

Curriculum Vitae

Salmiati, PhD

Centre for Environmental Sustainability and Water Security (IPASA)
Faculty of Civil Engineering
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PERSONAL RECORD

Academic Qualifications

2008 PhD (Environmental), Universiti Teknologi Malaysia, Malaysia
2002 M.Eng. Civil (Environmental), Universiti Teknologi Malaysia, Malaysia
1995 B.Sc. Biology, Universitas Syiah Kuala, Banda Aceh, Indonesia

Professional Membership

Member, Malaysian Society for Engineering and Technology (mySET)
Member, International Water Association (IWA)
Malaysian Analytical Science Society (Analisis-P225)

Employment

Dec/09 – present Senior Lecturer at Centre for Environmental and Water Resources Management (IPASA), Faculty of Civil Engineering, UTM, Malaysia
Feb/09 – Dec/09 Visiting Lecturer, Institute of Environmental Sustainability and Water Security (IPASA), Faculty of Civil Engineering, UTM, Malaysia
Dec/02 – Dec/04 Research Officer (RO), Department of Environmental Engineering, Faculty of Civil Engineering, UTM, Malaysia
1996 – 1999 Tutor (Chemistry-Physic), Yayasan Putra Anda, Binjai, Indonesia
1993 – 1995 Teaching Assistant, Biology Laboratory, Universitas Syiah Kuala, Indonesia

ACADEMIC AND RESEARCH

Teaching

- Solid Waste Management
- Environmental Engineering Laboratory
- Environmental Management
- Water Quality Analysis

Supervision

Ph.D

1. Mohamed Zuhaili Mohamed Najib – **Main Supervisor**, “Development of microbial photosynthetic granules from palm oil mill effluent (POME) for reduction of carbon dioxide (CO₂)”, Faculty of Civil Engineering. In-progress
2. Nor Zaiha Arman – **Co-Supervisor**, “Biological criteria using macrobenthos as a tool for river restoration”, Faculty of Civil Engineering. Submitted
3. Syaiful Akhmal Saadon – **Main Supervisor**, “Development of A New Adsorbent Material for Efficiency and Economic Removal of Arsenic (III) from Aqueous System”. Faculty of Civil Engineering. In-progress

Master

1. Sabri Abd Rashid – **Main Supervisor**, “Mechanistic and kinetic of CO₂ biofixation in photosynthetic aerobic granules”. Faculty of Civil Engineering. In-progress
2. Omar Danial – **Co-Supervisor**, Nutrient removal of grey water from wet market using sequencing batch reactor.” Faculty of Civil Engineering. In-progress
3. Nawal Shaharuddin – “Energy recovery from sludge management”. **Co-Supervisor**. Faculty of Civil Engineering. Submitted
4. Normaizatul Akmar Rahmat – **Main Supervisor**, “Combination of ozonation and adsorption for treatment of BPA removal.” Faculty of Civil Engineering. In-progress.

Research Project

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| 2009 – 2011 | Kinetics of Adsorption and Selective removal of Some Heavy metals Using Fixed bed Ion Exchange Column (RM49,000). Funded by Fundamental Research Grant Scheme (FRGS). Researcher. Completed. |
| 2009 – 2011 | Microbial Characterization of Photosynthetic Aerobic Granules Developed in Synthetic Municipal Wastewater for the Reduction of CO ₂ Emission (Vote No. 77323). Funded by UTM Institutional Research Grant Project Leader. Completed |
| 2010 – 2011 | Macrobenthos as a Potential Bioindicator for Tropical Rivers (Vote No. 77543; RM30,000). Funded by UTM Institutional Research Grant. Project Leader. Completed |
| 2011 - 2012 | Transformation pathway of high molecular weight (HMW) polycyclic aromatic hydrocarbon (PAH) by white rot fungi. Funded by UTM Institutional Research Grant. (Vote No. 00J31; RM 40,000). Researcher. Completed. |
| 2011 – 2013 | Integrated of Sewage and Greywater Treatment For Sustainable Environment (Vote no. 01H17; RM150,000). Funded by UTM Institutional Research Grant. Researcher. Completed. |
| 2011 – 2013 | Biological Criteria Using Macrobenthos as a Tool for River Restoration (Vot 00H99; RM150,000). Project Leader. Completed |
| 2011 – 2013 | The Fate and Transport of Nanosilver Products and Materials. (Vote no. 4H009; RM250,000). MOSTI Fund. Researcher. Completed. |

