

**JABATAN PENDAFTAR**Kem Sungai Besi
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MS ISO 9001:2008 REG NO KLR -0500197

CURRICULUM VITAE

I. PERSONAL PARTICULARS			
Name	Prof. Dr. Ong Keat khim		
Current Position Faculty / Department	Professor Department of Chemistry, Centre for Defence Foundation Studies (Pusat Asasi Pertahanan)		
Position applied for			
II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS			
Year	Degree	Discipline	University
1996	Bac. Sc. (Hons)	Major in: Chemistry	Univeristi Putra Malaysia (UPM)
1999	Master Science	Chemical Engineering	Univeristi Putra Malaysia (UPM)
2007	PhD (Chemical Engineering)	Chemical Engineering	Univeristi Putra Malaysia (UPM)
III. TITLES OF POSTGRADUATE THESES WRITTEN			
No.	TITLES OF POSTGRADUATE THESES		
1.	Membrane Filtration Application in Pre-treatment of Crude Palm Oil		
2.	Influence of pH and Initial Sludge Concentration on Anaerobic Digestion of Waste Activated Sludge		

IV. WORK EXPERIENCE

Year	Position	Field of Work	Place of Work
1999-2000	Lecturer	Teaching	Private college, Kuala Lumpur.
2003-2004	Lecturer	Teaching	Private college, Shah Alam.
2005-2008	Lecturer	Teaching and research	UiTM, Shah Alam.
15 October 2008-	Lecturer	Teaching and research	UPNM

1.0 TEACHING AND SUPERVISION**1.1 Undergraduate Courses**

No	Course Title	Semester	Year
1.	Chemistry A-level	Each semester	2005-2008
2.	Chemistry II Chemistry Lab II	II	2008/2009
3.	Chemistry Lab I Chemistry I	I	2009/2010
4.	Chemistry IV	II	2009/2010
5.	Chemistry I	I	2010/2011
6.	Chemistry III	II	2010/2011
7.	Chemistry I	I	2011/2012
8.	Chemistry II	II	2012/2013
9.	Chemistry I	I	2013/2014
10.	Chemistry II	II	2013/2014
11.	Chemistry II	II	2014/2015
12.	Chemistry I	I	2015/2016
13.	Chemistry I and II	I and II	2016/2017-

1.2 Ph.D Supervision

No.	Name of Student	Project Title	Year	Status <ul style="list-style-type: none"> • Completed • Submitted • In Progress
1.	As supervisor: Leong Jin Hoong PhD (Chemical Engineering)	Improvement of colorimetric arsenic (III), arsenic (V), and total inorganic arsenic detection by Image processing technique	October 2012-	Completed
2.	As supervisor: Soleha binti Mohamat Yusuff PhD (Chemistry)	Preparation and characterization of natural fiber based activated carbon for removal of pollutant gaseous	December 2013-	In Progress (writing thesis)
3.	As co-supervisor: Siti Hasnawati Binti Jamal PhD (Chemistry)	Preparation and characterization of poly(lactic acid)/ carbon nanotubes/LDH nanocomposites	September 2012-	In Progress (will submit thesis (for viva) on September)
4.	As co-supervisor: Zakiah Binti Jamingan PhD (Chemistry)	Lipase catalysed fatty hydrazide from epoxidized palm oils as a clay modifier for polyurethane nanocomposite preparation	December 2015-	In Progress
5.	As co-supervisor: Syed Shafid Syed Ahmad PhD (Chemistry)	Lipase catalysed synthesis of epoxidised palm fatty hydrazides from palm oils	July 2015-	In Progress

1.3 M.Sc (by Research)

No.	Name of Student	Project Title	Year	Status <ul style="list-style-type: none"> • Completed • Submitted • In Progress
1.	As supervisor: Madiah binti Zainuddin Master of Science (Chemistry)	Development arsenic (III) detection method for	2011-2014	Completed

		drinking water analysis		
2.	As supervisor: Ahmad Farhan Bin Ahmad Tarmizi Master of Science (Chemistry)	Adsorption studies of Zn (II) and Ni (II) onto thermally treated rice husk	17 June 2013-	Completed
3.	As supervisor: Nur Athirah binti Zulkifli Master of Science (Chemistry)	Establishment of a simple and cost effective technique to stimulate microgravity condition to improve selected seed rice quality for food security	September 2016-	In Progress
4.	As co-supervisor: Alia Syafiqah Abdul Hamed Master of Science (Civil Engineering)	Leaching of heavy metals from water treatment sludge-clay brick	9 December 2013 (effective 12 March 2015)-	In Progress (submitted thesis for viva)

1.4 Undergraduate supervision (as co-supervisor):

Name of Student	Project Title	Year	Status
Nurul Afiqah Bt Azmi (Civil Engineering)	Development of field test kit for detection of arsenic in drinking water	2010	completed
Mohammad Masrur bin Abd Aziz (Civil Engineering)	Development of personal desalination kit for emergency purposes	2010	completed
Syuriya Binti Mohamad (Civil Engineering)	Removal of dye from synthetic textile wastewater using water treatment dry sludge	2012	completed
Hotin Anak Lukong (Civil Engineering)	Utilisation of water treatment sludge for brick making	2012	completed
Mohd Ashraf Abdul Rahman (Mechanical Engineering)	Investigation on the thermodynamic properties of composite rocket propellant using natural based cellulose materials	2012	completed

