## 1. PERSONAL DATA

Name	:	Puganeshwary Palaniandy
Nationality	:	Malaysia
Current Position	:	Senior Lecturer
Qualifications	:	PhD
Field of specialization	:	Water and Wastewater treatment
Tel (office) /HP	:	04-5995883
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## 2. ACHIEVEMENTS

On going grants	:	<ul> <li>National: 1 ( As Main Researcher)</li> <li>1.Up scaling the Compound Parabolic Collecting Reactor in treating pharmaceutical wastewater using Solar Photocatalysis Process.</li> <li>2. Elucidation of photocatalytic degradation mechanisms and the kinetics reaction of antimicrobial degradation using composite catalyst - Fe2O3-TiO2-Zeolite.</li> </ul>
Completed grants	:	<ul> <li>National :1 (As Main Researcher)</li> <li>1. Fundamental Process Of Heterogeneous Photo-Catalysis (TiO2) For Hospital Wastewater Treatment In Removal Of New Emerging Pollutants (NEP)</li> <li>2. Behaviour and Fate of Micro-Pollutants (NEP) Removals in using Photocatalysis - LS/TiO2/Solar</li> <li>University : 2 (As Main Recearcher)</li> <li>1. CFF-Novel Low Cost Adsorbent for Colour, COD and NH3-N Removal from Shrimp Pond Wastewater</li> <li>2. Use Of Filtration And Solar Treatment For Conversion Of Harvested Rainwater Into Alternative Source Of Drinking Water</li> </ul>
Graduated students	:	1 Postdoc 1 PhD (Main Supervisor) 1 PhD ( Co-Supervisor) 4 Master by Research (Main Supervisor) 6 Master by Mixmode
Postgraduate under supervision	:	1 Master by Mixmode 1 Master by Research (Main Supervisor) 3 Phd (Main Supervisor) 2 PhD ( Co-Supervisor)
Achievements/Awards / Recognitions	:	<ol> <li>Anugerah Sanggar Sanjung 2009 – Kategori Penerbitan Jurnal, from Universiti Sains Malaysia.</li> <li>Hadiah Sanjungan 2011 - Kategori Penerbitan Jurnal, from Universiti Sains Malaysia.</li> <li>Best Thesis Award in Water Resources and Hydrology 2011, from Department of Irrigation and Drainage Malaysia.</li> <li>Main Prize in Youtube Video Competition BJIM-USM 2015 (Ground Water Well Construction), from Bahagian Jaringan Industri &amp; Masyarakat, Malaysia.</li> <li>Consolation Prize in Youtube Video Competition BJIM-USM 2015 (Ground Water Well Construction), from Water Watch Penang.</li> </ol>

## 3. CURRENT RESEARCHS AND PAST RELATED RESEARCHS:

# National

Main Researcher

FRGS: Fundamental Process Of Heterogeneous Photo-Catalysis (TiO2) For Hospital Wastewater Treatment In Removal of New Emerging Pollutants (NEP);Researchers: Dr. Puganeshwary Palaniandy(PI), Prof. Suffian Yusoff, Prof. Hamidi Abd Aziz, Dr. Norli Ismail; Amount: RM 81,000.00 (KEMENTERIAN PENGAJIAN TINGGI) Duration: 1/12/2013 - 30/11/2015

PRGS: Up scaling the Compound Parabolic Collecting Reactor in treating pharmaceutical wastewater using Solar Photocatalysis Process. Assoc. Prof. Dr Puganeshwary Palaniandy (PI), Prof. Hamidi Abd Aziz, Prof Dr. Norli Ismail; Amount: RM 182,000.00 (KEMENTERIAN PENGAJIAN TINGGI) Duration: 01/08/2019 - 30/04/2022

FRGS: Elucidation of photocatalytic degradation mechanisms and the kinetics reaction of antimicrobial degradation using composite catalyst - Fe2O3-TiO2-Zeolite., Assoc. Prof. Dr Puganeshwary Palaniandy (PI), Prof. Hamidi Abd Aziz, Dr. Noor Haida Mohd Kaus, Dr.Thaigarajan Parumasivam; Amount: RM135,000.00, (KEMENTERIAN PENGAJIAN TINGGI) Duration: 07/09/2021-06/09/2024