- 2012 – 2014 Characterization of enzymatic transformation of synthetic dyes in the liquid culture by ligninolytic fungi. Funded by UTM Institutional Research Grant. (Vote No .02H65; RM 104,613). **Researcher. In-progress.**
- 2012 – 2014 Evaluation of earthworms (*Eisenia fetida*) and immobilized laccase to accelerates the removal and transform Persistent Organic Pollutants (POPs) in soil. Funded by Exploratory Research Grant Scheme (ERGS) of Ministry of High Education (MOHE). (Vote No. 4L053; RM 98,000). **Researcher. In-progress.**
- 2012 – 2014 Inhibition of Sulfate Reduction Bacteria to Enhance Methane Yield in Anaerobic Digester. Funded by Fundamental Research Grant Scheme (FRGS) of Ministry of High Education (MOHE). (Vote no.4F138; RM 93,000). **Researcher. In-progress.**
- 2012 – 2014 Co-digestion of Mesocarp Fibre with Poultry-Manure Under Ananerobic Condition. Funded by UTM Institutional Research Grant. (Vote No. Q.J13000.2522.02H66; RM 119,800). **Researcher. In-progress.**
- 2012 – 2014 Bioremediotional of *Ulva* and *Gracillaria* Species in an Integrated Multi-Tropic Aquaculture (IMTA) system. Funded by UTM Institutional Research Grant. (Vote No. 06J16; RM 20,187). **Researcher. In-progress.**
- 2012 – 2014 Bioremediational potential of *Ulva* (green) and *Gracilaria* (red) seaweed species in an integrated multi-trophic aquaculture (IMTA) system. Funded by Exploratory Research Grant Scheme (ERGS) of Ministry of High Education (MOHE).(Vote No.4L060; RM 89,000). **Researcher. In-progress.**
- 2012 – 2017 Micro-Pollutants Removal using Combined Membrane Filtration, Advanced Oxidation Process and Adsorption for Safe Drinking Water. Funded by Long-term Research Grant Scheme (LRGS) of Ministry of High Education (MOHE). (Vote No. 4L801; RM 1,500,000). **Researcher. In-progress.**
- 2012 – 2014 Development of photosynthetic microbial granule-based for carbon dioxide emission reduction of palm oil effluent. Funded by UTM Institutional Research Grant. (Vote No. 04H33; RM 196,600). **Researcher. Completed.**
- 2013 – 2014 Adsorptive potential of sulfonated poly(glycidylmethacrylate)-grafted polymer for separation of metal ions from aqueous solution. Funded by UTM Institutional Research Grant. (Vote No. 09J43; RM 40,000). **Researcher. In-progress.**
- 2013 – 2015 Mechanistic and Kinetics of Carbon Dioxide Biofixation in Photosynthetic Aerobic Granules. Funded by Fundamental Research Grant Scheme (FRGS) of Ministry of High Education (MOHE). (Vote No. 4F211; RM 71,000) **Project Leader. In-progress.**
- 2013 - 2015 Evaluation of bioluminescent fungi for monitoring and classify Persistent Organic Pollutants (POPs) toxicity. Funded by Exploratory Research Grant Scheme (ERGS) of Ministry of High Education (MOHE). (Vote No. 4L102; RM 142,900). **Researcher. In-progress**
- 2014 - 2015 Bio-assessment Fish Population and Investigate Impact of Endocrine Disrupting Compounds (EDCs) in the Aquatic Environment. Funded by UTM Institutional Research Grant. (Vote No. 07H25; RM40,000). **Project Leader. In-progress**
- 2014 – 2016 Characterization of the stereochemical transformation of Reactive Azo, Anthraquinone and Triazine Dye Catalyzed by Ligninolytic Enzymes Secreted from White-rot Fungi. Funded by Fundamental Research Grant Scheme (FRGS) of Ministry of High Education (MOHE). (Vote No. 4F312; RM90,000) **Researcher. In-progress**

- 2014 -2016 Evaluation on the Fate and Transport Behavior Mechanisms of Nanosilver Particles in the Water Environment. Funded by Fundamental Research Grant Scheme (FRGS) of Ministry of High Education (MOHE). (Vote No. 4F619; RM102,000) **Project Leader. In-progress**
- 2015 Evaluation of Flood Disaster Impacted on Water Quality and Aquatic Habitat in Water Environment. Transdisciplinary Research Grant Scheme (TRGS) of Ministry of High Education (MOHE). (Vote No. 4L830; RM113,700) **Project Leader. In-Progress**
- 2015 Evaluation of Risk and Abatement Measures in Flood Disaster Impacted Area for Sustainable Waste Management. Transdisciplinary Research Grant Scheme (TRGS) of Ministry of High Education (MOHE). (Vote No. 4L834; RM114,070). **Researcher. In-progress.**
- 2015 – 2017 Characterization of resin extracted from cactus (*Opuntia ficus-indica*) as natural coagulant for water purification. Funded by UTM Institutional Research Grant. (Vote No. 10H17; RM49,985). **Researcher. In-progress.**

