	3,000	1 Jan 2017	31 Dec 2017
24	Evaluation on the effects of microwave-assisted extraction factors on the quality and	Project member	UTM	RUG Tier 1	20,000	1 Oct 2016	31 Dec 2017

	stability of malaysia black						
	mulberry (Morus Nigra L.) extract						
25	Analytical and experimental modelling of desolventisation system for EcoOils Sdn. Bhd.	Project member	External	Contract research	75,472	1 Sep 2016	31 Jul 2017
26	Antimicrobial solution from extraction of tamarindus indica incorporated with phyllanthus niruri	Project member	UTM	UTMF	20,000	1 Jul 2016	30 Jun 2018
27	Enzymatic conversion of agricultural-biomass to oligosaccharides-prebiotic	Project member	UTM	RUG Tier 1	50,000	1 July 2016	30 Jun 2018
28	Bioavailability and release profile of encapsulated vitamin E in simulated gastro-intestinal tract	Project member	KPT	FRGS	131,780	2 Nov 2015	1 Nov 2018
29	Drug delivery system in microfluidic device: microchannel (MC) design and fabrication	Project member	UTM	RUG Tier 1	50,000	15 Nov 2015	14 Nov 2017
30	Encapsulation of anthocyanins from ipomoea batatas using microwave drying	Project member	UTM	RUG	24,000	1 Aug 2015	31 Jul 2017
31	Development of biocatalyst and cell biocatalyst for conversion of polysaccharides	Project member	UTM	RUG Tier 1	180,000	1 Jun 2015	31 May 2019
32	Antioxidant and antimicrobial activity of alcohol-free mouthwash from piper betel (sireh)	Project member	UTM	RUG Tier 1	43,740	1 May 2015	31 Oct 2016
33	Optimization of extraction process and antioxidant activity of phaleria macrocarpa extract	Project member	UTM	RUG Tier 1	47,600	1 May 2015	31 Oct 2016
34	Identification of ligninase genes from wood-feeding insects for agropulp biodelignification	Project member	KPT	FRGS	82,000	1 Dec 2014	1 Nov 2017
35	Antimicrobial bio-plastic from local microalgae protein incorporated with chitosan	Project member	UTM	RUG Tier 1	20,000	1 Jul 2014	30 Jun 2015
36	Process optimization and upscaling extraction of sabah snake grass (Clinachantus Nutans)	Project member	External	Technofund	113,200	1 Jul 2014	30 Jun 2015
37	Process optimization of the thermal oxidative properties of thin layers of vegetable oil exposed to high curing temperatures	Project member	External	Qatar Foundation	60,000	1 May 2014	10 Sep 2014
38	Floating multiparticulate systems for gastro-retentive controlled release of modelled drug delivery in nutraceuticals	Project member	UTM	RUG Tier 1	72,500	1 Apr 2014	31 Mar 2016
39	Application of biotechnology and related-sciences in health and waste management (UTM-Argentina Collaboration)	Project member	UTM	Flagship	100,000	1 Apr 2014	31 Mar 2015
40	Relationship of structure- function to texture and sensory properties for assessment model of high nutrients food from tuber crops	Project member	KPT	FRGS	74,000	16 Dec 2013	15 Dec 2016
41	Penubuhan Makmal Halal, UTM R&D Grant	Project member	UTM	UTM R&D Grant	99,200	1 Nov 2013	31 Oct 2015
42	Sustainable production of second generation biocellulose	Project member	External	KTP	198,338	1 Aug 2013	31 Jul 2015

	and its green technology applications						
43	Biofortification of food crops for enhanced food security	Project member	UTM	Flagship	450,000	1 Apr 2013	31 Mar 2014
44	Nanoencapsulated Vitamin E based formulations for improving the lipid profile of the functional diet on cancer and cardiovascular diseases	Project member	UTM	Flagship	30,000	1 Apr 2013	31 Mar 2014
45	Process development for dielectric-material assisted microwave freeze drying of hygroscopic biomaterial with fatty acids	Project member	UTM	RUG Tier 1	200,000	1 Dec 2012	31 Dec 2014
46	In-vivo and in-vitro study of diabecine extract for diabetic problem	Project member	UTM	RUG Tier 1	200,000	1 Dec 2012	31 Dec 2014

# **Grant based on Innovation and University Commercialisation Product**

NO.	NAME OF GRANT	ROLE	CATEGORY OF GRANT (UTM/ OTHERS)	TYPE OF GRANT	AMOUNT (RM)	STARTING DATE	ENDING DATE
1	Pineapple Cough Syrup	Project member	UTM	PDF-2	50,000	15 Dec 2021	14 Jun 2023
	Niomahogel: Swietenia mahogani Wound Healing Gel	Project leader	UTM	PRGS-ICC	20,000	1 Dec 2020	30 Nov 2021
_	Extra Care Hand Sanitizer with Seaweed Extract	Project member	UTM	PRGS-ICC	20,000	1 Jun 2020	30 Nov 2020
4	Meal-to-Heal for emergency relief	Project leader	UTM	PRGS-ICC	20,000	1 Apr 2018	30 Mar 2019

### **COLLABORATION / MOU**

NO	NAME OF MOU	LEVEL OF MOU (NATIONAL/ INTERNATIONAL)	STARTING DATE	ENDING DATE
1	Research Collaboration Agreement between Universiti Kebangsaan Malaysia, Universiti Teknologi Malaysia and Universiti Sains Islam Malaysia, Member	National	1 Jan 2021	31 Dec 2022
2	Letter of Collaboration between Industrial University of Ho Chi Minh, Vietnam and UTM, Leader	International	3 Jul 2019	2 Jul 2022
3	Memorandum of Understanding between Prince of Songkla University, Thailand and Universiti Teknologi Malaysia, Member	International	18 Apr 2017	17 Apr 2022

### **TEACHING ACTIVITIES**

Summary	
Total Credit Hours	88

#### **UNDERGRADUATES**

YEAR OF SEMESTER	SEMESTER (1/2)	SUBJECT CODE	NAME OF SUBJECT	CREDIT HOUR	NO. OF STUDENT
2022/23	2	SMJC 2233	Physical Chemistry for Chemical Engineers	3	43
2022/23	2	SMJC 2253	Transport Phenomena	3	45
2022/23	1	SMJC 2113	Fluid Mechanics	3	53
2022/23	1	SMJC 1101	Engineering Drawing	1	24
2021/22	2	SMJC 4433	Biotechnology and Bioprocessing	3	27
2021/22	2	SETB2313	Transport Processes	3	39
2021/22	1	SETB1123	Static and Biomaterial	3	18
2020/21	2	SKTB4213	Food Process Engineering	3	26
2020/21	1	SETB1123	Static and Biomaterial	3	36
2020/21	1	SETB1011	Industrial and Career Seminar	1	35
2019/20	2	SKKB4813	Food Process Engineering	3	44
2019/20	1	SETB1123	Static and Biomaterial	3	17
2018/19	2	SKKB4813	Food Process Engineering	3	29
2018/19	1	SKTB1123	Static and Biomaterial	3	26
2017/18	2	SKKB4813	Food Process Engineering	3	36
2016/17	1	SKKB1011	Seminar	1	34
2016/17	1	SKKB1123	Static and Biomaterial	3	34
2015/16	2	SKKK4413	Biotechnology for Engineer	3	13
2015/16	1	SKKB1123	Static and Biomaterial	3	27
2014/15	2	SKKK4413	Biotechnology for Engineer	3	68
2014/15	1	SKKB1123	Static and Biomaterial	3	36
2014/15	1	SKKB1011	Seminar	1	36
2013/14	2	SKB5133	Biotechnology	3	12
2013/14	1	SKKK1021	Engineering Drawing	1	37
2013/14	1	SKKB1123	Static and Biomaterial	3	37
2013/14	1	SKKB1111	Seminar	1	37
2012/13	2	SKKK2213	Chemical Engineering Thermodynamics	3	15
2012/13	1	SKKK1021	Engineering Drawing	1	40
2007/08	1	SKM1013	Static	3	58
	TOTAL CRE	DIT HOUR (UN	IDERGRADUATE)	73	