2.0 RESEARCH AND PUBLICATION

2.1 Research Projects

No.	Title	List of researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
1.	Development of Field Test Kit for Detection of Arsenic in Drinking Water	Principal	July 2009-December 2010	RM 15,000 UPNM Internal fund	Completed
2.	Development of Field Test Kit for Determination of Arsenic in Drinking Water	Principal	July 2010-Jan 2013	RM 44,000 FRGS (FRGS/1/10/SG/UPNM/03/1)	Completed
3.	Development of Portable Arsenic Detection System	Principal	August 2012-January 2015	RM 230,000 PRGS (PRGS/1/2012/STWN01/UPNM/02/1)	Completed
4.	Effect of Modified Layered Double Hydroxide and Carbon NanoTube on Poly(lactic acid) Nanocomposite	Principal	May 2013-April 2015	RM 89,000 FRGS (FRGS/1/2013/ST05/UPNM/02/1)	Completed
5.	Mechanism of carbon dioxide adsorption using waste material	Principal (12 August 2015-30 November 2016)	1 December 2014-30 November 2016	RM 15,000 UPNM Short Term Grant (UPNM/2014/GPJP/SG/3)	Completed
6.	Simple and rapid method to detect organophosphorus pesticide (simulant of nerve agent) by colorimetric incorporated with image processing technique	Principal	1 July 2016-30 June 2018	RM 24,000 UPNM/2016/GPJP/3/SG/2	In Progress
7.	Development of cost effective, high efficiency and environmental friendly nanocomposite coating for controlled release fertilizer prototype	Principal	October 2016-October 2018	RM 200,000 PRGS/1/2016/STG01/UPNM/02/1	In Progress
8.	Effects of DNA aptamer structure and gold nanoparticle amount on detection of main hydrolysis products of VX nerve agent	Principal	August 2017-August 2019	RM 61,000 FRGS/1/2017/STG01/UPNM/02/1	In Progress
9.	Development of Natural Dyes from Waste Plants	Project member	December 2006-	RM 150,000 eScience	Completed

No.	Title	List of researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
			31 December 2008	Fund	
10.	Development of Near Real Time Digital Multispectral Image Processing System for Paddy Precision Farming	Project member	1 Jan 2012-30 June 2014	RM 424,000 eScience Fund (04-03-08-SF0352)	Completed
11.	Poly(lactic Acid)/Modified LDH Nanocomposite Preparation and Characterization	Project member	January 2013-June 2015	RM 29,850 RAGS (RAGS/2012/UPNM/SG01/1)	Completed
12.	Leaching of Heavy Metals from Water Treatment Sludge-Clay Brick	Project member	1 June 2013-31 May 2015	RM 70,000 ERGS (ERGS/1/2013/STNWN01/UPNM/02/02)	Completed
13.	Effect of Surface Functional Groups of Carbon in Water-based Nanofluids for Heat Transfer Media	Project member	December 2013-September 2016	RM 105,000 FRGS (FRGS/2/2013/ST05/UPNM/03/1)	Completed
14.	Effect of dioctyl sulfosuccinate sodium (DSS) salt modified layered double hydroxide on morphology, thermal and mechanical properties of poly(lactic acid) nanocomposites	Project member	1 December 2014-30 November 2016	RM 15,000 UPNM Short Term Grant (UPNM/2014/GPJP/ST/2)	Completed
15.	Chemical Inventory Database, Storage and Laboratory Security Improvements	Project member	1 February 2015-31 January 2016	USD 19,521 (~RM80,000) Chemical Security Improvement Grants Round Six (International grant) (GTR2-14-61044-0) by U.S. Department of State's Chemical Security	Completed

No.	Title	List of researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
				Program	
16.	Lipase catalysed synthesis of epoxidised palm fatty hydrazides from palm oils	Project member	December 2014- May 2017	RM 111,000 FRGS (FRGS/2/2014/SG05/UPNM/01/1)	In Progress
17.	Effect of Modified Carbon Nanotube on Morphology, Thermal and Mechanical Properties of Poly(Lactic Acid) Nanocomposite	Project member	26 January 2015- 26 June 2017	RM 50,000 RACE (RACE/F3/S G1/UPNM/1)	In Progress
18.	Adsorption capacity and mechanism of nitrogen oxide adsorption using alum sludge	Project member	26 January 2015- 26 June 2017	RM 50,000 RACE (RACE/F3/S G1/UPNM/4)	In Progress
19.	Characterisation of Newly Developed Ag/Epoxy Polyurethane Bio-nanocomposite	Project member	26 January 2015- 26 June 2017	RM 50,000 RACE (RACE/F3/S G1/UPNM/5)	In Progress
20.	Establishment of a simple and cost effective technique to simulate microgravity condition for improving selected rice seed quality	Project member	1 November 2015-31 October 2017	RM 88,200 FRGS/1/2015/WAB01/M OA/02/4)	In Progress
21.	Pembangunan Pusat Penyelidikan Pertahanan Kimia (Research Centre Chemical Defence), Univrsiti Pertahanan Nasional Malaysia	Project member	2017-2020	RM 10.656 millions	Submitted to Unit Perancang Ekonomi (EPU)

2.2 Publications

2.2.1 Invited/Keynote Papers/Presentation

No	Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)	Level • International • National • University
1.	Mangrove Area Change Detection Using Remote Sensing Data. Second International Conference and Workshops on Basic and Applied Sciences and Regional Annual Fundamental Science Seminar 2009 (ICORAFSS 2009). 3-4 Jun 2009, The Zon Regency Hotel, Johor Bahru, Johor.	International
2.	Arsenic (III) Detection in Water for Agricultural Applications. National Horticulture Conference. 18-20 Oktober 2011, Renaissance Melaka	National