Consultancy

- 2002 – 2004 Application of Biochemical Products in Improving/Assisting Sewage Treatment Plant in Malaysia (Contract Research with IWK; RM67,500)
- 2010 – 2011 The Study on Proposed Centralized Effluent Treatment System for Seaport Worldwide – IMREC and Seaport Worldwide (RM121,000)
- 2011 – 2012 CSR Project - Clean Water Well for Water Supply Enhancement in Cambodia IPPTN Grant (RM95,000)
- 2013 – 2014 Development of Awareness Programs for Safe and Sustainable Rural Water Supply in Cambodia – KPT Grant (RM225,000).

Patent filing

- Bioplastic Raw Materials Production from Palm Oil Waste (**PI 2007 1650**)
 An Extraction Method for Recovering Polyhydroxyalkanoates (**PI 2008 3142**)
 A System for Obtaining Biodegradable Polymer (**PI 2008 2899**)

Publication

Scopus H-index: 4 Google H-index: 5

Peer-Review Articles/ Non-index

1. **Salmiati**, Farrah Aini Dahalan, Mohamed Zuhaili Mohamed Najib, Mohd Razman Salim, Zaini Ujang. (2015). Characteristics of Developed Granules Containing Phototrophic Aerobic Bacteria for Minimizing Carbon Dioxide Emission. *International Biodeterioration & Biodegradation* 102. 15-23. **IF: 2.24**
2. Nor Zaiha Arman, Mohd. Ismid Mohd. Said, **Salmiati**, Mohamad Shahrul Azri. (2015). Effects of Logging Activities on Ecological Water Quality Indicators in the Berasau River, Johor, Malaysia. *Environmental Monitoring and Assessment*. 187(8), 1-9. **IF: 1.68**
3. Nor Zaiha Arman, **Salmiati**, Mohd. Ismid Mohd. Said. (2015). Temporal Distribution of Benthic Macroinvertebrate Communities from Tropical Forest Stream in Southern Peninsular, Malaysia. *Sains Malaysiana* 44(9):1223-1228. **IF: 0.48**
4. Mohamed Zuhaili Mohamed Najib, **Salmiati**, Zaini Ujang, Mohd Razman Salim. Development of Microbial Granules Containing Photosynthetic Bacteria Using Palm Oil Mill Effluent (POME). *Jurnal Teknologi* (Accepted for publication). (Scopus Indexed)
5. Mahdi Rafieizonooz, Mohd Razman Salim, Ernaz Khankhaje, Mohd Warid Hussein, **Salmiati**. (2015).

Determining the Causes of Delay in Construction Projects in Tehran Using Factor Analysis. *Applied Mechanics and Materials*. 735, 109-116. **IF:0.15**

6. Nur Anis Ahmad Lutpi, Muhamad Ali Muhammad Yuzir, Ee Ling Yong, Mohamad Razman Salim, Zulkifli Yusop, **Salmiati**. (2015). The Effect of Water Quality on Removal of Acetaminophen in Surface Water by Ozonation Process. *Jurnal Teknologi*. 74(11), 1-7. (Scopus Indexed)
7. M. S. Muhamad, M. R. Salim, W. J. Lau, M. A. Yuzir, **S. Yunus**. (2015). Fabrication of Mixed Matrix Membrane Incorporated with Modified Silica Nanoparticles for Bisphenol A Removal. *Jurnal Teknologi*. 74(11), 23-31 (Scopus Indexed)
8. Farrah Aini Dahalan, Norhayati Abdullah, Ali Yuzir, Gustaf Olsson, **Salmiati**, Myzairah Hamdzah, Mohd Fadhil, Mohd Din, Siti Aqlima Ahmad, Khalilah Abdul Khalil, Aznah Nor Anuar, Zainura Zainon Noor, Zaini Ujang. (2015). A Proposed Aerobic Granules Size Development Scheme for Aerobic Granulation Process. *Bioresource Technology*. 181, 291-296. (**IF: 5.04**)
9. Faridahanim Ahmad, Shamila Azman, Mohd Ismid Mohd Said, Lavania-Baloo, