

Puganeshwary Palaniandy

D.O.B: 8th June 1982
Nationality: Malaysian

School of Civil Engineering
Engineering Campus
Universiti Sains Malaysia
14300 Nibong Tebal
Seberang Perai Selatan
Pulau Pinang
Malaysia
Tel : +604 599 5813
Fax : +604 594 1009
H/P : +6016 443 1545
Email: cepuganeshwary@eng.usm.my

EDUCATION

- April 2008 – October 2011 **Universiti Sains Malaysia**
PhD (Environmental Engineering)
Title:
LECHATE TREATMENT USING COAGULATION PROCESS PRIOR TO DISSOLVED AIR FLOTATION (DAF)
- June 2006 – June 2007 **Universiti Sains Malaysia**
MSc by Mix-mode (Environmental Engineering)
CGPA: 3.67
Dissertation Title:
OXIDATION and COAGULATION PROCESS IN REMOVING COD, AMMONIACAL NITROGEN, SUSPENDED SOLIDS, TURBIDITY and COLOUR from SEMI-AEROBIC LEACHATE
- June 2003 - June 2006 **Universiti Sains Malaysia**
BTech (Hons) (Environmental Technology)
CGPA: 3.35
Final thesis title:
A STUDY ON THE SILICA WASTEWATER TREATMENT USING DIFFERENT COAGULANT.

WORK/RESEARCH EXPERIENCE

- February 2012 – Present **Lecturer** (School of Civil Engineering, Universiti Sains Malaysia)
- July 2005 – May 2007 **Research Assistant** (Universiti Sains Malaysia)
- A study on the use of dissolved air flotation for treatment of leachate from landfill site
- March 2005 – May 2005 **Tranee (Total Quality Management)** (Fumakilla Malaysia Bhd)
- Occupational Safety and Health Administration (OSHA)

PUBLICATIONS

- **Journal Papers**

1. Palaniandy, P., Adlan, M. N., Aziz, H. A. & Murshed, M. F. Application of dissolved air flotation (DAF) in semi-aerobic leachate treatment. *Chemical Engineering Journal*, 157, 316-322, 2010
2. Adlan, M. N., Palaniandy, P., & Aziz, H. A. Optimization of coagulation and dissolved air flotation (DAF) treatment of semi-aerobic landfill leachate using response surface methodology (RSM). *Desalination*, 277, 74-82, 2011

- **Conference Papers**

1. Palaniandy, P., Adlan, M. N., & Aziz, H. A. Pollutant Removal from Raw Leachate Using Dissolved Air Flotation, "Proceeding of International Conference on Construction and Building Technology (2008)", Kuala Lumpur.
2. Palaniandy, P., Adlan, M. N., & Aziz, H. A. Dissolved Air Flotation (DAF) Process for Colour and Chemical Oxygen Demand (COD) Removal in Landfill Leachate Treatment "Proceeding of International Conference on Chemical, Biological, and Environmental Engineering (2009)", Singapore.
3. Palaniandy, P., Adlan, M. N., & Aziz, H. A. Coagulation and Dissolved Air Flotation (DAF) process in Landfill Leachate Treatment "Persidangan Kebangsaan Kejuruteraan Awam Kelima (2009)", Kuala Lumpur
4. Palaniandy, P., Adlan, M. N., & Aziz, H. A. Comparison between Oxidation (H_2O_2)/Coagulation ($FeCl_3$) and Coagulation ($FeCl_3$)/ DAF in Landfill Leachate Treatment "5th ASEAN Civil Engineering Conference and the 5th ASEAN Environmental Engineering Conference and the 3rd Seminar on Asian Water Environment, 25-26 October 2012, Ho Chi Minh City, Vietnam

RESEARCH GRANTS

1. Principal Investigator

No.	Title of research	Grant's name	Duration	Start date	End date
1.	CFF- Novel low cost adsorbent for colour, COD and NH ₃ -N Removal from Shrimp Wastewater	USM - Incentive	1 year	19 Oct 2012	18 Oct 2013

2. Co-Researcher

No.	Title of research	Grant's name	Duration	Start date	End date
1.	Protection of Drinking Water for Society: Source abstraction and treatment: River bank/bed filtration for drinking water source abstraction.	LRGS	5 years	May 2102	April 2017

COMMENDATION & ACADEMIC LEADERSHIP

- **Academic Accessor/External, Internal & Thesis Examiner**

- a. **External Examiner**

- b. **Internal Examiner**

1. Msc (research), 2012, The effect of Temperature and pH on Bubble Rising Velocity and Bubble Sizes in Dissolved Air Flotation, Harziantie binti Hassan.
2. Msc (mixed-mode), 2011/2012, Beam-Column Connections for Triangular Web Profiled Steel Connection, Aderiza Brahmana.
3. Msc (mixed-mode), 2011/2012, The effect of Different Depth in Removal Efficiency of Vertical Upflow Roughing Filter for the treatment of Pulau Burung Semi-Aerobic Landfill Leachate, Ooi See Chian.
4. Msc (mixed-mode), 2011/2012, *Composite Fibre as Potential Biomass Carrier for Poultry Slaughterhouse Wastewater Treatment*, Siti Hasmiza Pamin.
5. Final year project (FYP) dissertation, 2011/2012.

