

UNIVERSITI  
KEBANGSAAN  
MALAYSIA  
*National University  
of Malaysia*



**UKM-YSD CHAIR  
FOR SUSTAINABLE DEVELOPMENT**

**FINAL REPORT  
ZERO WASTE TECHNOLOGY PROGRAM  
2010-2020**

**Forging Mutually Beneficial Partnership**

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## 6. CAPACITY BUILDING: LIST OF UKM-YSD'S ALUMNI

Table 6.1 List of UKM-YSD'S alumni students Thrust Area 1

No.	Name	Graduated as	Year of graduation	Title of Thesis	Current employment
1	Izzati Nadia Binti Mohamad 	Master	2016	Biohydrogen upgrading from fermentation of POME	Company: Ministry of Education Position: Executive officer
2	Nur Yusra Binti Mt Yusuf 	Master	2018	Ionic liquid-impragnated adsorbent for CO <sub>2</sub> removal in biohydrogen purification via adsorber unit	Company : Academy Al-Fan Position : Entry Level (teaching)
3	Adam Mohd Izhan Bin Noor Azam	Master	2019	Kajian parameter pengoperasian terhadap pengangkutan jisim dan prestasi sel fuel etanol langsung (DEFC)	Company : UKM Position : PhD candidate in ukm

						
4	Nurul Noramelya Binti Zulkefli		Master	2018	Penjerapan karbon teraktif (CAC) terubahsuai bagi peningkatan kapasiti penyingkiran H <sub>2</sub> S dalam penulenan biogas melalui unit penjerapan	Company : UKM Position : PhD candidate in ukm
5	Muhammad Zhaahir Bin Sidek		Master	2020	Pembangunan dan pengoperasian loji pandu: Sistem penstoran dan penulenan biohidrogen melalui proses penjerapan-penyahjerapan	Company: Abedeen International School. Position: Teacher
6	Siti Najibah Abdul Rahman		PhD	2020		

Table 6.2 List of UKM-YSD'S alumni students Thrust Area 2

No.	Name	Graduated as	Year of graduation	Title of Thesis	Current employment
1	Mohd Rashdan Bin Ghazali 	Master	2017	Application of empty fruit bunches (EFB) and cow manure (CM) compost on the growth and yield of chili ( <i>Capsicum annum</i> ) treated with different fertilizer	Company : Aik Cheong Coffee Roaster Sdn Berhad Position : R&D Executive

Table 6.3 List of UKM-YSD'S alumni students Thrust Area 3A

No	Name	Graduated as	Year of graduation	Title of Thesis	Current employment
1	Hemavathi a/p Silvamany 	Master	2017	Peningkatan pengekstrakan minyak kelapa sawit melalui penggunaan enzim	Company : Sime Darby Plantation Research Sdn Bhd Position : Research Engineer

2	Nur Syakina Binti Jamali 	PhD	2017	Thermophilic biohydrogen production using attached biofilm on granular activated carbon as microbial carriers.	Company: UPM Position: Senior Lecturer
3	Nur Athirah Binti Khaleb	Master	2015	Biohydrogen production from hydrolysate of palm oil mill effluent using batch and continuous culture	Company: Duopharma Innovation Sdn Bhd Position: Senior executive
4	Irina binti Harun 	Master	2013	Pengoptimuman penghasilan biohidrogen oleh <i>Enterobacter cloacae</i> KBH3 penculan tempatan	Company: UPM Position: Senior Lecturer
5	Nor Haziyah binti Ibrahim	Master	2014	Penghasilan hidrogen secara termofilik daripada effluent kilang pemprosesan sawit menggunakan kultur campuran mikroflora	Company: Pejabat Daerah Kecil dan Tanah Gemas Negeri Sembilan. Position: Penolong Pegawai Daerah

6	Peer Mohamed 	PhD	2016	Effect of changes in chemical and structural characteristic of ammonia fibre expansion (AFEX) pretreated oil palm empty fruit bunch fibre on enzymatic saccharification and fermentability for biohydrogen	Company: UKM Position: Senior Lecturer
7	Mariatul Fadzilah Binti Mansor 	PhD	2018	Two-stage biohydrogen and methane production from palm oil mill effluents using anaerobic sludge	Company: IIUM Position: Assistant Professor
8	Nurul Sakinah Binti Engliman 	PhD	2018	The influence of adding iron oxide nanoparticles in biohydrogen production through fermentation of mixed culture of bacteria in thermophilic condition	Company: IIUM Position: Assistant Professor
9	Nabilah Aminah Binti Lutpi 	PhD	2016	Batch and continuous thermophilic hydrogen fermentation of sucrose using anaerobic sludge from palm oil mill effluent via immobilisation technic	Company: Unimap Position: Senior Lecturer

10	Safa Senan Mahmud 	PhD	2019	Production of biohydrogen and biomethane from pre-treated palm oil mill effluent in two stage thermophilic anaerobic system	Company: UKM Position : Postdoctoral Researcher
11	Chong Poh She	Master	2015		Company: Position:
12	Nur Izzati Iberahim 	Master	2015	Effect of initial substrate concentration and pH on bio hydrogen fermentation from oil palm mesocarp fiber (OPMF) hydrolysate in batch fermentation	Company: Unimap Position: Lecturer
13	Muhammad Azri Bin Abd Nasir 	Master	2020	Penghasilan biometana daripada efluen kilang pemprosesan sawit (Palm Oil Mill Effluent, POME) berasid dalam pencerna termofilik reaktor berujujukan sesekumpul anaerob	Company: Chemist Position: Behn Meyer Agricare (M) Sdn Bhd.
14	Rizal Muzhafar bin Maaroff	Master	2020	Two stage biohydrogen production from thermophilic and	Company: Process-3 Services Solutions Sdn Bhd.

				mesophilic anaerobic sequential batch reactors system	Position: Engineer
15	Muhammad Arif Fikri bin Hamzah 	Master	2020	Penilaian prestasi penghasilan metana secara mesofili dan termofili daripada sisa air buangan kelapa sawit berasid	Company: Enterpreneur

Table 6.4 List of UKM-YSD'S alumni students Thrust Area 3B

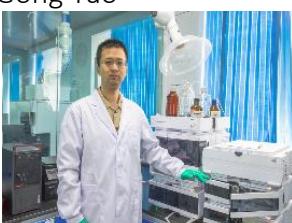
No	Name	Graduated as	Year of graduation	Tittle of Thesis	Current employment
1	Manoj Pudukudy 	PhD	2016	Synthesis of Ni, Co, and Fe based catalyst for methane decomposition into hydrogen and carbon nanomaterial	Company : Kunming University of Science and Technology Position : Postdoctoral researcher

Table 6.5 List of UKM-YSD'S alumni students Thrust Area 4

No	Name	Graduated as	Year of graduation	Tittle of Thesis	Current employment
1	Aqilah Binti Mohd Tajuddin 	Master	2019	Prestasi tandan kosong buah sawit (EFB) terawat menggunakan pelarut eutektik dalam (DES) berasaskan kolina klorida (ChCl)	Company : Entrepreneur
2	Nur Farahin Binti Abdul Rahman 	Master	2019	Kesan parameter pengoperasia terhadap prestasi hidrolisis berenzim bagi tandan buah kosong terawat ammonium hidroksida bertekanan tinggi	Company : Entrepreneur
3	Nur Atikah Binti Md Nor 	Master	2017	Pelarut eutektik dalam (PED) sebagai medium alternatif untuk pra-rawatan serat tandan kosong kelapa sawit (STKKS) dalam penghasilan xilosa dan glukosa	Company : One Auto Worldwide (M) Sdn Berhad Position : QA/ Halal Executive

4	Nurul Hazirah Binti Che Man 	Master	2016	Perawatan bendalir lampau genting karbon dioksida ke atas tandan kosong kelapa sawit (EFB) bagi penghasilan gula ringkas	Company : Universiti Malaysia Kelantan Position : PhD Candidate
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Table 6.6 List of UKM-YSD'S alumni students Thrust Area 5

No	Name	Graduated as	Year of graduation	Tittle of Thesis	Current employment
1	Nur Muhammad Afifi Bin Zainal 	Master	2015	Biorawatan effluent dari proses pencernaan anaerobik dua peringkat air sisa kilang pemprosesan sawit menggunakan <i>Spirulina platensis</i> , <i>Scenedesmus quadricauda</i> dan <i>Nannochloropsis oculata</i> .	Company : TNB Research Sdn Bhd Position : Research Engineer
2	Zuraifah Binti Minhat	Master	2016		Company: Position:
3	Ding Gong Tao 	PhD	2017	Microalgae isolation and cultivation for CO2 fixation using palm oil mill effluents	Company: Northwest Minzu University, China Position: Senior Lecturer