#### Co-researcher

LRGS: River Bank/Bed Filtration For Drinking Water Source Abstraction

Researchers: Prof. Nordin Adlan, Prof. Hamidi Abd Aziz, Prof. Ismail Abustan, Prof. Azlin, Prof. Suffian Yusoff, Puganeshwary Palaniandy (member); Amount: RM 2,696,150.00 (KEMENTERIAN PENGAJIAN TINGGI); Duration: 1/8/2012 - 31/7/2017

FRGS: The Effect of Moisture Content as the Causal Mechanism of Odor Concentration (OUM-3); Researchers: Dr. Nastaein Binti Qamaruz Zaman, Amount: RM 70,000.00 (KEMENTERIAN PENGAJIAN TINGGI); Duration: 1/5/2013 - 31/10/2015

FRGS: Investigation of Natural Organic matter (NOM) characterization for disinfection by-products (DBPs) formation and the option of its removal for drinking water purposes; Researchers: Dr. Mohamad Fared Bin Murshed; Amount: RM 95,000.00 (KEMENTERIAN PENGAJIAN TINGGI); Duration: 1/12/2014 - 31/5/2017

FRGS: Impact on Environmental Assets: Preparedness on water abstraction and treatment for flood prone areas in Kelantan River Basin; Researchers: Prof Mohd Nordin Bin Adlan; Amount: RM 99,400.00 (KEMENTERIAN PENGAJIAN TINGGI); Duration: 1/4/2015 - 31/12/2015

PPRN: Behaviour and Fate of Manufactured SiO2 Nanoparticles in the Presence of Commercial/Natural Polymers for the Optimization of Semiconductor Wastewater Treatment Processes; Researchers: Dr. Fatehah Omar Amount: RM 29,928.00 (KEMENTERIAN PENDIDIKAN MALAYSIA) Duration: 1/1/2017 - 1/1/2018.

FRGS: Correlations between oil palm fronds pre-treatment using white rot fungi and methane generation in temperaturephased anaerobic digestion; Researchers: Nik Azimatolakma Awang; Amount: RM 103398 (KEMENTERIAN PENGAJIAN TINGGI); Duration: 01/01/2019 - 30/09/2022

#### University Main Researcher

PRGS: Removal of COD, colour and ammoniacal nitrogen in landfill leachate using coagulation process prior to dissolved air flotation (DAF) Researcher: Dr. Puganeshwary Palaniandy (PI); Amount: RM 14,780.00 (USM); Duration: 10/8/2009 - 9/8/2012

Insentif: Characterization of Micro-Pollutant Properties in Cosmetic Wastewater Researchers: Dr. Puganeshwary Palaniandy; Amount: RM 5,000.00 (USM); Duration: 7/12/2012 - 6/12/2013

Short Term: CFF-Novel Low Cost Adsorbent for Colour, COD and NH3-N Removal from Shrimp Pond Wastewater; Researchers: Dr. Puganeshwary Palaniandy(PI); Amount: RM 40,000.00 (USM); Duration: 15/11/2013 - 14/11/2015

RUI: Use Of Filtration And Solar Treatment For Conversion Of Harvested Rainwater Into Alternative Source Of Drinking Water; Researchers: Dr. Puganeshwary Palaniandy; Amount: RM 133,489.00 (USM); Duration: 1/12/2013 - 30/11/2015

RUI: Behaviour and Fate of Micro-Pollutants (NEP) Removals in using Photocatalysis - LS/TiO2/Solar; Researchers: Dr. Puganeshwary Palaniandy; Amount: RM 88, 000 (USM); Duration: 01/07/2018 - 30/06/2020

Bridging: Adsorption Studies On Heavy Metal Removal By Pyrolyzed Chicken Feather Fiber; Researchers: Dr. Puganeshwary Palaniandy; Amount: RM 9,000(USM); Duration: 25/01/2018 - 24/01/2019