	Hotel, Melaka.	
3.	Sludge as Dye Adsorbent. International Conference On Environment 2012. 11 – 13 Disember 2012, Parkroyal Penag Resort, Pulau Pinang.	International
4.	Kinetic Study of a Cationic Dye Adsorption by Dewatered Alum Sludge. 1st International Conference on the Science and Engineering of Materials. 13 Nov-14 Nov 2013, Sunway Putra Hotel, Kuala Lumpur.	International
5.	Development of Field Test Kit for Determination of Arsenic in Drinking Water. Seminar Hasil Penemuan Penyelidikan Terbaik Skim Geran Penyelidikan FUndamental (FRGS) tahun 2010. 12 November 2013, Konvensyen Antarabangsa Putrajaya, Putrajaya.	National
6.	Development of Portable Arsenic Detection System. Pemantauan Laporan Prestasi dan Kewangan Program di bawah Skim Geran Penyelidikan Pembangunan Prototaip (PRGS) fasa 1/2012, 20 November 2013 Pusat Konvensyen Antarabangsa Putrajaya, Putrajaya.	National
7.	Sorption Kinetics of Zn (II) Ion by Thermally Treated Rice Husk. International Conference on Mathematics, Engineering and Industrial Applications (ICoMEIA 2014), 28-30 May 2014, The Gurney Resort Hotel & Residences Penang.	International
8.	Effects of Test Paper Drying and Reaction Periods on Silver ion-Arsine Complex Color Development for a Simple and Rapid Arsenic (V) Determination. 27th Regional Symposium of Malaysia Analytical Sciences, 9-10 December 2014, KSL Resort, Johor.	International
9.	Enhancement of Colorimetric Arsenic (III) Detection by Image Processing Technique. 11th Asian Conference on Chemical Sensors, 16-18 November 2015, Rasa Sayang Resort-Shangri La, Pulau Pinang.	International
10.	Soleha Mohamat Yusuff, K. K. Ong* , W. M. Z. Wan Yunus, A. Fitrianto, M. B. Ahmad, N. A. Ibrahim, Fadhlina Che Ros, S.N.M.Tawil. Aluminium based waterworks sludge for carbon dioxide gas adsorption. Energy Materials Nanotechnology (EMN) Dalian Meeting, 25-29 July 2016.	International

2.2.2 Book/Chapter in Book:

1.	Siti Hasnawati Jamal, Ong Keat Khim , Noor Azilah Mohd Kasim, Siti Aminah Mohd Noor (2010). Module Chemistry I (FKA 0212).	University
2.	Hussain Long, Norherdawati Kasim, Madinah Jaafar Mad Ariff, , Noor Azilah Mohd Kasim, Ong Keat Khim , Syed Mohd Shafiq Syed Ahmad, Ahmad Farid Mohd Azmi (2010). Module Chemistry II. (FKA 0223).	University
3.	Noor Aisyah Ahmad Shah, Siti Hasnawati Jamal, Mohd Junaedy Osman, Siti Aminah Mohd Noor, Noor Azilah Mohd Kasim, Madinah Jaafar Mad Ariff, Ong Keat Khim , Norherdawati Kasim, Nas Aulia Ahmad Nasaruddin, Intan Juliana Shamsudin, Alinda Samsuri, Safura Taufik, Wan Md Zin Wan Yunus (2016). Module Chemistry I.	University
4.	Ong Keat Khim , Neza Ismail, Siti Hasnawati Jamal, Mohd Lip Jabit, Nurul Afiqah Azmi, Teoh Chin Chuang, Madihah Zainuddin (2012). Arsenic Detection System. 1UPNM (magazine), pp. 10-11.	University
5.	Ong Keat Khim , Wan Md Zin Wan Yunus, Mansor Ahmad, Teoh Chin Chuang, Leong Jin Hoong (2014). Portable arsenic detection system. Buku R&D Products of Universities in Malaysia 2013 (ISBN: 978-967-0334-93-6) p. 95-96.	National

6.	Ong Keat Khim , Soleha Mohamat Yusuff, , Wan Md Zin Wan Yunus, Mansor Ahmad, Anwar Fitrianto, Nor Azowa Ibrahim, Syed Mohamad Shafiq Syed Ahmad (2016). Water treatment sludge for carbon dioxide removal. Submitted to Profile Book of Research & Innovation Products (ISBN 978-967-5985-42-3).	University
7.	Ong Keat Khim , Wan Md Zin Wan Yunus, Mansor Ahmad, Nor Azowa Ibrahim, Noor Azilah Mohd Kasim, Siti Hasnawati Jamal (2016). Effect of modified layered double hydroxide and carbon nanotube on morphology, thermal and mechanical properties of poly(lactic acid) nanocomposites. Submitted to Buku Profil FRGS 2013.	National