4	Harizah Bajunaid Hariz 	Master	2018	Integrated palm oil mill effluent treatment and CO2 fixation by native microalgae	Company: Waikato University, NZ Position: PhD candidate
5	Azianabihah Binti A. Halip @ Khalid 	PhD	2020	Cultivation of microalgae species in palm oil mill effluent for enhanced nutrient removal process	Company: UiTM Position: Senior Lecturer
6	Kamrul Fakir Bin Kamarudin	PhD	2020	Phycoremediation and carbon dioxide sequestration of palm oil mill effluent with native isolated microalgae	Company: UMP Position: Senior lecturer

Table 6.7 List of UKM-YSD'S alumni students Thrust Area 6

No	Name	Graduated as	Year of graduation	Tittle of Thesis	Current employment
1	Ho Kah Chun 	PhD	2019	Graphene oxide/carbon nanotubes conductive membrane with active antifouling properties	Company :UKM Position : Post-doctoral researcher
2	Mohd Syahmi Hafizi Bin Ghani 	Master	2020	Pretreatment fouling behaviour and cleaning property of membranes applied for tertiary pal oil mill effluent treatment	Company :UKM Position: Research Assistant
3	Nurul Salwa Azliyana Binti Hamzah	Master	2019	Production of graphene san composite for wastewater treatment	Company: Bezt Clean Industries Sdn Berhad Position: R&D Chemist/ Head of Quality

						
4	Muhammad Said Bin Usman Hasyim		PhD	2015	Rawatan tertier air sisa minyak kelapa sawit melalui proses gabungan penjerapan dan teknologi membrane	Company: Universitas Sriwijaya Position:Senior Lecturer
5	Wong Zhong Huo		Master	2018	Treatment of anaerobic digested palm oil mill effluent (anPOME) suing two stage microalgae/membrane process	Company: Position:
6	Siti Nur Hatika Binti Abu Bakar		Master	2019	Palm oil mill effluent (POME) treatment using mocing bed biofilm reactor (MBBR)	Company: UKM Position: Research assistant

## YSD Postgraduate Scholar

<b>Graduated</b>	<b>MSc Candidates</b>			<b>PhD Candidates</b>	
 Ho Kah Chun Thrust area 6 <b>Completed Phd</b> Post-Doc at UKM	 Izzati Nadia Mohamad Thrust area 1 <b>Completed Msc</b> Exec Officer, KPM	 Aqilah Mohd Tajuddin Thrust area 4 <b>Completed Msc</b> Freelancer	 Alif Fitri Hanipa Thrust area 3A <b>6<sup>th</sup> Semester</b>	 Siti Najibah Abd Rahman Thrust area 1 <b>Waiting for Viva</b>	 Azima Syafaini Japar Thrust area 5 <b>9<sup>th</sup> Semester</b>
 Harizah Bajunaid Hariz Thrust area 5 <b>Completed Msc</b> Phd New Zealand	 Hemavathi Silvamany UKM-YSD RO Engineer at Sime Darby Plantation	 Shalini Narayanan Thrust area 3A <b>5<sup>th</sup> Semester</b>	 Jannatulhawa Jasni Thrust area 5 <b>7<sup>th</sup> Semester</b>	 Mohd Hafis Irsyad Thrust area 3A <b>7<sup>th</sup> Semester</b>	