### 4. RESEARCH PUBLICATIONS:

#### Journal

1. Puganeshwary Palaniandy, Mohd. Nordin Adlan, Hamidi Abdul Aziz, and Mohd. Fared Murshed (2010). Application of Dissolved Air Flotation (DAF) in Semi-Aerobic Leachate Treatment. Chemical Engineering Journal, 157 (2–3), pp. 316–322. [ISI, Q1, IF: 2.813]

2. Mohd. Nordin Adlan, Puganeshwary Palaniandy, and Hamidi Abdul Aziz (2011). Optimization of Coagulation and Dissolved Air Flotation (DAF) Treatment of Semi-Aerobic Landfill Leachate Using Response Surface Methodology (RSM). Desalination, 277 (1–3), pp. 74–82. [ISI, Q1, IF: 2.034]

3. Mohd. Remy Rozainy M.A.Z, Hasif M, Shafalny S, Puganeshwary Palaniandy, and Afifi A. (2014). Combination of Chitosan and Bentonite as Coagulant Agents in Dissolved Air Flotation. APCBEE Procedia, 10, pp. 229-234. [SCOPUS]

4. Mohd. Remy Rozainy M.A.Z, Hasif M, Shafalny S, and Puganeshwary Palaniandy (2014). Physical modeling of flow characteristic in dissolved air flotation tank with chitosan and bentonite as coagulant. Advances in Engineering Mechanics and Materials. [INTERNATIONAL]

5. Dheeaa al Deen A. Aljuboury, Puganeshwary Palaniandy, Hamidi Bin Abdul Aziz, and Shaik Feroz (2014). A Review on the Fenton Process for Wastewater Treatment. Journal of Innovative Engineering, 2 (3), pp. 4. [INTERNATIONAL]

6. Dheeaa al Deen A. Aljuboury, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Shaik Feroz (2014). Organic Pollutants Removal from Petroleum Refinery Wastewater with Nanotitania Photo-catalyst and solar irradiation in Sohar Oil Refinery. Journal of Innovative Engineering, 2 (3), pp. 15. [INTERNATIONAL]

7. Lee Chee Mei, Puganeshwary Palaniandy, Nastaein Qamaruz Zaman, and Mohd. Nordin Adlan (2015). Pharmaceutical Removal from Synthetic Wastewater using Heterogeneous–Photocatalyst. Applied Mechanics and Materials, 802, pp 507-512. [INTERNATIONAL]

8. Dheea al Deen A. Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Syaik Feroz (2015). Comparative Study of Advanced Oxidation Processes to Treat Petroleum Wastewater. Hungarian Journal of Industry and Chemistry, 43 (2), pp. 97–101. [INTERNATIONAL]

9. Dheea al Deen A. Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Shaik Feroz (2015). Treatment of petroleum wastewater using combination of solar photo-two catalyst TiO 2 and photo-Fenton process. Journal of Environmental Chemical Engineering, 3 (2), pp. 1117–1124. [SCOPUS, Q2]

10. Dheeaa al Deen Atallah Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Shaik Feroz (2015). New Treatment of petroleum wastewater using the combination of solar photo-three catalysts ZnO, TiO2 and photo-Fenton process. International Journal of Applied Engineering Research (IJAER), 10(81), pp. 6-14. [INTERNATIONAL]

11. Dheeaa al Deen Atallah Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Shaik Feroz (2015). Evaluating the TiO2 as a solar photocatalyst process by response surface methodology to treat the petroleum waste water. Karbala International Journal of Modern Science, 1, 78-85. [SCOPUS]

12. Dheea al Deen A. Aljuboury, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Syaik Feroz (2016). Evaluation of the Solar Photo-Fenton Process to Treat the Petroleum Wastewater by Response Surface Methodology (RSM). Environmental Earth Sciences, 75 (4), pp. 1–12. [ISI, Q2, IF: 1.765]

13. Dheea al Deen A. Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Syaik Feroz (2016). Comparative Study to the Solar Photo-Fenton, Solar Photocatalyst of TiO2 and Solar Photocatalyst of TiO2 Combined with Fenton Process to Treat Petroleum Wastewater by RSM. Journal of Petroleum & Environmental Biotechnology, 1, pp. 1–5. [INTERNATIONAL]