#### **POSTGRADUATES**

YEAR OF SEMESTER	SEMESTER (1/2)	SUBJECT CODE	NAME OF SUBJECT	CREDIT HOUR	NO. OF STUDENT
2021/22	2	MAEF1223	Food Processing & Preservation I	3	4
2015/16	2	MKKB1333	Bioproduct Development	3	5
2014/15	2	MKKB1333	Bioproduct Development	3	12
2013/14	1	MKKB1333	Bioproduct Development	3	2
2012/13	1	MKKB1333	Bioproduct Development	3	4
	15				

### **SUPERVISION**

Summary					
Main Supervisor – PhD (Graduated)	2				
Co-Supervisor – PhD (Graduated)	2				
Main Supervisor – PhD (Ongoing)	3				
Co-Supervisor – PhD (Ongoing)	2				
Main Supervisor- Master by Research (Graduated)	6				
Main Supervisor- Master by Research (On-Going)	0				
Main Supervisor- Master by Mixed-Mode/ Taught Course (Graduated)	3				
Main Supervisor- Master by Mixed-Mode/ Taught Course (On-Going)	0				
Main Supervisor- Undergraduate Final Year Project (Graduated)	25				
Main Supervisor- Undergraduate Final Year Project (On-Going)	3				

### PhD (Main supervisor)

No.	Name	Status (Graduated/ On-Going)	Title	Roles of Supervision	Date
1	Umi Hartina binti Mohamad Razali (PKK203028)	Ongoing	Extraction and characterization of bioactive peptides from aquatic collagen as food supplement	Main supervisor	Sep 2020 – present
2	Nabilah Abdul Samad (PKK183011)	Ongoing	Encapsulation of functional ingredient for formulation of high energy nutrient dense food	Main supervisor	Sep 2018 – present
3	Nor Azizah Mohammad (PKK163003)	Ongoing	Bioavailability of nanoencapsulated xanthones from mangosteen ( <i>Garcinia Mangostana L</i> .) pericarp extracts using simulated gastrointestinal fluid	Main supervisor	Sep 2016 – present
4	Noor Faizah bt Ismail (PK133001)	Graduated	Purification and optimisation of beta-galactanase from Geobacillus sp.	Main supervisor	Sep 2015 – Jun 2022
5	Nor Azyati Abdul Muttalib (PK133022)	Graduated	Design and performance of milliliter range reactor prototype for immobilized bioprocess operation	Main supervisor	Sept 2013 – Apr 2019

### PhD (Co-supervisor)

No.	Name	Status (Graduated/ On-Going)	Title	Roles of Supervision	Date
1	Ahmed Moh Qrimida (PKK193054)	Ongoing	Biodegradable Plastics Polyhydroxyalkanoates Production from palm fruits peels: a waste to wealth perspectives for sustainable future	Co-supervisor	Feb 2020 – present
2	Azni binti A. Aziz (PK133045)	Ongoing	Structure Relationship To Texture - Sensory Properties And Functionality Of Purple Sweet Potato-Based Solid Food	Co-supervisor	Apr 2018 – present

3	Hamoud J.M.A.	Graduated	Modeling and optimisation for	Co-supervisor	Sep 2018 –
	Alenezi		fouling reduction in		Aug 2021
	(PKK153018)		Alphabutol technology		_
4	Hassan Fahmi bin Ismail (PK113113)	Graduated	Quality control, safety and anti-diabetes pharmacodynamics effect of synacinn	Co-supervisor	Sept 2016 – Apr 2018

# Master by Research

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught- course/ Mixed Mode)	Roles of Supervision	Date
1	Noor Fadzilah binti Abu Bakar (MKK163028)	Graduated	Extraction of essential oil from Swietenia macrophylla by using microwave extraction and characterization of its antidiabetic properties	Research	Main supervisor	Sep 2016 – May 2019
2	Siti Nurazwa binti Zainol (MK133037)	Graduated	Antimicrobial activity of combination Cinnamomum zeylanicum Blume and Eugenia Caryphyllata L. essential oil against oral pathogens	Research	Main supervisor	Sep 2016 – Dec 2017
3	Nurul Hazirah binti Hamidon (MKK153010)	Graduated	Effect of sweet potato pectin on the release of volatile flavour compounds and the structural stability in multi-layer emulsion	Research	Main supervisor	Sep 2015 – Apr 2018
4	Nur Shakira binti Sahat (MK133026)	Graduated	Formulation and stability of margarine containing anthocyanins from Roselle and Red Cabbage	Research	Main supervisor	Sep 2013 – Aug 2016
5	Sharifah Annirah binti Syed Abd Rahman (MK133002)	Graduated	Hydrolysis of soluble cellooligosaccharides by <i>Trichoderma Reesei</i> cellobiohydrolase 7A	Research	Main supervisor	Sep 2013 – Aug 2016
6	Nurul Shafinas binti Mohd. Daud (MK133008)	Graduated	Extraction of rice bran oil using soxtherm extraction method	Research	Main supervisor	Sept 2013 - Apr 2016
7	Mohammad Lokman bin Hilmi (MKK182006)	Graduated	Nanoencapsulation of essential oil from Swietenia Mahagony extracted using Supercritical Carbon Dioxide Method	Research	Co- supervisor	Sep 2018 – Mar 2020

8	Noorzetty Akhtar binti Zakaria (MKK143041)	Graduated	Extraction and Characterization of Pectin from Pineapple ( <i>Ananas</i> comosus) Peels	Research	Co- supervisor	Sep 2016 – Jan 2020
9	Reiza Mutia (MK123036)	Graduated	Blending of Palm Oil Midfraction and Canola Oil for Production of Cocoa Butter Equivalent via Lipase-catalyzed Interesterification	Research	Co- supervisor	Feb 2013 – Jun 2015
10	Maznah Misbah (MK113030)	Graduated	Growth performance, feed intake and feed efficiency on ruminant supplemented with probiotic treated sugarcane bagasse	Research	Co- supervisor	Jan 2013 – Aug 2015

### Master (Mixed-Mode/Taught Course)

No.	Name	Status (Graduated/ On-Going)	Title	Mode (Research / Taught- course/ Mixed Mode)	Roles of Supervision	Date
1	Nabilah Abdul Samad (MKK162014)	Graduated	Optimization of Plectranthus Amboinicus essential oil extraction using microwave-assisted extraction and characterization of its bioactive compounds and antioxidant activity	Mixed-Mode	Main supervisor	Sep 2016 – Apr 2018
2	Nurul Hidayah Ismail (MKK142020)	Graduated	Optimization and characterization of pectin from sweet potato using acid extraction method	Mixed-Mode	Main supervisor	Sep 2015 – Jan 2017
3	Thaibah Ali (MKK142032)	Graduated	Processing parameters of oven and microwave drying on the properties of ready- to-eat meal to heal	Mixed-Mode	Main supervisor	Sep 2015 – Jan 2017
4	Jeveenath A/L Supramaniam (MKK162013)	Graduated	Freeze Microwave Drying Method for Porosity and Rehydration Ratio Improvement of Instant Rice Porridge	Mixed-Mode	Co- supervisor	Sep 2017 – Sep 2019