Figure 6.1 YSD Postgraduate scholars

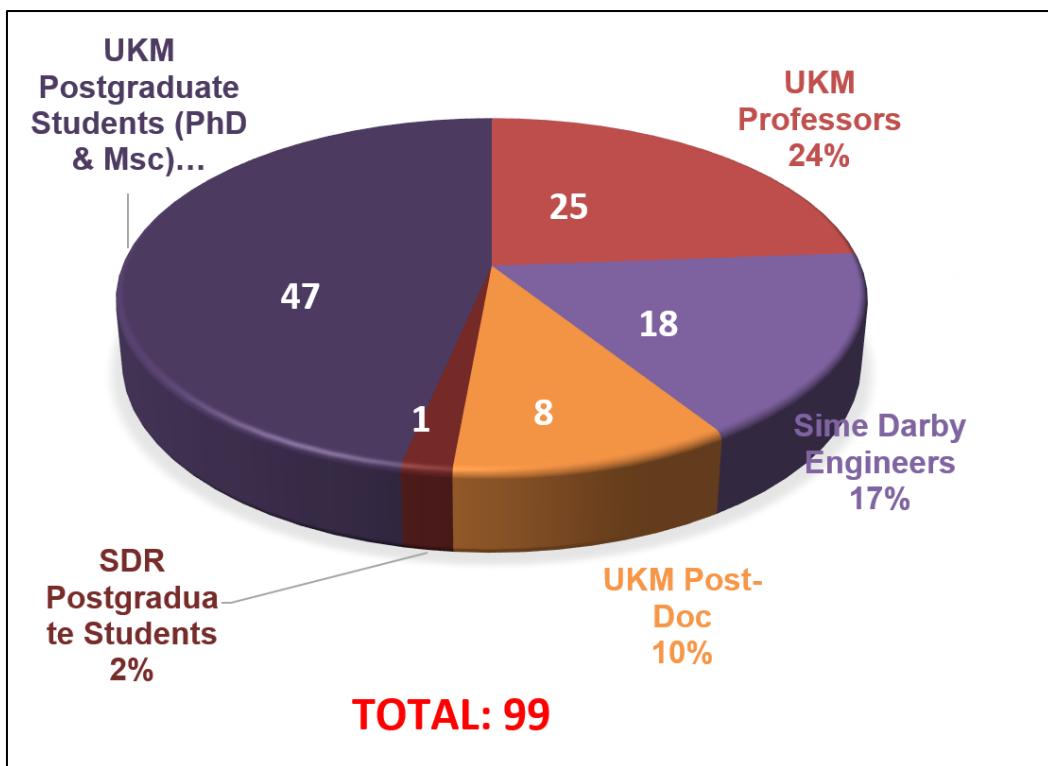


Figure 6.2 Capacity building by categories includes UKM and SDPR reserachers

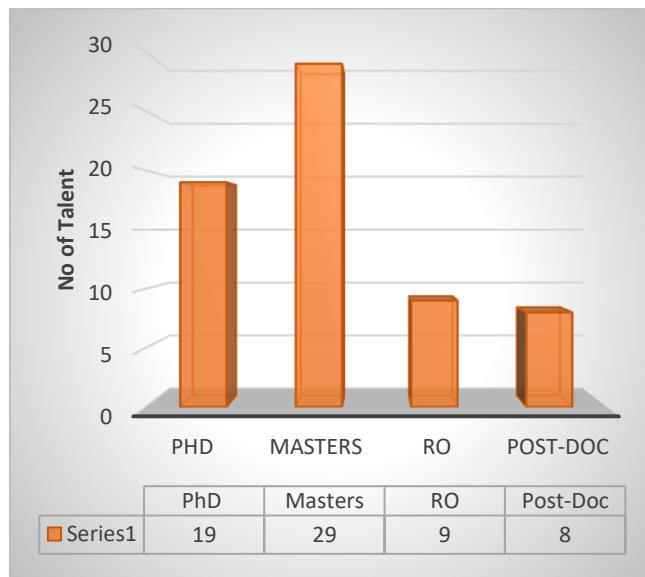


Figure 6.2 Capacity building by categories includes students, research officers and post-docs