2.2.3 Journal Articles

No	Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> • International • National • University
1.	K. K. Ong , A. Fakhru'l-Razi, B.S. Baharin, and M. A. Hassan. (1999). Degumming of Crude Palm Oil by Membrane Filtration. Art. Cells, Blood Subs., and Immob. Biotech., (SCOPUS) and (ISI Impact factor: 2014/2015: 1.314), 27(5 & 6), 381-385.	International
2.	Ong Keat Khim* , Neza Ismail, Siti Hasnawati Jamal, Mohd Lip Jabit and Nurul Afiah Azmi (2010). Development of Arsenic Test Kit to Detect Arsenic in Military Field Drinking Water. The Journal of Defence and Security, 1(2), 251-257.	International
3.	M. A. Md Nor, K. K. Ong* , S. Mohamad, N. A. Ahmad Nasaruddin, N. L. A. Jamari, W. M. Z. Wan Yunus (2014). Kinetic Study of a Cationic Dye Adsorption by Dewatered Alum Sludge. Materials Research Innovations (SCOPUS) and (SCIE-ISI indexed journal) (Impact factor: 0.83), Volume18, Issue S6 (December 8, 2014), pp. S6-140-S6-143.	International
4.	K.K. Ong* , M. Zainuddin, N.A. Yusof, A.F.M. Azmi, W.M.Z. Wan Yunus (2014). Development of a Simple and Cost-Effective Arsenic (III) Detection Method. ZULFAQAR International Journal of Defence Science, Engineering and Technology,1(1), 1-6.	International
5.	K. K. Ong* , A.F.A. Tarmizi, W.M.Z.Wan Yunus, K. M. Safidin, A. Fitrianto, Fadhlina Che Ros, A.G. Hussin, A. F. M. Azmi (2014). Effect of Contact Period and Adsorbent Dosage on Zn (II) Ion Removal by Thermally Treated Rice Husk. ZULFAQAR International Journal of Defence Science, Engineering and Technology, 1(2), 71-76.	International
6.	Ong Keat Khim* , Madiah Zainuddin, Chin Chuang Teoh, Nor Azah Yusof, Wan Md Zin Bin Wan Yunus, Ahmad Farid Mohd Azmi (2015). Development of Simple, Inexpensive and Environmental-Friendly Arsenic (III) Detection Kit. Environmental Engineering and Management Journal (SCOPUS)(ISI)(2015 Impact factor: 1.008), 14 (8), 1963-1968.	International
7.	Siti Hasnawati, Wan Md Zin Wan Yunus, Noor Azilah Mohd Kasim, Ong Keat Khim , Mansor Ahmad (2015). Preparation and Characterization of Sodium Lauryl Ether Suphate Modified Layered Double Hydroxides. Jurnal Teknologi (SCOPUS), 76 (3), 109-113.	International

8.	Ong Keat Khim* , Leong Jin Hoong, Wan Md Zin Wan Yunus, Anwar Fitrianto, Teoh Chin Chuang, Abdul Ghapor Hussin, Mansor bin Ahmad, Ahmad Farid Mohd Azmi (2015). Effects of Test Paper Drying and Reaction Periods on Silver Ion-Arsine Complex Color Development for a Simple and Rapid Arsenic (V) Determination. Malaysian Journal of Analytical Sciences (SCOPUS), 19(6), 1164 - 1170.	International
9.	Mohd Asri Md Nor, Alia Syafiqah Abdul Hamed, Faisal Hj Alia, and Ong Keat Khim (2015). Properties and Performance of Water Treatment Sludge (wts)-Clay Bricks. Jurnal Teknologi (Science and Engineering) (SCOPUS), 77:32, 83–93.	International
10.	K. K. Ong* , A. T. Ahmad Farhan, W. M. Z. Wan Yunus, Ahmad Mujahid Ahmad Zaidi, M. L. Jabit, A. Fitrianto, K. M. Safidin, U. F. Abdul Rauf, F. Che Ros, A. G. Hussin, M.B. Ahmad (2016). Factorial Design Analysis of Zn (II) Ions Adsorption on Thermally Treated Rice Husk. Modern Applied Science (Excellence Research in Australia)(ERA). Vol. 10, No. 1, 121-132. http://dx.doi.org/10.5539/mas.v10n1p121 .	International
11.	Soleha Mohamat Yusuff, Ong Keat Khim* , Wan Md Zin Wan Yunus, Mansor Ahmad, Anwar Fitrianto, Nor Azowa Ibrahim, Syed Mohamad Shafiq Syed Ahmad, N.A. Ahmad Shah, Aidy Ali, Ku Zarina Ku Ahmad and Teoh Chin Chuang (2016). Characterization of Raw and Thermally Treated Alum Sludge. Key Engineering Materials (SCOPUS), 701, 138-142.	International
12.	Mohd Junaedy Osman, Wan Md Zin Wan Yunus, Ong Keat Khim , Nor Azilah Mohd Kasim, Siti Hasnawati Jamal, Mansor Ahmad, Nor Azowa Ibrahim (2016). Surface Modification of Multi-walled Carbon Nanotube using Double-chained Quaternary Ammonium Bromide. Key Engineering Materials (SCOPUS), 701, 18-22. http://dx.doi:10.4028/www.scientific.net/ .	International
13.	A. T. Ahmad Farhan, K. K. Ong* , W. M. Z. Wan Yunus, M. L. Jabit, A. Fitrianto, U. F. Abdul Rauf, A. G. Hussin, C. C. Teoh, M. B. Ahmad (2016). Optimisation of Nikel (II) Adsorption Using Thermally Treated Rice Husk. International Journal of Applied Environmental Sciences. 11(3), 717-730.	International
14.	Ahmad Farhan Ahmad Tarmizi, Keat Khim Ong* , Wan Md Zin Wan Yunus, Anwar Fitrianto, Mohd Lip Jabit, Abdul Ghapor Hussin, Chin Chuang Teoh (2016). Sorption Isotherm Model of Zinc (II) onto Thermally Treated Rice Husk. Oriental Journal of Chemistry (SCOPUS and ISI), 32(5), 2797-2801.	International
15.	Leong Jin Hoong, Keat Khim Ong* , Wan Md Zin Wan Yunus, Anwar Fitrianto, Ummul Fahri Abdul Rauf, Chin Chuang Teoh, Hussin Abdul Ghapor, Osman Mohd Junaedy (2016). Optimisation of Arsenic (III) Detection by Colorimetric Incorporated with Image Processing Technique. Oriental Journal of Chemistry (SCOPUS and ISI), 32(5), 2407-2423.	International
16.	Leong Jin Hoong, Ong Keat Khim* , Wan Md Zin Wan Yunus, Anwar Fitrianto, Teoh Chin Chuang, Abdul Ghapor Hussin, Mansor Ahmad, Siti Aminah Mohd Noor (2016). A Mathematical Model for Arsenic (V) Concentration Determination by Image Processing Technique. Journal of Engineering and Applied Sciences (SCOPUS), 11(9), 1912-1915.	International
17.	F. A. Tarmizi, K. K. Ong* , W. M. Z. Wan Yunus, M. L. Jabit, A.	International