14. Dheea al Deen A. Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, Syaik Feroz, and Salem S. Abu Amr (2016). Evaluating Photo-Degradation of COD and TOC in Petroleum Refinery Wastewater by Using TiO2/ZnO Photo-Catalyst. Water Science and Technology, 74 (6), pp. 1312–1325. [ISI, Q3, IF: 1.106]

15. Dheea al Deen A. Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Syaik Feroz (2016). Evaluation of the Photocatalyst of TiO2/ZnO/Fenton Process to Treat the Petroleum Wastewater. Water Resources & Industry (Accepted). [SCOPUS, Q2]

16. Dheea al Deen A. Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Syaik Feroz (2016). Removal of COD from Petroleum Wastewater by Solar Photo-Fenton: Kinetic study. Journal of Innovative Engineering (Accepted). [INTERNATIONAL]

17. Dheea al Deen A. Aljubourya, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Syaik Feroz (2016). Influence of Photocatalytic Activity of Anatase TiO2/PVA Film Coated Glass Plate on Degradation of TOC and COD from Petroleum Wastewater. Journal of Innovative Engineering (Accepted). [INTERNATIONAL]

18. Nurul Aiin Ab Aziz, Puganeshwary Palaniandy, Hamidi Abdul Aziz, and Irvan Dahlan (2016). Review of the Mechanism and Operational Factors Influencing the Degradation Process of Contaminants in Heterogenous Photocatalysis. Journal of Chemical Research, 40, pp. 704–712. [ISI, Q4, IF: 0.633]

19. Nurul Aini Zainol Abidin, Puganeshwary Palaniandy, Mohd. Suffian Yusoff, and Mohd. Nordin Adlan (2016). A Review Regarding Treatment of Water Using Composite Adsorbent. International Journal of Scientific Research in Knowledge, 4, pp. 21–27. [INTERNATIONAL]

20. Khairunnisa Fakhriah Mohd. Omar, Nurul Aiin Ab Aziz, Salem S. Abu Amr, and Puganeshwary Palaniandy (2017). Removal of Lindane and Escherichia Coli (E. coli) from Rainwater Using Photocatalytic and Adsorption Treatment Processes. Global NEST Journal, 19, pp. 191-198. [ISI, Q4, IF: 0.458]

21. Moon Wei Chek, Puganeshwary Palaniandy, Mohd. Suffian Yusoff, and Irvan Dahlan (2017). Adsorption Studies on Heavy Metal Removal from Synthetic Wastewater by Pyrolyzed Chicken Feather Fiber. Desalination and Water Treatment, 62, pp. 307–315. [ISI, Q3, IF: 1.272]

22. Nurul Aiin Ab Aziz, Puganeshwary Palaniandy, and Hamidi Abdul Aziz (2017). Photocatalytic Degradation of Lindane and DDT Using TiO2/Solar Light by Response Surface Methodology. Science International (Lahore), 29(1), pp. 63–67. [ISI]

23. Dheea al Deen A. Aljuboury and Puganeshwary Palaniandy (2017). Kinetic Study of Inorganic Carbon (IC) Removal and COD Removal from Refinery Wastewater by Solar Photo-Fenton. Global NEST Journal, 19(4), pp. 641-649. [ISI, Q4, IF: 0.458]

24. Chee Mei Lee, Nurul Aiin Ab Aziz, Puganeshwary Palaniandy and Salem S. Abu Amr (2017). Performance of natural sunlight on paracetamol removal from synthetic pharmaceutical wastewater using heterogeneous TiO2 photocatalyst. Desalination and Water Treatment, 78, pp. 341-349. [Scopus, Q1]

25. Chee Mei Lee, Puganeshwary Palaniandy and Irvan Dahlan (2017). Pharmaceutical Residues in Aquatic Environment and Water Remediation by TiO2 heterogeneous photocatalysis: a review. Environmental Earth Science, 76 (611). [Scopus, Q1]