# **UTM POSTGRADUATE EXAMINATION/ VIVA**

Summary					
PhD Internal Examiner	3				
MSc. Internal Examiner	18				
Master mixed mode Internal Examiner	6				
Others Examiner	-				
Chairmain for MSc. viva	3				
Assistant Chairman for PhD viva	5				

### **PhD Internal Examiner**

NO.	ROLE	NAME OF STUDENT	TITLE	DATE/YEAR
1		Shafie	Thermo-responsive gamma-irradiated nanogels with tunable lower critical solution temperature for drug delivery	23 May 2023
2		Suhaimi	Rosmarinic acid-rich fraction from Orthosiphon aristatus induces apoptosis in porastate cancer cells through inhibition of rapamycin signaling pathway	24 Aug 2022
3	Internal examiner		Bioprocess optimization for high cell mass production and microencapsulation of probiotic bacteria <i>Lactobacillus reuteri</i>	30 Jun 2022

# Msc Internal Examiner

NO.	ROLE	NAME OF STUDENT	TITLE	DATE/YEAR
1	Internal examiner	Aiman Farhana Azaddin	Viability of Volvariella volvacea on electrospun nanofiber mat	31 Jan 2023
2	Internal examiner	Nivashini Neela Mekan	Optimization of Riboflavin Production by Genetically Modified Ashbya Gosyypii Using Bioprocessing Parameters	14 Feb 2023
3	Internal examiner	Luo Zaini binti Mohd Izwan Low	Bioprocess Optimization of Pullulan Production Using Aureobasidium melanogenum DSM2402	15 Feb 2023
4	Internal examiner	Nurhidayah Kumar binti Muhammad Firdaus Kumar	Entrapment of maltogenic amylase and cyclodextrin glucanotransferase for malto- oligosaccharides synthesis	7 Jun 2022
5	Internal examiner	Nur Syazwani binti Hanafi	Impact of pre-treatment prior to freeze- drying on the phytochemical content and quality attributes of pineapple fruit	21 Apr 2022
6	Internal examiner	Norsyafiqah Amalina binti Ahmad Jafri	Immobilization of Laccase Enzyme on Magnetically Separable Hierarchically- ordered Mesocellular Mesoporous Silica	4 Jan 2022
7	Internal examiner	Muhamad Khairul Hafiz bin Idris	Bioassay-guided extraction of Andrographis paniculata for intervention of in-vitro prostate cancer progression in metabolic syndrome environment	23 Jun 2021
8	Internal examiner	Nur Fatiha Norhisham	Nutritional characterization and storage condition of Johor Stingless bee honey	6 Jul 2020
9	Internal examiner	Nurul Nadrah binti Mohd Zabidi	Characterization of Saponin-Based Foaming Agent from <i>Colubrina Asiatica</i> Extract	20 Nov 2019

10	Internal examiner	Nur Atiqah binti Zularifin	Palm Oil-Based Degreaser Enhanced with Catnip ( <i>Nepeta Cataria</i> ) Essential Oil for Household Cleaning	13 Nov 2019
11	Internal examiner	Nur Fashya binti Musa	Optmization of Ultrasonic-Assisted Extraction Processing parameter of Garcinia Cambogia and Its Biological Activites	7 Nov 2019
12	Internal examiner	Fatin Husna binti Zulikram	Extraction and Fractionation of <i>Ficus Deltoidea</i> Leaves on Anti-Ageing Activity In-Vitro	13 Nov 2018
13	Internal examiner	Auni Salma binti Shaiful Amri	Optimization Process Extraction and Formulation of Anti-Dengue Emulsion from Carica Papaya Leaves	9 Jan 2017
14	Internal examiner	Nor Asyiqin binti Bakeri	Optimization of <i>Swetenia Mahagoni</i> Seed in Supercritical Carbon Dioxide Extraction	6 Sep 2016
15	Internal examiner	Nik Nurul Najihah Binti Nik Mat Daud	Optimization of <i>Graviola</i> Leaves Extraction parameter and Formulation Ingredients Anticancer Supplement Preparation	10 Apr 2016
16	Internal examiner	Siti Nur Hana binti Mamat	Physicochemical and Antibacterial Activities of Treated Cotton Fabric with Chitosan-Tripolyphosphate Nanoparticles and Lauric Acid	11 Feb 2016
17	Internal examiner	Wan Najihah Wan Hassan @ Wan Hussein	Metabolic Profiling of Mitochondrial Dysfunction In 3T3-LI Adipocytes	2 Jun 2015
18	Internal examiner	Chen Siew Chin	Optimization of formulation and process condition of <i>Labisia Pumila</i> and <i>Ficus Deltoidea</i> loaded niosome	24 Nov 2014

# Master by Mixed Mode Internal Examiner

NO.	ROLE	NAME OF STUDENT	TITLE	DATE/YEAR
1	Internal examiner	Dr. Zeenat Begam Binti Sawal Hamid	Formulation of antidiabetic functional beverage using guava leaves extract	31 Jul 2022
2	Internal examiner	Puvaniswaran A/L Krishna Moorthi	Medium optimization for biomass production of Lactobacillus fermentum B1840 in semi industrial scale	30 Dec 2020
3	Internal examiner	Lim Shin Yuan	Product Recovery Strategy and Fouling Mechanism for Cellulose Hydrolysis in Enzymatic Membrane Reactor	22 Sep 2019
4	Internal examiner	Nur Salina Salleh	Microwave blanching for inactivation of polyphenol oxidase and shelf-life extension of black mulberry juice	12 Mar 2019
5	Internal examiner		Citrus paradisi peels optimized extraction by ultrasonic-assisted technique and its antioxidant activity	25 Feb 2019
6	Internal examiner	Zunairah Ahmad	Electricity generation from soybean synthetic wastewater using microbial fuel cell	29 Jul 2013

# Chairman for MSc. Viva

NO.	ROLE	NAME OF STUDENT	TITLE	DATE/YEAR
1 (		Shafie	Modification Of Empty Fruit Bunch And Palm Kernel Shell To Activated Carbon For Gold Adsorption	25 Nov 2022

2	Chairman	Haslina Hussin	The Optimization Of Ammonia Removal	23 Nov 2022
			From Municipal Solid Waste Landfill	
			Leachate By Air Stripping And Its Recovery	
			Potential	
3	Chairman	Norhafiza Binti Nordin	Optimization of cascade low-pressure	1 Dec 2021
			steam heating and organic acid pre-	
			treatment on pineapple wastes for	
			fermentable sugars production	

### Assistant Chairperson for PhD Viva

NO.	ROLE	NAME OF STUDENT	TITLE	DATE/YEAR
1	Assistant Chairman		Induced pluripotent stem cells transplantation as wound therapy on a mouse model	4 Jan 2021
2	Assistant Chairman		High sensitivity sniffing capacity of apis mellifera for Andrographis paniculata detection	16 Mei 2018
3			Performance of microwave heating and encapsulation on alpha-tocopherol stability	30 July 2017
4	Assistant Chairman		Pretreatment of lignocellulosic biomass for organic acid production	13 Dec 2016
5	Assistant Chairman		Optimization of essential oil extraction from Sweetenia Mahagoni seeds using supercritical carbon dioxide method	1 Mar 2015