	Fitrianto, A. G. A. Hussin, C. C. Teoh (2017). Isotherm Study of Nickel (II) Adsorption from Aqueous Solution Using Thermally Treated Rice Husk. <i>Asian Journal of Chemistry (SCOPUS)</i> , 29(3), 589-591.	
18.	Leong Jin Hoong, Ong Keat Khim* , Wan Md Zin Wan Yunus, Anwar Fitrianto, Teoh Chin Chuang, Abdul Gapor Hussin, Ummul Fahri Abdul Rauf, Mansor Ahmad (2017). Improvement of Colorimetric Arsenic (V) Concentration Determination by an Image Processing Technique: Application of Factorial Design Analysis. <i>International Journal of ChemTech Research</i> , 10(2), 1044-1060.	International
19.	Jin Hoong Leong, Keat Khim Ong* , Wan Yunus Wan Md Zin, Fitrianto Anwar, Chin Chuang Teoh, Hussin Abdul Gapor. Simple and Rapid Quantitative Determination of Total Arsenic. <i>International Journal of Advance and Applied Sciences (ISI)</i> (in press).	International
20.	A. F. A. Tarmizi, K. K. Ong* , W. M. Z. Wan Yunus, M. L. Jabit, A. Fitrianto, A. G. A. Hussin, A.Z. Sulaiman, S. H. Jamal, J. Osman, C. C. Teoh. Kinetics Study of Nickel (II) Ions Sorption by Thermally Treated Rice Husk. <i>Nature Environment and Pollution Technology (SCOPUS)</i> (in press).	International
21.	Siti Hasnawati, Ong Keat Khim , Noor Azilah Mohd Kasim, Wan Md Zin Wan Yunus, Mansor Ahmad. Influence of SLES-Layered Double Hydroxides on the Mechanical and Biodegradation Properties of Poly(Lactic-Acid) Nanocomposites. <i>International Journal of Advanced and Applied Sciences (ISI)</i> (in press).	International
22.	Soleha Mohamat Yusuff, Ong Keat Khim* , Wan Md Zin Wan Yunus, A. Fitrianto, M. B. Ahmad, N. A. Ibrahim, Mohd Junaedy Osman, Teoh Chin Chuang. Adsorption Kinetics and Isotherm of Methylene Blue by Thermally Treated Alum-based Water Treatment Plant Sludge. <i>International Journal of Advance and Applied Science (ISI)</i> (in press).	International
23.	Soleha Mohamat Yusuff, Ong Keat Khim* , Wan Md Zin Wan Yunus, Anwar Fitrianto, Mansor Ahmad, Nor Azowa Ibrahim, Fadhlina Che Ros Chin Chuang Teoh, S.N.M. Tawil. Carbon dioxide adsorption by reusing drinking water treatment plant sludge. <i>Asian Journal of Chemistry (SCOPUS)</i> (in press).	International
24.	Nur Athirah Zulkifli, Chin Chuang Teoh, Keat Khim Ong* , Norliza Abu Bakar, Ummul Fahri Abdul Rauf, Wan Md Zin Wan Yunus. Effect of Simulated Microgravity on Rice (MR 219) Growth and Yield using a 2-D Clinostat. <i>Microgravity Science and Technology (SCOPUS) (ISI)</i> (Impact factor 1.188) (submitted).	International
25.	Soleha Mohamat Yusuff, K. K. Ong* , W. M. Z. Wan Yunus, A. Fitrianto, M. B. Ahmad, N. A. Ibrahim. Removal of Methylene Blue from Aqueous Solutions using Alum Sludge: Sorption Optimization by Response Surface Methodology (will submit to SCOPUS/ISI journal).	
26.	Jin Hoong Leong, Keat Khim Ong* , Wan Yunus Wan Md Zin, Fitrianto Anwar, Chin Chuang Teoh, Jahwarhar Izuan Abd Rashid, Hussin Abdul Gapor. Digital image-based Colorimetry for Enhancement of Arsenic (III) Determination (will submit to SCOPUS/ISI journal).	