26. Dheea al Deen A. Aljuboury, Puganeshwary Palaniandy Feroz. S and Abu Amr S.S. (2017). Performance of Different Photocatalytic Oxidation Processes in Petroleum Wastewater Treatment: A Comparative Study. Global NEST Journal, 19(1), pp. 167-175. [ISI, Q4, IF: 0.458]

27. Dheea al Deen A. Aljuboury, Puganeshwary Palaniandy and Feroz. S (2017). Treatment of Petroleum Wastewater by Conventional and New Technologies- A Review. Global NEST Journal, 19(3), pp. 439-452. [ISI, Q4, IF: 0.458]

28. Dheea al Deen A. Aljuboury, Puganeshwary Palaniandy, Hamidi Abd Aziz and Feroz. S (2017). Degradation of Total Organic Carbon (TOC) and Chemical Oxygen Demand (COD) in Petroleum Wastewater by Solar Photo-Fenton Process. Global NEST Journal, 19(3), pp. 430-438. [ISI, Q4, IF: 0.458]

29. Dheea al Deen A. Aljuboury, Puganeshwary Palaniandy, Hamidi Abd Aziz, Shaik Feroz and Salem S. Abu Amr (2017). Performance of the Photocatalyst and Fenton Processes to Treat the Petroleum Wastewater – A review. Global NEST Journal, 19(3), pp. 396-411. [ISI, Q4, IF: 0.458]

30. Nurul Aiin Ab Aziz, Puganeshwary Palaniandy, Hamidi Abdul Aziz and Dheea al Deen A. Aljuboury (2018). Use of Photocatalysis for Conversion of Harvested Rainwater as an Alternative Source into Drinking Water. Global NEST Journal, 20(2), pp. 243-256. [ISI, Q4, IF: 0.665]

31. Dheea al Deen A. Aljuboury and Puganeshwary Palaniandy (2018). Inorganic Carbon Removal from Refinery Wastewater by Using TiO2/ZnO/Fenton Photocatalyst. Global NEST Journal, 20(2), pp. 216-225. [ISI, Q4, IF: 0.665]

32. Wei Chek Moon and Puganeshwary Palaniandy (2019). A Review on Interesting Properties of Chicken Feather as Low-Cost Adsorbent. International Journal of Integrated Engineering, 11(2), pp. 136-146. [Scopus]

33. Nurul Aini Zainol Abidin, Puganeshwary Palaniandy, Mohd. Suffian Yusof and Salem S. Abu Amr (2019). Activated Carbon-Limestone-Alginate Beads for the Simultaneous Removal of Color and Turbidity of Kerian River. International Journal of Integrated Engineering, 11(2), pp. 32-39. [Scopus]

34. D.A. Aljuboury, P. Palaniandy, K.S.A.A. Maqbali. (2019). Evaluating of performance of landfills of waste in Al-Amerat and Barka, in Oman, Materials Today: Proceedings, Volume 17, Part 3. [ISI]

35. Omar Fawzi Suleiman Khasawneh, Puganeshwary Palaniandy, Lum Pei Teng. (2019). Large-scale study for the photocatalytic degradation of paracetamol using Fe2O3/TiO2 nanocomposite catalyst and CPC reactor under natural sunlight radiations, MethodsX, Volume 6. [ISI]

36. Fawzi Suleiman Khasawneh, O., & Palaniandy, P. (2019). Photocatalytic Degradation of Pharmaceuticals Using TiO2 Based Nanocomposite Catalyst-Review, Civil and Environmental Engineering Reports, 29(3), 1-33.[ISI]

37. P.T. Lum, K.Y. Foo, N.A. Zakaria, P. Palaniandy. (2020). Ash based nanocomposites for photocatalytic degradation of textile dye pollutants: A review, Materials Chemistry and Physics, Volume 241.[ISI]

38. Omar Fawzi Suleiman Khasawneh, Puganeshwary Palaniandy. (2021). Removal of organic pollutants from water by Fe2O3/TiO2 based photocatalytic degradation: A review, Environmental Technology & Innovation, Volume 21.[ISI]