- **Academic Accessor**

1. Panel for postgraduate seminar, Seminar Room 1, School of Civil Engineering, USM, 23 May 2012.
2. Panel for postgraduate seminar, Seminar Room 1, School of Civil Engineering, USM, 26 September 2012.
3. Panel for assessment of industrial training presentation, Seminar Room 1, School of Civil Engineering, USM, 31 October 2012.

- **Award/Reviewer/Editorial positions/Boards**

1. Anugerah Sanggar Sanjung (Universiti Sains Malaysia) Category: Publication (2010)
2. Best PhD Thesis Award-National Level, Bronze Medal. (2011)
3. Reviewer for AWAM International Conference on Civil Engineering (AICCE'12) and Geohazard Information Zonation (GIZ'12).
4. Anugerah Hadiah Sanjungan ((Universiti Sains Malaysia) Category: Publication (2011)

TRAINING & DEVELOPMENT (Presenter/Participant)

1. Presenter, International Conference on Construction and Building Technology (2008), Kuala Lumpur.
2. Presenter, International Conference on Chemical, Biological, and Environmental Engineering (2009), Singapore.
3. Presenter, Persidangan Kebangsaan Kejuruteraan Awam Kelima (2009),

Kuala Lumpur

4. Presenter, *5th ASEAN Civil Engineering Conference and the 5th ASEAN Environmental Engineering Conference and the 3rd Seminar on Asian Water Environment*, 25-26 October 2012, Ho Chi Minh City, Vietnam

TEACHING

Graduate Teaching (USM)

<i>Course Title</i>		<i>Semester</i>	<i>Year</i>
Water Supply Engineering	EAP 581	1	2012/2013
Wastewater Engineering	EAP 582	1	2012/2013

Undergraduate Teaching (USM)

<i>Course Title</i>		<i>Semester</i>	<i>Year</i>
Hydraulic, Geotechnical and Environmental Engineering Laboratory	EAA 305	1	2012/2013

SUPERVISION

- **Graduate Supervision**

- a. **Phd**

- a2. **Co-supervisor**

- 1. Sariyah Bt Madzahir (2011 – present), STUDY OF RHA/PFA/CFA ADSORBENT FOR REMOVAL OF DYE CONTAINING WASTEWATER-

- b. **Master (by mixed-mode)**

- c1. **Main supervisor**

- 1. Mohammed H. Jbara (2012 –Present), SHRIMP POND WASTEWATER TREATMENT USING PYROLYSIS CHECKEN FEATHER (CFF) AS ADSORBENT

- **Undergraduate Supervision**

- a. **Final Year Project (FYP)**

- 1. Wong Sern Yan (2012 – Present), Characteristic of car wash wastewater and treatment using CFF as an adsorbent
 - 2. Kuak Li Chian (2012 – Preent), Synthetic shrimp pond wastewater treatment by adsorption process using CFF as an adsorbent

- b. **Industrial Training/Practical**

- 1. Industrial training visit, Semester 2 (2011/2012), 1 August 2012, JPS Daerah Kerian.

CONTRIBUTIONS TO THE UNIVERSITY

- **University Committee**

1. Member for Academic and Administrative Staff Association, USM (PKAPUSM), Oktober 2012 – present.
2. School Board Members, School of Civil Engineering (*Ahli Majlis Pusat Pengajian Kejuruteraan Awam*), 2012 – present.

- **School Committee (named as member)**

1. Represent School of Civil Engineering for USM Open Day, 10 March 2012.
2. Secretary for Alumni Dinner PPKA, 2012 – present.
3. Committee member for Sustainable PPKA, 2012 – present.
4. Secretariat committee member for AWAM International Conference on Civil Engineering (AICCE' 12) and Geohazard Information Zonation (GIZ'12), 28th – 30th August 2012, Penang, Malaysia.
5. Emcee for opening and closing ceremony for AWAM International Conference on Civil Engineering (AICCE' 12) and Geohazard Information Zonation (GIZ'12), 28th – 30th August 2012, Penang, Malaysia.
6. Committee member for Team Building and Leadership Camp, 2012/2013
7. Working committee member – head of lodging committee member for PPKA Family Day, 7th December 2012.