* *Corresponding author*

2.2.4 Proceedings Articles:

No	Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> • International • National • University
1.	K. K. Ong , A. Fakhru'l-Razi, S., Mustapha, and S. Abd. Aziz. A Mathematical Model for Sewage Sludge Biodegradation by a Continuous Stirred Tank (CSTR). In Proceedings: The International Water Association Conference on Water and Wastewater Management for Developing Countries. Volume 1, pp. 447-455. 29-31 October 2001 Putra World Trade Centre, Kuala Lumpur.	International
2.	K. K. Ong , A. Fakhru'l-Razi, S. Mustapha, and S. Abd. Aziz. (2002). Aerobic Sewage Sludge Digestion. In: Proceedings 2 nd World Engineering Congress: Engineering Innovation and Sustainability: Global Challenges and Issues. Fakhru'l-Razi Ahmadun, A.B. Dayang Radiah, Shafreeza Sobri (eds.). pp. 30-33. 22-25 July 2002, Sarawak.	International
3.	K. K. Ong , A. Fakhru'l-Razi (2002). Chemical Treatment of Waste Activated Sludge. In: Proceedings National Science Fellowship (NSF) Annual Seminar. 17-18 December 2002, Vistana Hotel, Kuala Lumpur.	National
4.	Ong Keat Khim and Wong Tai Hong (2007). Land Use Change Detection and Monitoring of Mangrove Area Using Remote Sensing Technique. In Proceedings: World Engineering Congress, 5-9 August 2007, Penang.	International
5.	Ong Keat Khim and Wong Tai Hong (2009). Mangrove Area Change Detection Using Remote Sensing Data. In Proceedings: 2 nd International Conference and Workshops on Basic and Regional Annual Fundamental Science Seminar 2009. 3-4 June 2009, The Zon Regency, Johor Bahru, Johor.	International
6.	Ong Keat Khim , Madihah Zainuddin, Teoh Chin Chuang, Nor Azah Yusof, Neza Ismail, Ahmad Mujahid Ahmad Zaidi, Ahmad Farid Mohd Azmi (2011). Arsenic (III) Detection in Water for Agricultural Applications. In Proceedings: National Horticulture Conference 2011, 18- 20 October 2011, Melaka.	National
7.	Mohd Asri Md Nor, Ong Keat Khim , Syuriya Mohamad, Nas Aulia Ahmad Nasaruddin, Nor Laili-Azua Jamari (2012). Sludge as dye adsorbent. Proceedings: International Conference On Environment 2012, 11 – 13 December 2012, Parkroyal Penang Resort, Pulau Pinang.	International
8.	Ong Keat Khim , Ahmad Farhan bin Ahmad Tarmizi, Wan Md Zin Bin Wan Yunus, Mohd. Safidin Kashim, Anwar Fitrianto, Ahmad Farid Bin Mohd Azmi (2013).Preparation and Characterization of Thermally Treated Rice Husk. Proceeding: Seminar Kebangsaan Aplikasi Sains dan Matematik 2013, 29-30 Oktober 2013, UTHM.	National

9.	Mohd Asri Md Nor, Ong Keat Khim , Syuriya Mohamad, Nas Aulia Ahmad Nasaruddin, Nor Laili-Azua Jamari (2013). Kinetic Study of a Cationic Dye Adsorption by Dewatered Alum Sludge. Proceedings: 1st International Conference on the Science and Engineering of Materials, 13 Nov-14 Nov 2013, Sunway Putra Hotel, Kuala Lumpur.	International
10.	Keat Khim Ong* , Ahmad Farhan Ahmad Tarmizi, Wan Md Zin Wan Yunus, Mohd. Safidin Kashim, Anwar Fitrianto and Ahmad Farid Mohd Azmi (2015). Sorption Kinetics of Zn (II) Ion By Thermally Treated Rice Husk. Prosiding: International Conference on Mathematic, Engineering and Industrial Applications. American Institute Physics (AIP) AIP Conf. Proc. 1660, 070017 (2015); http://dx.doi.org/10.1063/1.4915735 (SCOPUS and ISI).	International
11.	Ong Keat Khim* , Mohd Asri Md Nor, Syuriya Mohamad, NasAulia Ahmad Nasaruddin, NorLaili-AzuaJamari and Wan Md Zin Wan Yunus (2015). Isotherm study of reactive blue 19 adsorption by an alum sludge. Proceeding: International Conference on Mathematics, Engineering and Industrial Applications, 28-30 Mei 2014. AIP Conf. Proc.1660, 070055, http://dx.doi.org/10.1063/1.4915773 . American Institute Physics (AIP) (SCOPUS and ISI).	International
12.	A. F. A. Tarmizi, K. K. Ong , W. M. Z. Wan Yunus, M. L. Jabit, A. Fitrianto, A. G. A. Hussin, A.Z. Sulaiman, S. H. Jamal, J. Osman, C. C. Teoh (2016). Kinetics study of nickel (II) ions by thermally treated rice husk. In Proceeding: International Science, Technology and Engineering Conference, 20-23 April 2016, Equatorial Hotel, Pulau Pinang.	International

3.0 ACADEMIC RECOGNITION AND LEADERSHIP, CONSULTANCY, SERVICE TO THE UNIVERSITY AND SERVICE TO THE COMMUNITY

(a) Academic Recognition and Leadership

Academic recognition and leadership such as Academic Award, Academic Assessor/External Examiner/Ph.D. Thesis Examiner, Master's Thesis Examiner/Promotion Assessor (External), Internal Thesis Examiner, Visiting Professor/Fellowship, Invited Speaker, Editorial Board and other academic recognition.

No.	Academic Recognition	Year	Level	Awarding Body / Name of Institution
1.	Anugerah Akademik Cemerlang	2011	University	UPNM
2.	Panel of Postgraduate Colloquium Panel, Cluster Science and Technology (PhD postgraduate student: Nurul Aimi binti Mohd. Zainul Abidin)	2013	University	UPNM
3.	Panel of Postgraduate Colloquium Panel, Cluster Science and Technology (PhD postgraduate student: Norien binti Azraaie)	2013	University	UPNM
4.	Internal panel: conversion of Master to PhD program		University	UPNM
5.	Inviter speaker: Energy Materials Nanotechnology (EMN) Dalian Meeting, 25-29 July 2016	2016	International	OAHOST (organization for publication and conference management by

				scientists and for scientists)
6.	Panel of Postgraduate Colloquium: Mas Amira Idayu binti Abdul Razak ((Master of Science)(Chemical Engineering))	2016	University	UPNM
7.	Panel of Postgraduate Colloquium: Nur Farahin binti Pairan ((Master of Science)(Chemistry))	2016	University	UPNM

Patent

Title of invention	Patent file number	Year	Status
Portable Arsenic Detection System	PI 2013004037	2013	Pending
A Composition for Removal of CO ₂ and a Method of Preparation Thereof	PI 20160703796	2016	Pending

Copyright

Title of copyright	Status
Arsenic Determination Software	Date of filing: on 2 December 2013 Copyright deposition with MyIPO