39. Faizan Ahmed, Mohd Sharizal Bin Abdul Aziz, Puganeshwary Palaniandy, Feroz Shaik. (2021). A review on application of renewable energy for desalination technologies with emphasis on concentrated solar power, Journal of Thermal Analysis and Calorimetry:, [Q1 ISI (Impact Factor : 4.626)]

40. Omar Fawzi Suleiman Khasawneh, Puganeshwary Palaniandy, Mohsen Ahmadipour, Hossein Mohammadi, Mohammad Razak Bin Hamdan. (2021). Removal of acetaminophen using Fe2O3-TiO2 nanocomposites by photocatalysis under simulated solar irradiation: Optimization study, Journal of Environmental Chemical Engineering, 9:, 104921 [Q1 ISI (Impact Factor : 5.909)]

41. Omar Fawzi Suleiman Khasawneh, Puganeshwary Palaniandy. (2021). Occurrence and removal of pharmaceuticals in wastewater treatment plants, Process Safety and Environmental Protection, 150:, 532–556 [Q1 ISI (Impact Factor : 6.158)]

42. Nayeemuddin Mohammed, Puganeshwary Palaniandy, Feroz Shaik. (2021). Pollutants removal from saline water by solar photocatalysis: a review of experimental and theoretical approaches, International Journal of Environmental Analytical Chemistry:,[Q3 ISI (Impact Factor : 2.826)]

43. Nayeemuddin Mohammed, Puganeshwary Palaniandy, Feroz Shaik. (2021) Optimization of solar photocatalytic biodegradability of seawater using statistical modelling, Journal of the Indian Chemical Society, 2000:, S0019-4522(21)00240-5, [Q4 ISI (Impact Factor : 0.284)]

#### Chapter

1. Puganeshwary Palaniandy, Hj Adlan, Hamidi Aziz,Yung Hung (2017). Chapter 5 : Dissolved Air Flotation (DAF) for Wastewater Treatment. In book: Waste Treatment in the Service and Utility Industries, pp.145-182. DOI: 10.1201/9781315164199-6

2. Dheeaa Al deen Atallah Aljuboury; Puganeshwary Palaniandy; S. Feroz (2017). Chapter 3 : Treatment of refinery wastewater by using the combination of TiO2/ZnO Photocatalyst and Photo-Fenton process. In book: Advances in Chemistry and Chemical Engineering, pp.19-38. Publisher: Research India Publication.

3. Dheea al Deen A. Aljuboury, Puganeshwary Palaniandy and Shaik Feroz (2018). Chapter 5 : Advanced Oxidation Processes (AOPs) to Treat the Petroleum Wastewater. In Advanced Oxidation Processes (AOPs) in Water and Wastewater Treatment, pp. 99-122. IGI Clobal.

4. Nurul Aiin Ab Aziz and Puganeshwary Palaniandy (2018). Chapter 8 : Photocatalysis (TiO2/Solar) in Water and Wastewater Treatment. In Advanced Oxidation Processes (AOPs) in Water and Wastewater Treatment, pp. 171-199. IGI Clobal.

5. Omar Fawzi Suleiman Khasawneh, Puganeshwary Palaniandy, Mohamad Anuar Kamaruddin, Hamidi Abdul Aziz, Yung-Tse Hung (2022). Chapter 9: Landfill Leachate Collection and Characterization. In Solid Waste Engineering and Management Volume 2, pp. 599 – 657. Springer Link.

6. Puganeshwary Palaniandy, Hamidi Abdul Aziz, Lawrence K Wang, P Michael Terlecky, Yung-Tse Hung (2022). Chapter 8: Sanitary Landfill Types and Design. In Solid Waste Engineering and Management Volume 2, pp. 543 – 597. Springer Link.

7. Puganeshwary Palaniandy, Mohd Suffian Yusoff, Lawrence K Wang, Mu-Hao Sung Wang (2022). Chapter 3: Electronic and Electrical Equipment Waste Disposal. In Solid Waste Engineering and Management Volume 3, pp. 115 – 161. Springer Link.