# **EXTERNAL EXAMINATION/ VIVA**

Summary	
PhD External Examiner	1
MSc. External Examiner	4
Others Examiner	-

# **PhD External Examiner**

NO.	ROLE	NAME OF STUDENT	TITLE	DATE/YEAR
1	External examiner	(UTHM)	Optimisation of Biopulping Process by Bacteria Delignification on Empty Fruit Bunch for Pulp Industry	30 Nov 2021

# **Msc External Examiner**

NO.	ROLE	NAME OF STUDENT	TITLE	DATE/YEAR
1		Hissham (UMT)	Elucidation of alginate-based composite edible coating as pretreatment on osmotic dehydration mass transfer, microstructure and physicochemical properties of ginger	1 Feb 2023
2		Hisham (UMP)	Enhancement of Nitrogen uptake in palm oil-based compost by using rice husk ash	1 Jul 2021
3		Sharfina Mutia Syarifah (UTHM)	Oil palm residue biodelignification by Bacillus cereus ligninase from	29 Jun 2020

		Coptotermus curvignathus gut for handsheet production	
4	Murzaini (UPM)	Effect of Drying Parameters in Producing Pumpkin Powder from Different Parts of Pumpkin and Its Application in Bingka Baking	6 Feb 2019

# **PUBLICATIONS**

Summary					
ISI Article/Journal	20				
Scopus Article/Journal	42				
Non-Indexed Article/Journal	10				
Indexed Conference Proceedings	3				
Non- Indexed Conference Proceedings	54				
Book Chapters	8				
Classified/Technical /Expert Report	1				
Magazines article	1				
Total citation in Scopus	539				

### **Indexed Journal**

NO.	ARTICLE TITLE	JOURNAL TITLE	VOL.	ISSUE	PAGE	YEAR	I.F.	TYPE OF PUBLICATION	QUARTILE RANKING	CATEGORY AUTHOR
1	Improving collagen processing towards a greener approach: current progress	Journal of Chemical Technology and Biotechnology	98	5	1063- 1082	2023	3.709	WOS & SCOPUS Indexed	Q2	Corresponding
2	Unleashing the potential of xanthan: a comprehensive exploration of biosynthesis, production, and diverse applications	Bioprocess and Biosystems Engineering	46	6	771 - 787	2023	3.434	WOS & SCOPUS Indexed	Q2	Co-author
3	Metal contaminants and chloramphenicol in Litopenaeus vannamei and Penaeus silasi at various supply chain stages in Johor Bahru, Malaysia and their health risk assessment	Journal of King Saud University - Science	35	1	102401	2023	3.829	WOS & SCOPUS Indexed	Q2	Co-author
4	The induction techniques of resinous agarwood formation: A review	Bioresource Technology Reports	21		Article number 101337	2023	-	SCOPUS Indexed		Co-author
5	Extraction optimization and physicochemical properties of high methoxyl pectin from Ananas comosus peel using microwave-assisted approach	Journal of Food Measurement and Characterizati on				2023	3.006	WOS & SCOPUS Indexed	Q3	Co-author
6	Optimisation of Microwave Drying for Encapsulation of Edible Bird's Nest Hydrolysate	Chemical Engineering Transactions	97		379 - 384	2022	-	SCOPUS Indexed	-	Corresponding
7	Green Extraction of Lawsonia Inermis L. Leaves for Antimicrobial Active Packaging Film	Chemical Engineering Transactions	97		229 - 234	2022	-	SCOPUS Indexed	-	Co-author

8	Valorisation of plant seed as natural bioactive compounds by various extraction methods: A review	Trends in Food Science & Technology	119		201-214	2022	12.56	WOS & SCOPUS Indexed	Q1	Co-author
9	Triple-action of the standardized antidiabetic polyherbal extract; Synacinn™ through upregulation of GLUT4 and inhibition of DPP(IV), α-amylase, and α-glucosidase activity	Medical Journal of Malaysia	77		16-22	2022		SCOPUS Indexed		Co-author
10	The scavenging activity of encapsulated EBN hydrolysates using different combinations of polysaccharides as wall material by spray drying	Biocatalysis & Agricultural Biotechnology	45		102503	2022	0.636	WOS & SCOPUS Indexed	Q2	Co-author
11	Breadfruit ( <i>Artocarpus</i> altilis) Studies: Rheological Stability, Incorporation of Gluten Free and Bioactive Compound as An Intermediate Ingredient in Health-related Products	ECS Transactions	107	1	14455 - 14463	2022		SCOPUS Indexed	1	Co-author
12	State of the art Bioremediation of textile dye in wastewater: A Review	Bioscience Research	19	2	914-924	2022	0.135	WOS Indexed	Q4	Co-author
13	Microbial treatment of tube wells water for improved water quality	AIP Conference Proceedings	2610		040012	2022	-	SCOPUS Indexed	-	Corresponding
14	Microbial Biotransformation and Biomineralization of Organic-Rich Waste	Current Pollution Reports	7	4	435-447	2021	6.37	WOS & SCOPUS Indexed	Q1	Co-author
15	Influence of Microwave Drying on the Properties of Moringa oleifera Leaves	Chemical Engineering Transactions	89		469-474	2021	-	SCOPUS Indexed	-	Corresponding

16	Extraction of Plant Based Protein from Moringa oleifera Leaves using Alkaline Extraction and Isoelectric Precipitation Method	Chemical Engineering Transactions	89		253-258	2021	-	SCOPUS Indexed	-	Corresponding
17	Characterization of thermostable beta-1,4-galactanase and its application in hydrolysis of pectin from sweet potato ( <i>Ipomoea batatas (L.) lam</i> ) peels	Jurnal Teknologi	83	5	57-65	2021	-	SCOPUS Indexed	-	Corresponding
18	Characterization of Cocoa Butter Equivalent from Formulated Hard Palm Oil Mid-fraction and Canola Oil Blend	IOP Conference Series: Earth and Environmental Science	807		042075	2021	-	SCOPUS Indexed	-	UTM First Author
19	Probiotics application in poultry industry: from feed to meat	Bioscience Research	18	1	496-514	2021	0.737	WOS & SCOPUS Indexed	Q4	Co-author
20	Microwave-assisted extraction of pectin from pineapple peel	Malaysian Journal of Fundamental and Applied Sciences	17	1	33-38	2021	-	SCOPUS Indexed	-	Co-author
21	Optimisation of Swietenia macrophylla seed oil extraction using ultrasoundassisted method	Chemical Engineering Transaction	83		79-84	2021	-	SCOPUS Indexed	-	Corresponding
22	Effect of ultrasonication process on microbial content and antioxidant activities of black mulberry-pineapple-mango functional drink	Chemical Engineering Transaction	83		427-432	2021	-	SCOPUS Indexed	-	Co-author
23	Surface current distribution and performance analysis of different feeding	2020 13 <sup>th</sup> International UNIMAS	CFP20 T28	Code 16614 5	Article No. 9299340	2020	-	SCOPUS Indexed	-	Co-author