## 7.0 EXCHANGE PROGRAM

Table 7.1 Outbound program

<b>UKM-YSD ATTACHMENT/ACTIVITIES</b>		<b>OUTBOUND</b>	
<b>Participants</b>	<b>Program</b>	<b>Host/ Location</b>	<b>Duration</b>
i. Peer Mohamed ii. Rizal Muzaffar	UKM-FCU Student Exchange Program 2016	Feng Chia University, Taiwan	9 Apr 2016 – 3 Jul 2016
i. Hemavathi Silvamany ii. Harizah Hariz	2016 Short Term Training Course on 'Promoting Community Empowerment in APEC's Rural Area'	Feng Chia University, Taiwan	3 Jul 2016 – 16 Jul 2016
i. Ainil Farhan Mohd Udaiyappan ii. Norzila Mohd	SAKURA SCIENCE Exchange Program	Kyushu Institute of Technology (Kyutech), Fukuoka, Japan	1 Jan 2017 – 13 Jan 2017
i. Dr. Mohd Shaiful Sajab	UKM-TISTR Researcher Attachment	Thailand Institute of Scientific and Technological Research, Thailand	31 Jul 2017 – 4 Aug 2017
i. Siti Hajar Mohammad ii. Jamilah Ahmad	APEC Research Center for Advanced Biohydrogen Technology (ACABT) Short Training Course 2017	Feng Chia University, Taiwan	17 Aug 2017 – 31 Aug 2017
i. Azratul Madiyah Azahar ii. Shalini Narayanan iii. Jannatulhawa Jasni	UKM-FCU Student Exchange Program 2017	Feng Chia University, Taiwan	1 Sep 2017 – 30 Nov 2017
i. Muhammad Zikri Aiman Zulkifli	SAKURA SCIENCE Exchange Program	Kyushu Institute of Technology (Kyutech), Fukuoka, Japan	15 Oct 2017 – 27 Oct 2017
i. Mohd Hafis Irsyad Mohd Faudzi	Taiwan Experience Education Program, TEEP@AsiaPlus at FCU	Feng Chia University, Taiwan	1 Mar 2018 – 1 Aug 2018
i. Jannatulhawa Jasni ii. Tuan Aima Najihah Che Wan	SAKURA SCIENCE Exchange Program	Kyushu Institute of Technology (Kyutech), Fukuoka, Japan	7 Jul 2019 – 27 Jul 2019
i. Dr. Peer Mohamed	UKM-FCU Visiting Lecturer Program 2019	Feng Chia University, Taiwan	3 Sep 2019 – 5 Sep 2019
i. Masturah Abdul Manaf	UKM-FCU Student Exchange Program 2020	Feng Chia University, Taiwan	10 Feb 2020 – 8 May 2020
i. Azima Syafaini Japar	UKM-TISTR Student Attachment	Thailand Institute of Scientific and Technological Research, Thailand	2020
i. Denesh Mohan	Taiwan Experience Education Program, TEEP@AsiaPlus at FCU	Feng Chia University, Taiwan	2020

Table 7,2 Inbound program

<b>UKM-YSD ATTACHMENT/ACTIVITIES</b>			<b>INBOUND</b>
<b>Participants</b>	<b>Program</b>	<b>University/Country of Origin</b>	<b>Duration</b>
i. Chun-Min Liu ii. Yi-Sin Wu iii. Chen-Kuan Lee	UKM-FCU Student Exchange Program 2016	Feng Chia University, Taiwan	Aug 2016
i. Napapat Sitthikitpunya ii. Prajaree Subin iii. Siriwan Khanpanuek	UKM-KKU Student Exchange Program 2017	Khon-Kaen University, Thailand	16 Jan 2017 – 21 Apr 2017
i. Aditya Bungsu ii. Andre Prasetya Winata	UKM-USU Student Exchange Program 2017	Universitas Sumatera Utara, Indonesia	21 May 2017 – 27 May 2017
i. Judith Strik ii. Martijn Savenije	UKM-WUR Student Exchange Program 2017	Wageningen University Research, Netherlands	19 Jun 2017 – 15 Oct 2017
i. Kai Hsiang Yang ii. Jun-Ji Weng iii. Lai Chang Hsien iv. Shou Chang Tseng	UKM-FCU Student Exchange Program 2017	Feng Chia University, Taiwan	6 Nov 2017 – 30 Nov 2017
i. Aminee Jehlee ii. Dr. Chonticha Maimimin	Visiting Researcher	Thaksin University	6 Nov 2017 – 10 Nov 2017
i. Dr. Edwi Mahajoeno	Visiting Researcher	Universitas Sebelas Maret	24 Nov 2017 – 30 Nov 2017
i. Dr. Edwi Mahajoeno	Visiting Researcher	Universitas Sebelas Maret	3 Dec 2017 – 9 Dec 2017
i. Noreen Abida	UKM Non-Graduate Study Programme	PMAS-Arid Agriculture University Rawalpindi, Pakistan	2 Jan 2018 – 30 Jun 2018
i. Dr. Kanjana Tuantet ii. Suphansa Khantasopa	UKM-TISTR Exchange Program	Thailand Institute of Scientific and Technological Research, Thailand	24 Jun 2018 – 30 Jun 2018
i. Rozas Sophie	International Student Attachment	Psait Graduate School of Engineering, France	9 Jul 2018 – 7 Sep 2018
i. Pattraporn Wijannarong	UKM-KKU Student Exchange Program 2019	Khon- Kaen University, Thailand	14 Jan 2019 – 15 May 2019
i. Syafrizal ii. Rivaldi Sidabutar	UKM- USU Exchange Program	Universitas Sumatera Utara, Indonesia	1 Jul 2019 – 14 Jul 2019