#### Proceeding

1. Puganeshwary Palaniandy and Mohd. Nordin Adlan (2008). Pollutant removal from raw leachate using dissolved air flotation. Proceedings of the International Conference on Construction and Building Technology (ICCBT 2008), 16-20 June 2008, pp. 233-240, Universiti Tenaga Nasional, Kuala Lumpur.

2. Puganeshwary Palaniandy, Mohd. Nordin Adlan, and Hamidi Abdul Aziz (2009). Coagulation and dissolved air flotation (DAF) process in landfill leachate treatment. Monograf Awam'09, Pusat Pengajian Kejuruteraan Awam, Universiti Sains Malaysia, Kampus Kejuruteraan, Pulau Pinang.

3. Puganeshwary Palaniandy, Mohd. Nordin Adlan, and Hamidi Abdul Aziz (2009). Dissolved air flotation (DAF) process for colour and chemical oxygen demand (COD) removal in landfill leachate treatment. Proceedings of the 2009 International Conference on Chemical, Biological and Environmental Engineering (CBEE 2009), 9–11 October 2009, pp. 149-152, World Scientific, Singapore.

4. Puganeshwary Palaniandy, Mohd. Nordin Adlan, and Hamidi Abdul Aziz (2012). Comparison between Oxidation (H2O2)/Coagulation (FeCl3) and Coagulation (FeCl3)/DAF in Landfill Leachate Treatment. The 5th ASEAN Civil Engineering Conference (ACEC), the 5th ASEAN Environmental Engineering Conference (AEEC) and the 3rd Seminar on Asian Water Environment, 25-26 October 2012, Ho Chi Minh City, Vietnam.

5. Nurul Aini Zainol Abidin, Puganeshwary Palaniandy, and Mohd. Suffian Yusof (2016). A review regarding treatment of water using composite adsorbent. Water Security Conference 2016, 10-11 May 2016, Science and Engineering Research Centre (SERC), Universiti Sains Malaysia, Engineering Campus, Pulau Pinang.

6. Khairunnisa Fakhriah Mohd. Omar and Puganeshwary Palaniandy (2016). A Preliminary Study of Heavy Metals Removal from Synthetic Rainwater by Natural Mineral Adsorbents. 2nd International Conference on Architecture, Civil and Environment Engineering (ICACEE 2016), 23-24 December 2016, Federal Hotel, Kuala Lumpur, Malaysia.

7. Dheea al Deen A. Aljuboury, Puganeshwary Palaniandy, Hamidi Abdul Aziz and Shaik Feroz (2017). Evaluation of the Photocatalyst of TiO2/Fenton/ZnO to Treat the Petroleum Wastewater. AIP Conference Proceedings, 1892(1), pp. 040024. [Scopus]

8. Khairunnisa Fakhriah Mohd. Omar, Puganeshwary Palaniandy, Mohd. Nordin Adlan, Hamidi Abdul Aziz and Ambarasi Subramaniam (2017). The Potential use of Rainwater as alternative source of drinking water by using laterite soil as natural adsorbent. AIP Conference Proceedings, 1892(1), pp. 040020. [Scopus]

9. Wei Chek Moon, Mohamad Hasan Jbara, Puganeshwary Palaniandy and Mohd. Suffian Yusoff (2017). Shrimp Pond Wastewater Treatment Using Pyrolyszed Chicken Feather as Adsorbent. AIP Conference Proceedings, 1892(1), pp. 040022-1-040022-8. [Scopus]

10. Nur Aiin Ab Aziz, Puganeshwary Palaniandy, Wei Chek Moon, Omar Fawzi Suleiman Khasawneh, and Dheeaa Al Deen Atallah Aljuboury (2021). Removal of fluoranthene and pyrene from rainwater using solar/TiO2 photocatalysis: Optimization study. AIP Conference Proceedings 2332, 070001 (2021); <a href="https://doi.org/10.1063/5.0043753">https://doi.org/10.1063/5.0043753</a>

11. Nayeemuddin Mohammed, Puganeshwary Palaniandy, and Feroz Shaik (2022). Solar photocatalytic biodegradability of saline water: Optimization using RSM and ANN. AIP Conference Proceedings 2463, 020027.