	techniques for microstrip patch antenna	Engineering Conference								
24	Optimization of Pectin Extraction from Sweet Potato Peels using Citric Acid and Its Emulsifying Properties	Recent Patents on Food, Nutrition & Agriculture	11	3	202-210	2020	-	SCOPUS Indexed	-	Corresponding
25	UV Induced Mutagenesis Elevates the Production of Laccase in Enterobacter cloacae	Journal of Scientific & Industrial Research	79		442-448	2020	0.735	WOS & SCOPUS Indexed	Q4	Co-author
26	Biopolymeric encapsulation of probiotics for improved release properties in the gastrointestinal digestion system	IOP Conference Series: Materials Science and Engineering	778	1	012033	2020	-	SCOPUS Indexed	-	Corresponding
27	Xanthan biopolymer in pharmaceutical and cosmeceutical applications: Critical review	Bioscience Research	17	1	205-220	2020	-	SCOPUS Indexed	-	Co-author
28	Potential application of pineapple waste as a fermentation substrate in yeast production	International Journal of Scientific and Technology Research	9	3	1933- 1937	2020	-	SCOPUS Indexed	-	Co-author
29	Optimisation of Microwave- assisted Encapsulation of Black Mulberry ( <i>Morus</i> <i>nigra</i> ) Extract	Chemical Engineering Transactions	78		145-150	2020	-	SCOPUS Indexed	-	Co-author
30	Microwave-assisted Encapsulation of Blue Pea Flower ( <i>Clitoria ternatea</i> ) Colourant: Maltodextrin Concentration, Power, and Time	Chemical Engineering Transactions	78		199-204	2020	-	SCOPUS Indexed	-	Co-author
31	Extraction of Swietenia macrophylla Seed Oil using Supercritical Carbon Dioxide Technique and Its	Chemical Engineering Transactions	78		523-528	2020	-	SCOPUS Indexed	-	Corresponding

	Antioxidant, Antidiabetic and Toxicity Properties									
32	Optimization of Bacterial Cellulose Production from Pineapple Waste using Different Fermentation Method	Chemical Engineering Transactions	78		559-564	2020	-	SCOPUS Indexed	-	Co-author
33	Stabilization of Multilayer Emulsion as Influenced by Sweet Potato Pectin Concentration, pH and Salt	Journal of Scientific & Industrial Research	78	11	775-781	2019	0.735	SCOPUS & WOS Indexed	Q4	Corresponding
34	Optimization of the antioxidant-rich xanthone extract from mangosteen (Garcinia mangostana L.) pericarp via microwaveassisted extraction	Heliyon	5		e02571	2019	2.85	WOS & SCOPUS Indexed	Q2	Corresponding
35	Recent developments on ethylene dimerization with focus on alphabutol optimization	International Journal of Innovative Technology and Exploring Engineering	8	10	3969- 3975	2019	-	SCOPUS Indexed	-	Co-author
36	Optimization of Plectranthus amboinicus (Lour.) Spreng Extraction Process Using Microwave- assisted Technique	Chemical Engineering Transactions	72		397-402	2019	-	SCOPUS Indexed	-	Corresponding
37	Crude Oil Yield and Properties of Rice Bran Oil from Different Varieties as Affected by Extraction Conditions using Soxhterm Method	Arabian Journal for Science and Engineering	43	11	6237- 6244	2018	1.092	WOS & SCOPUS Indexed	Q3	Corresponding
38	Effect of Solvent pH, Microwave Power and Extraction Time on Microwave-Assisted Extraction of Hibiscus rosa- sinensis	Chemical Engineering Transactions	63		541-546	2018	-	SCOPUS Indexed	-	Co-author

39	Design and Analysis of Slotted Ring Wideband Bandpass Filter for Microwave Sensor	Journal of Telecommunic ation, Electronic and Computer Engineering	10	1-12	51-54	2018	-	SCOPUS Indexed	-	Co-author
40	Extraction and Characterization of Pectin from Sweet Potato (Ipomoea batatas) Peels using Alkaline Extraction Method	Acta Horticulturae	1152		211-217	2017	-	SCOPUS Indexed	-	Corresponding
41	Effects of Ingredients Ratio on Physicochemical Properties of Convective- Microwave Nutritious Dried Rice Meal	Chemical Engineering Transactions	56		1477- 1482	2017	-	SCOPUS Indexed	-	Co-author
42	Effect of Impeller Design on the Rate of Reaction of Hydrolysis in Batch Reactor	Chemical Engineering Transactions	56		1423- 1428	2017	-	SCOPUS Indexed	-	Corresponding
43	Thermotolerance study of bagasse-alginate encapsulant using effective thermal conductivity model for sustainable probiotic feed	Chemical Engineering Transactions	56		1405- 1410	2017	-	SCOPUS Indexed	-	Co-author
44	Microwave-Assisted Stabilization and Storage Stability Study of Rice Bran Oil from Different Varieties	Chemical Engineering Transactions	56		1285- 1290	2017	-	SCOPUS Indexed	-	Corresponding
45	Physicochemical Properties and Storage Stability of Margarine Containing Anthocyanins from Roselle Calyces	Chemical Engineering Transactions	56		1051- 1056	2017	-	SCOPUS Indexed	-	Corresponding
46	Effect of Extraction Conditions on Pectin Yield Extracted from Sweet Potato Peels Residues using Hydrochloric Acid	Chemical Engineering Transactions	56		979-984	2017	-	SCOPUS Indexed	-	Corresponding

47	Extraction and Characterization of Pectin from Dragon Fruit (Hylocereus polyrhizus) Peels	Chemical Engineering Transactions	56		805-810	2017	-	SCOPUS Indexed	-	Corresponding
48	Oil Palm Leaf Fibre and its Suitability for Paper-based Products	ARPN Journal of Engineering and Applied Sciences	11	11	7364- 7369	2016	-	SCOPUS Indexed	-	UTM First author
49	Antioxidant Properties of Rice Bran Oil from Different Varieties Extracted by Solvent Extraction Methods	Jurnal Teknologi (Sciences & Engineering)	78	6-12	107-110	2016	-	SCOPUS Indexed	-	Corresponding
50	Optimization of Cocoa Butter Equivalent Production from Formulated Hard Palm Oil Mid-fraction and Canola Oil Blends	Jurnal Teknologi (Sciences & Engineering)	78	6-12	127-134	2016	-	SCOPUS Indexed	-	Co-author
51	Extraction and characterization of pectin from sweet potato (Ipomoea Batatas) pulp	Journal of Engineering Science and Technology	Specia I Issue 3		22-29	2015	-	SCOPUS Indexed	-	Corresponding
52	Efficiency and Thermal Stability of Encapsulated Anthocyanins from Red Dragon Fruit (Hylocereus Polyrhizus) using Microwave-assisted Technique	Chemical Engineering Transactions	43		127-132	2015	-	SCOPUS Indexed	-	Corresponding
53	Stability Study of Water-in- Oil Emulsion Containing Anthocyanins from Red Cabbage	Jurnal Teknologi (Sciences and Engineering	69	4	1-5	2014	-	SCOPUS Indexed	-	Corresponding
54	Plant Protein Hydrolysates as a Supplement for Medium in Human Skin Fibroblast 1184 Cell Culture	Advances in Environmental Biology	8	3	838-843	2014	-	SCOPUS Indexed	-	Co-author
55	Evaluation of capsaiciniods extracts as bioactive	Jurnal Teknologi	64	2	69-74	2013	-	SCOPUS Indexed	-	Co-author