Awards

No.	Award	Exhibitions/event	Year	Level
1.	Gold medal	International Invention, Innovation and Technology Exhibition 2011 (ITEX 011)	2011	International
2.	Gold Medal	Malaysia Technology Expo (MTE) 2012	2012	National
3.	Gold medal	Defence, Security and Sustainability Colloquium & Exhibition (DSS 2015), National Defence University of Malaysia, 29-30th April 2015, UPNM	2015	University
4.	Gold medal			
5.	Silver medal			
6.	Bronze medal			
7.	Gold medal	Seoul International Invention Fair (SIIF) 2015	2015	International
8.	Best presenter award	Defence, Security and Sustainability Colloquium & Exhibition (DSS 2015), National Defence University of Malaysia, 29-30th April 2015, UPNM	2015	University
9.	Anugerah Perkhidmatan Cemerlang tahun 2015	Majlis Anugerah Universiti Pertahanan Nasional Malaysia (UPNM) 2016, 27 Julai 2016	2016	University
10.	Gold medal	International Invention, Innovation and Technology Exhibition 2016 (ITEX 2016)	2016	International

11.	Gold medal	iENA Nuremberg 2016 International Trade Fair Ideas Inventions New Products, Germany	2016	International
12.	Bronze medal			
13.	Anugerah Perkhidmatan Cemerlang	Majlis Anugerah Perkhidmatan Cemerlang	2010 & 2015	University
14.	Anugerah Kecemerlangan Sempena Ucaptama Naib Canselor 2012		2012	University

Chairperson of International Conference

Conference	Year	Level
Chairperson : 6th International Conference on Humanities and Social Science (ICHiSS), Kuala Lumpur	2014	International
Energy Materials Nanotechnology (EMN) Dalian Meeting, 25-29 July 2016, Dalian, China	2016	International
Chairperson: International Conference on Engineering Management, 24 December 2016, Kuala Lumpur	2016	International

Panel of Research Grant

Panel of Research Grant	Year	Level
1 FRGS	2014	Centre
3 FRGS	2014	University
5 RAGS	2015	University
6 FRGS	2015	University
2 TRGS	2015	University
2 FRGS	2016	University
1 PRGS	2016	University

Reviewer of Journal

Journal	Year	Level
British Journal of Applied Science and Technology	2016	International
Journal of Scientific Research and Reports		
Journal of Applied Physical Science International		
Journal of Applied Chemical Science International		
American Chemical Science Journal		
Chiang Mai Journal of Science	2017	International
British Journal of Applied Science and Technology		
Chemical and Biochemical Engineering Quarterly Journal		

Nomination

Title of nomination	Year	Level
Project leader: Ong Keat Khim	2010	National

Project members: Nor Azah binti Yusof, Teoh Chin Chuang, Neza bin Ismail, Siti Hasnawati binti Jamal, Norherdawati binti KasimMadiah binti Zainuddin. Seminar Hasil Penemuan Penyelidikan Terbaik Skim Geran Penyelidikan Fundamental (FRGS) tahun 2010.		
Ong Keat Khim , Wan Md Zin Bin Wan Yunus, Teoh Chin Cheong, Mansor Bin Ahmad and Leong Jin Hoong. Portable Arsenic Detection System (Project PRGS 2012) : Anugerah Inovasi Perdana Menteri	2014	National

Judge of Exhibition

Exhibition	Year	Level
Invention, Innovation & Design Exposition 2015 pada 28 April 2015, Dewan Agung Tunku Canselor, Universiti Teknologi MARA, Shah Alam, Selangor.	2015	National
Invention, Innovation & Design Exposition 2016 pada 20 September 2016, Dewan Agung Tunku Canselor, Universiti Teknologi MARA, Shah Alam, Selangor.	2016	National
Defence, Security and Sustainability (DSS 2017), Dewan Lestari, National Defence University of Malaysia,	2017	University

(b) Consultancy - Consultancy work that benefited to the University.

No.	Title	Year	Sponsor	Value	Duration
1.	Production of Drinking Water from River Water by Ultrafiltration Membrane Technology: Persediaan Pemasangan Kajian Mobile Ultra Water Filtration di Perkampungan Orang Asli Daerah Hulu Perak dan Daerah Kuala Kangsar di Perak.	July 2009- June 2011	UPNM	RM 15,000	2 years Principal: Lt Kol Prof.Madya Ir Hj. Mohd Ghani Mohd Madersah Members: Ong Keat Khim Kapt Neza Ir. Ismail (Bersara) Mohd Asri Md Nor, Mejar Madinah Jaafar Mad Arif, Fazli Mohd Yusof, Nordila Ahmad
2.	Penggubal Soalan Pusat	2010	UPNM	A few	-

No.	Title	Year	Sponsor	Value	Duration
	Penilaian Kompetensi (PPK) Penilaian Tahap Kecekapan (PTK) Bukan Akademik Kumpulan Sokongan, UPM			hundreds RM	

(c) Service to the University

Service to the university such as Vice Chancellor/Deputy Vice Chancellor/Dean/Director, Deputy Dean/Deputy Director/Unit Coordinator/Hostel Warden, Programme Chairperson/ Assistant Warden/Fellow. Representing University in Sports and Other Non-Academic Activities. Professional/Academic Association (Committee Member).