	substance for antimicrobial films	(Science and Engineering)								
56	Oxidative enzymatic gelation of sugar beet pectin for emulsion stabilization	Research Journal of Biotechnology	8	7	81-86	2013	0.294	WOS & SCOPUS Indexed	Q4	UTM First Author
57	Stabilization of emulsions by gum tragacanth (Astragalus spp.) correlates to the galacturonic acid content and methoxylation degree of the gum	Food Hydrocolloids	31		5-14	2013	3.494	WOS & SCOPUS Indexed	Q1	UTM First Author
58	Stabilization of oil-in-water emulsions by enzyme catalyzed oxidative gelation of sugar beet pectin	Food Hydrocolloids	30		19-25	2013	3.494	WOS & SCOPUS Indexed	Q1	UTM First Author
59	Enzyme catalyzed oxidative gelation of sugar beet pectin: Kinetics and rheology	Food Hydrocolloids	28		130-140	2012	2.659	WOS & SCOPUS Indexed	Q1	UTM First Author
60	Biocatalytic cross-linking of pectic polysaccharides for designed food functionality: Structures, mechanisms, and reactions	Biocatalysis and Agricultural Biotechnology	1		207-219	2012	-	SCOPUS Indexed	-	UTM First Author
61	Kinetics of enzyme- catalyzed cross-linking of feruloylatedarabinan from sugar beet	Journal of Agricultural and Food Chemistry	59		11598- 11607	2011	2.816	WOS & SCOPUS Indexed	Q1	UTM First Author
62	A Review on Rheological Properties and Measurements of Dough and Gluten	Journal of Applied Sciences	10		2478- 2490	2010	-	SCOPUS Indexed	-	UTM First Author
63	Statistical modelling of gluten production by varying mixing time, salt and water levels during dough mixing	International Journal of Food Engineering	5		Article 16	2009	1.014	WOS & SCOPUS Indexed	Q4	UTM First Author
64	Analysis and Correlation Studies on Gluten Quantity	Journal of Applied Sciences	9		1686- 1694	2009	-	SCOPUS Indexed	-	UTM First Author

	and Quality during Production							
65	Rheological characterisation of gluten from extensibility measurement	Journal of Food Engineering	86	549-556	2.414	WOS & SCOPUS Indexed	Q1	UTM First Author

### Non-Indexed Journal

NO.	ARTICLE TITLE	JOURNAL TITLE	ISSN/ISBN	VOL.	ISSUE	PAGE	YEAR	TYPE OF PUBLICATION	CATEGORY AUTHOR
1	Formulation of Biscuits Containing Eucheuma CottoniiPowder and Physicochemical Properties Analysis of the Biscuits	Bioprocessing and Biomass Technology	2976-3177	1	1	7-11	2022	Non-Indexed	Corresponding
2	Encapsulation of Milk Protein with Inulin for Improved Digestibility	Journal of Human Centered Technology	2821-3467	1	2	26–32	2022	Non-Indexed	Co-author
3	Impact of multidisciplinary engineering service learning in instilling global engineer attributes among undergraduates	ASEAN Journal of Engineering Education	2231-9433	3	9	96-108	2019	Non-Indexed	Co-author
4	Innovation as the key driver for sustainable food systems	Asia-Pacific Journal of Food Safety and Security	2422-9555	4	2	1-4	2018	Non-Indexed	Corresponding
5	Effect of Microwave Drying Technique on the Properties of Dried Rice Food	Asia-Pacific Journal of Food Safety and Security	2422-9555	4	2	23-31	2018	Non-Indexed	Corresponding
6	Analysis on wideband band pass filter microwave sensor performances for measuring rice quality in agriculture industry	Asia-Pacific Journal of Food Safety and Security	2422-9555	4	2	43-62	2018	Non-Indexed	Co-author
7	Multivariate data analysis of pesticide residue on spinach leaves based on FT-IR spectroscopy	Asia-Pacific Journal of Food Safety and Security	2422-9555	4	2	63-69	2018	Non-Indexed	Co-author

8	Sustainability of food resources and the supply chain	Asia-Pacific Journal of Food Safety and Security	2422-9555	3	2	1-3	2017	Non-Indexed	Corresponding
9	Effects of Preparation Method on the Properties of Pineapple Fibers	Journal of Advanced Research Design	2289-7984	4	1	1-8	2015	Non-Indexed	Co-author
10	Characterisation And Evaluation Of Antibacterial Properties Of Polyacrylamide Based Hydrogel Containing Magnesium Oxide Nanoparticles	International Journal of Biology and Biomedical Engineering	-	7	3	108-113	2013	Non-Indexed	Co-author

#### **Other Publication**

#### **BOOK CHAPTER**

- D. N. Abang Zaidel, H. A. Gavlighi, N. Khairuddin, N. Zainol, Z. Hashim, N. A. Mohammad and N. A. Md Lazim. Functional Properties and Potential Application of Biosurfactants as a Natural Ingredient in the Food Industry. In: Microbial Surfactants. Volume 2: Applications in Food and Agriculture, Edited by R.Z Sayyed & H.A. El-Enshasy, CRC Press, Taylor & Francis Group, LLC, Florida, USA, pp. 98-132 (ISBN: 978-1-032-16247-8) (2022)
- 2. N. A. Abdul Muttalib, **D. N. Abang Zaidel** and M. N. H. Zainal Alam. Immobilization of Beta-Galactosidase: Kinetics and Performance in Bench-top Stirred-tank Reactor. In: Enzyme Immobilization for Bioprocessing, Edited by Roshanida A. Rahman & Shalyda Md Shaarani, UTM Penerbit UTM Press, Johor Bahru, Malaysia, pp. 71-96 (ISBN: 978-983-52-1889-7) (2022)
- 3. **D. N. Abang Zaidel**, I. I. Muhamad, Z. Hashim, Y. M. Mohd Jusoh, E. Salleh. Innovation and Challenges in the Development of Functional and Medicinal Beverages. In: Natural Products Pharmacology and Phytochemicals for Health Care, Methods and Principles in Medicinal Chemistry, Edited by Debarshi Kar Mahapatra, Cristobal Noe Aguilar & A.K. Haghi, Apple Academic Press Inc., Florida, USA, pp. 157-218 (**ISBN:** 9781771889018) (2021)
- 4. I. I. Muhamad, **D. N. Abang Zaidel**, Z. Hashim, N. A. Mohammad, N. F. Abu Bakar. Improving the Delivery System and Bioavailability of Beverages through Nanoencapsulation. In: Nano-Engineering in the Beverage Industry, Vol. 20, The Science of Beverages, Edited by Alexandru Mihai Grumezescu & Alina Maria Holban, Woodhead Publishing Elsevier, United Kingdom, pp. 301-332 (ISBN: 978-0-12-816677-2) (2020)
- 5. **D. N. Abang Zaidel**, I. I. Muhamad, N. S. Daud, N. A. Abdul Muttalib, N. Khairuddin, N. A. M. Lazim. Production of Biodiesel from Rice Bran Oil. In: Biomass, Biopolymer-based Materials, and Bioenergy, Edited by Deepak Verma, Elena Fortunati, Siddharth Jain and Ziaolei Zhang, Woodhead Publishing Elsevier, United Kingdom, pp. 409-448 (ISBN: 978-0-08-102426-3) (2019)
- 6. **D. N. Abang Zaidel**, N. A. Abdul Halim, N. S. Sahat and I. I. Muhamad. Study on Solubility and Protein Content of Haruan (Channa Striatus) Instant Soup Spray Dried Powder. In: Special Topics In Bioprocess Engineering Volume IV, Edited by D. N. Abang Zaidel, Penerbit UTM, Johor Bahru, Malaysia, pp. 37-52, (ISBN 978-983-52-1221-5) (2016)
- 7. **D. N. Abang Zaidel**, N. A. Ton Mohamed, N. S. Mohd Daud and F. A. Abdul Majid. Nutritional Quality Evaluation of Fermented Soybean (Tempeh) from Different Methods of Drying. In: Special Topics In Bioprocess Engineering Volume IV, Edited by D. N. Abang Zaidel, Penerbit UTM, Johor Bahru Malaysia, pp. 53-68, (ISBN 978-983-52-1221-5) (2016)
- 8. **D.N. Abang Zaidel**, I.I. Muhamad, N. Khairuddin. Gluten production: Rheological characterisation and modelling. In: Special Topics In Bioprocess Engineering Volume II. Penerbit UTM, Johor Bahru Malaysia, pp. 73-101, Edited by C. T. Lee (ISBN 978-983-52-0600-9) (2007)

#### **THESIS**

- D. N. Abang Zaidel. Enzyme catalyzed oxidative cross-linking of feruloylated pectic polysaccharides from sugar beet – Kinetics and rheology. PhD Thesis, Technical University of Denmark. J&R Frydenberg A/S, Denmark, (ISBN 978-87-92481-72-6) (2012)
- 2. **D. N. Abang Zaidel**. Factors affecting gluten production and its rheological characterisations. MSc Thesis, Universiti Putra Malaysia, Serdang, Malaysia (2008)

#### **EXPERT REPORT**

 Z. Abdul Manan, J. S. Lim, S. R. Wan Alwi, A. A. Mustaffa, A. Syahrom, D. N. Abang Zaidel, N. H. Zamzuri, A. P. M. Saad, R. A. Abdul Rahim, A. F. Ahmad Fadzil, A. Musa, Analytical and Experimental Modelling of Desolventisation System (AEMDS) for EcoOils, Final Report submitted to Eco Oils Sdn. Bhd., June 2017

#### **ARTICLE IN MAGAZINE**

1. D.N. Abang Zaidel, I.I. Muhamad. 'Seitan: Makanan pengganti daging'. Dewan Kosmik. Oct 2009.

# PLENARY/CHAIRPERSON/ORAL POSTER PRESENTER/KEYNOTE ADDRESS / INVITED GUEST SPEAKER

NO.	ROLE	TITLE OF PROGRAMME	DATE	LOCATION
1	Oral presenter	1st International Conference on Sustainable Chemical, Energy and Environmental Engineerin (SCE3) 2023	7 – 8 Mar 2023	Ibis Hotel, Kuala Lumpur
2	Invited speaker	International Symposium on Biomedical, Biorefinery and Energy Security (I-BES) 2022	19 – 21 Jun 2022	UTM Johor Bahru & Universitas Airlangga (Virtual)
3	Speaker	One-day Course on GMP in Biopharmaceutical Industry	26 Sep 2021	Manipal International University (Virtual)
4	Forum Panelist	IBD Webinar Series: Functional Food and Food Industry, New Consumer Insight	5 May 2021	Institute of Bioproduct Development, UTM
5	Facilitator	Half-day IBD Scientific Workshop on Writing Skill	25 Apr 2021	Institute of Bioproduct Development, UTM
6	Speaker	3-day Course on MeSTI, HALAL, GMP and HACCP for Food Industry	15 – 17 Dec 2020	Institute of Bioproduct Development, UTM
7	Speaker	3-day Course on MeSTI, HALAL, GMP and HACCP for Food Industry	12 – 14 Oct 2020	Institute of Bioproduct Development, UTM
8	Oral presenter	The 6 <sup>th</sup> International Conference on Low Carbon Asia (ICLCA) 2020, organized by Shanghai Jiao Tong University and Universiti Teknologi Malaysia	1-2 Sep 2020	Shanghai (Virtual)
9	Oral presenter	26 <sup>th</sup> Regional Symposium on Chemical Engineering 2019, organized by Universiti Malaya	30-31 Oct 2019	Petaling Jaya, Selangor
10	Co- Chairperson	Oral Session for 2 <sup>nd</sup> International Postgraduate Symposium in Biotechnology 2019 (IPSB 2019), Institute of Bioproduct Development, UTM	24-25 Sep 2019	Johor Bahru
11	Oral presenter	The 5 <sup>th</sup> International Conference on Low Carbon Asia & Beyond 2019, organized by Universiti Teknologi Malaysia	15-17 Oct 2019	Ho Chi Minh, Vietnam
12	Chairperson	Oral Session for Energy Security and Chemical Engineering Symposium 2019, organized by Universiti Malaysia Pahang	17-19 July 2019	Penang
13	Oral presenter	Energy Security and Chemical Engineering Symposium 2019, organized by Universiti Malaysia Pahang	17-19 July 2019	Penang
14	Oral presenter	International Conference on probiotics and Food Sustainability (ICPFS) 2018, organized by Universiti Teknologi Malaysia	23-24 Sept 2018	Johor Bahru
15	Judge	Zero Waste Competition 2016 for Introduction to Engineering, organized by Faculty of Chemical and Energy Engineering UTM	14 Dec 2016	UTM Johor Bahru

16	Chairperson	Oral session for the 9 <sup>th</sup> AUN/SEED-Net Regional Conference on Chemical Engineering 2016 and the 1st Postgraduate International Symposium on Chemical and Energy Engineering 2016 organized by Universiti Teknologi Malaysia in collaboration with AUN/SEED-Net	21 Nov 2016	Kuala Lumpur
17	Judge	2nd International Biotechnology Competition and Exhibition (IBCEx 2016), organized by BIOSS	16 April 2016	UTM Johor Bahru
18	Oral presenter	Persidangan Kajian Bencana Banjir 2014	4-6 April 2016	Kuala Lumpur
19	Oral presenter	One-day International Workshop on Sustainability of Food Resources and Supply Chain 2016 at UTM Kuala Lumpur organized by Asia-Pacific Institute of Food Professionals and Food and Biomaterial Engineering Reseach Group UTM, 20 Nov 2016	20 Nov 2016	Kuala Lumpur
20	Oral presenter	28 <sup>th</sup> Symposium of Malaysian Chemical Engineers (SomChE) 2015	21 – 22 Oct 2015	Kuala Lumpur
21	Oral presenter	12th International Conference on Chemical and Process Engineering, organized by AIDIC The Italian Association of Chemical Engineering	19-22 May 2015	Milan, Italy
22	Oral presenter	International Conference on Agricultural and Food Engineering 2014, organized by Universiti Putra Malaysia	1-3 Dec 2014	Kuala Lumpur
23	Oral presenter	27th Symposium of Malaysian Chemical Engineers 2014, organized by Taylors University Malaysia	29-30 Oct 2014	Selangor, Malaysia
24	Guest speaker	Career Seminar "My Career, My Future", Universiti Tun Hussein Onn Malaysia	7 Dec 2013	UTHM
25	Chairperson	Oral and technical presentation, in International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering 2013, organized by World Engineering of Science, Engineering and Technology	Jun 2013	Istanbul, Turkey
26	Facilitator	How To Get Yourself Employed (HTGYE) Module	2012-2020	UTM Johor Bahru
27	Poster presenter	Poster presentation at the Nordic Rheology Conference 2012, organized by Norwegian University of Life Sciences	13-15 June 2012	Oslo, Norway
28	Poster presenter	Poster presentation at the Nordic Rheology Conference 2011, organized by University of Helsinki, Finland	8-10 June 2011	Helsinki, Finland
29	Poster presenter	Poster presentation at the Food Denmark Congress 2010, organized by Copenhagen University, Denmark	22-23 Nov 2010	Copenhagen, Denmark