No.	Position/Membership	Committee	Duration
1.	Timbalan Pengerusi II Persatuan Wanita	University	2008
2.	Ketua Panel bagi Ahli Jawatankuasa Penilaian Kertas Cadangan Penyelidikan Pusat Asasi Pertahanan	Centre	1 May 2009- April 2010
3.	Ahli Kumpulan Penyelidikan Nuklear, Biologi dan Kimia (NBC) dan Alternatif Fuel	University	2009-2010
4.	Penasihat Akademik	Centre	2010-Sem II 2016/2017
5.	Ahli Jawatankuasa Penyediaan Silibus Diploma Ammunition Technology	Centre	1 May 2010- May 2011
6.	Ahli Jawatankuasa Penyediaan dan Penilaian Spesifikasi dan Teknikal Peralatan Makmal Sains bagi Kompleks R and D	University	21 May 2010-May 2011
7.	Penyelaras Ceramah Strategi Penerbitan Berkesan	Centre	20 August 2010
8.	Ketua Jabatan Kimia, Pusat Asasi Pertahanan	University	August 2010-July2012
9.	Ahli Jawatankuasa Rancangan Penaiktarafan Pusat Asasi Pertahanan kepada Institut Sains Pertahanan	Centre	March 2012-
10.	Ahli Jawatankuasa Wisma Perwira	University	2010-2015
11.	Ahli Jawatankuasa Mesyuarat Jawatankuasa Penyelidikan dan Inovasi Universiti	University	August 2012-Julai 2014
12.	Ahli Jawatankuasa Program Ijazah Sarjana Muda Sains (Sains Pertahanan)	University	January 2014
13.	Ahli Jawatankuasa Kerja Makmal Penyelidikan Fakulti Sains dan Teknologi Pertahanan	University	April 2014
14.	Jawatankuasa Penilaian bagi Sebutharga bagi Memekal dan Menghantar Peralatan Makmal Thermal Properties Analyzer bagi Kegunaan Geran Penyelidikan FRGS, UPM	Centre	30 September 2014
15.	Ahli Jawatankuasa Penyelidikan dan Inovasi	University	1 November 2014-

	Universiti		31 October 2016
16.	Penyelaras Penyelidikan Pusat Asasi Pertahanan (PAP)	Centre	March 2014-Feb 2016
17.	Penyelaras Penyelidikan PAP	Centre	1 March 2016-28 Feb 2017
18.	Ahli Jawatankuasa Mesyuarat Akademik PAP	Centre	21 January 2016
19.	Pengerusi Jawatankuasa Bengkel Pemurnian Kertas Cadangan Penyelidikan FRGS anjuran Pusat Asasi Pertahanan	Centre	21 March 2016
20.	Pengerusi Pengurusan Data PAP, UPNM	Centre	21 June 2016

(d) Service to the community

No	Level of involvement	Activity	Organiser	Venue	Date/Year/Duration
1.	National level	<ul style="list-style-type: none"> Evaluate the existing water treatment system in Perkampungan Orang Asli Daerah Hulu Perak dan Daerah Kuala Kangsar di Perak. Sampling and analyse existing water quality in Perkampungan Orang Asli, Perak. Design and set up drinking water treatment system/plant to supply good quality of drinking water to Perkampungan Orang Asli Daerah Hulu Perak dan Daerah Kuala Kangsar di Perak. 	UPNM collaborate with Jabatan Hal Ehwal Orang Asli, Kementerian Kemajuan Luar Bandar dan Wilayah	Perkampungan Orang Asli, Perak.	July 2009-June 2011

PROFESIONAL ORGANISATION/ASSOCIATION

Profesional organisation/Association	Position	Year
Institut Kimia Malaysia	Member	2012-
Persatuan Pegawai Akademik UPNM	Member	Sepanjang hayat
Majlis Profesor Negara	Member	14 August 2017

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RESEARCH EXHIBITIONS

Title	Project leader/member	Exhibition	Venue
Development of Field Test Kit for Detection of Arsenic in Drinking Water	Project leader	Defence Services Asia Exhibition and Conference (DSA 2010)	Putra World Trade Centre, Kuala Lumpur
Development of Field Test Kit for Detection of Arsenic in Drinking Water	Project leader	21 st International Invention, Innovation and Technology Exhibition 2010 (ITEX 2010)	Kuala Lumpur Convention Centre, Kuala Lumpur
Development of Field Test Kit for Detection of Arsenic in Drinking Water	Project leader	International Invention, Innovation and Technology Exhibition 2010 (ITEX 2010), 20-22 May 2011	Kuala Lumpur Convention Centre, Kuala Lumpur
Development of Field Test Kit for Detection of Arsenic in Drinking Water	Project leader	Malaysia Technology Expo (MTE) 2012, 16-18 February 2012	Putra World Trade Centre, Kuala Lumpur
Removal of carbon dioxide by a drinking water sludge	Project leader	Defence, Security and Sustainability Colloquium & Exhibition (DSS 2015), National Defence University of Malaysia, 29-30th April 2015	UPNM
Adsorption of zinc (II) ions by thermally treated rice husk	Project member		
Biodegradability of Polylactic-acid/layered double hydroxides nanocomposites	Project member		
Surface Modification of multi-walled carbon nanotube using double-chained quarternary ammonium surfactant (DDAB)	Project member		
Water treatment sludge for carbon dioxide removal	Project leader	Seoul International Invention Fair (SIIF) 2015, on 26-29 November 2015	Seoul, Korea.
Water treatment sludge for carbon dioxide removal	Project leader	International Invention, Innovation and Technology Exhibition 2016	Kuala Lumpur Convention Centre, Kuala Lumpur
Water treatment sludge for carbon dioxide removal	Project leader	iENA Nuremberg 2016 International Trade Fair	Nuremberg, Germany
Portable arsenic detection system	Project leader	Ideas Inventions New Products, 27-30 October 2016	

I declare that all the information in this form is true and correct. The University has the right to withdraw or reject the application if any information in this form found to be untrue.

Signature :

Name :

Faculty/Department :

Date :

I verify that, to the best of my knowledge, all the information provided in the forms are true.

**Dean
Signature and Stamp :**

Date :