30	Poster	Poster presentation at the Food	22-23 Nov 2010	Copenhagen,
	presenter	Denmark Congress 2010,		Denmark
		Copenhagen University, Denmark		
31	Poster presenter	Poster presentation at the 'Control and exploitation of enzymes for added-value products 3 <sup>rd</sup> Annual Workshop'	23-25 Sept 2009	Krakow, Poland
32	Oral presenter	World Engineering Congress 2007	5 – 9 Aug 2007	Penang, Malaysia

### PANEL EVALUATOR / AUDITOR

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION
1	Internal Evaluator	Matching Grant for the France-Malaysia Collaboration Programme For Joint Research 2023 (MYTIGER)	2 Apr 2023	Universiti Teknologi Malaysia (online evaluation)
2		Proposal evaluation for application of Industrial Contract Research for Double Tax Deduction	6 Mar 2023	Universiti Teknologi Malaysia (online evaluation)
3	Internal Evaluator	FRGS Grant Application	8 Mar 2023	Universiti Teknologi Malaysia (online evaluation)
4		UTM Fundamental Research grant application	3 Oct 2022	Universiti Teknologi Malaysia (online evaluation)
5		PRELUDIUM-21 Grant Application, National Science Center, Poland	23 Sep 2022	National Science Center, Poland (Online evaluation)
6		Master of Philosophy Programme Audit for Curtin University Malaysia Campus	9-11 Nov 2021	Curtin University, Malaysia Campus, Miri Sarawak
7	Internal Panel Evaluator	Evaluation of KTP-RIG Grant	17 Nov 2021	Centre for Community and Industrial Network, UTM
8		Plant Design Project Presentation in 2019/20 session Semester 2	7 Jun 2020	School of Chemical and Energy Engineering UTM
9		Lawatan Audit berkala ke Makmal Pengajaran, Makmal Penyelidikan dan Pejabat Pentadbiran di SKT	10 Feb 2020	School of Chemical and Energy Engineering UTM
10		Final Year Project Presentation in 2019/20 session Semester 1	31 Dec 2019	School of Chemical and Energy Engineering UTM
11		Teaching Excellent System Evaluation for LPPT	15 Dec 2019	Faculty of Engineering
12	Evaluator	UTM Fundamental Research Grant Application 2019 for Niche Area Health and Wellness	Nov 2019	Research Alliance Health and Wellness
13		Plant Design Project Presentation in 2018/19 session Semester 2	14 May 2019	School of Chemical and Energy Engineering UTM
14		Final Year Project Presentation in 2018/19 session Semester 1	2 Jan 2019	School of Chemical and Energy Engineering UTM
15	Evaluator	Final Examination Question Evaluation in 2018/19 session Semester 2	24 Apr 2019	School of Chemical and Energy Engineering UTM
16		Research University Grant Application 2018/1 for Niche Area Health and Wellness	Nov 2017	Research Alliance Health and Wellness

17	Internal Panel	Final Examination Question Evaluation in	Nov 2016	Faculty of Chemical and
	Evaluator	2016/17 session Semester 1		Energy Engineering
				UTM
18	Internal Panel	Research University Grant Application	May 2016	Research Alliance
	Evaluator	2016/1 for Niche Area Health and Wellness		Health and Wellness
19	Internal Panel	Research University Grant Application	Mar 2014	Biotechnology Research
	Evaluator	2014/1 for Biotechnology Research Alliance		Alliance
20	Internal Panel	Exploratory Research Grant Scheme	Mar 2013	Biotechnology Research
	Technical	Application 2013 for Research Alliance		Alliance
	Evaluator	Biotechnology		

# **PROFESSIONAL SERVICES**

# **Consultation and Training**

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION	TOTAL INCOME GENERATED (RM)
1	Organizing committee	One-day Course on GMP in Biopharmaceutical Industry	26 Sep 2021	Manipal International University (Virtual)	1950
2	Organizing committee	7 <sup>th</sup> Asia-Pacific Probiotics Workshop	7 Dec 2020	Virtual	-
3	Organizing committee	3-day Course on MeSTI, HALAL, GMP and HACCP for Food Industry	15 – 17 Dec 2020	Institute of Bioproduct Development, UTM	2,800
4	Organizing committee	3-day Course on MeSTI, HALAL, GMP and HACCP for Food Industry	12 – 14 Oct 2020	Institute of Bioproduct Development, UTM	2,100
5	Organizing committee	International Conference on Probiotics and Food Sustainability 2018	23-24 Sep 2018	Pulai Spring Johor Bahru	20,555
6	Organizing committee	Public Lecture by Prof. Jackie Ying on Nanotechnology: Frontier in Research and Commercialization	22 Dec 2016	UTM Kuala Lumpur	-
7	Program Director	One-day International Workshop on Sustainability of Food Resources and Supply Chain 2016.	20 Nov 2016	UTM Kuala Lumpur	10,350
8	Publicity Unit	One-day International Workshop on Food Safety and Food Security 2015.	26 Aug 2015	Faculty of Chemical Engineering UTM	2,300
9	Organizing committee	Half-day Workshop on Understand Reaction Kinetics, Mechanism and Pathway in Real Time to Accelerated Process Development & Scale-up and Safety from Mettler Toledo Sdn. Bhd.	20 Jul 2012	Institute of Bioproduct Development UTM.	-

# **Community and University Services**

NO	ROLE	TITLE OF PROGRAMME	DATE	LEVEL	LOCATION
1	Committee Member	Engineering Service Learning 2018 organized by Pusan National University and UTM in Kampung Pendas Baru, Gelang Patah	26 Aug-6 Sept 2018	National	Gelang Patah, Johor
2	Committee Member	Creativity Station 2016 Program Pusan National University and UTM at Telkom University, Bandung, Indonesia	1-13 Aug 2016	International	Bandung, Indonesia
3	Committee Member	Creativity Station 2015 Program organized by Pusan National University and UTM at Kampung Punggai, Johor, Malaysia	14-24 Aug 2015	International	Kampung Punggai, Johor
4	Team Manager	UTM-PNU-EEPIS International Cross-Cultural Service Design Project & Knowledge Transfer 2013 Program, organized by Pusan National University and Centre of Engineering Education, Universiti Teknologi Malaysia	13 Aug 2013	International	Surabaya, Indonesia

# **Patent Granted and Filing**

NO	NAME OF PATENT	STATUS OF PATENT	REMARKS
1	Meal-2-Heal Ready-To-Eat Designed	Patent Filing	Patent Filing No.:
	Food For Emergency Relief, Leader	_	PI <u>2017703043</u>
2	A Method of Producing Cocoa Butter	Utility Innovation Filing	Utility Innovation Filed No.:
	Equivalent, Member		UI2014700811

# Copyright, Trade Secret & Trademark

NO	NAME OF COPYRIGHT / TRADEMARK	STATUS	REMARKS
	Soal Selidik Pengetahuan Nutrisi Dan	Copyright	Copyright No. MyIPO:
	Status Pertumbuhan Kanak- Kanak,		LY2021E05413
	Member		
2	Formulation of Extra Care Seaweed Hand	Trade Secret	IP/TS/01671
	Sanitizer, Member		
3	NIOMAHOGEL- Swietenia Mahagoni	Trade Secret	IP/TS/2019/0707
	Wound Healing Hydrogel, Member		
4	Laboratory Manual for Food Technology,	Copyright	Copyright No. MyIPO:
	Member		LY2016003775
5	Meal-to-Heal Instant Food for Emergency	Trademark	Trademark Filing No.:
	Relief, Leader		2017065182 Class 30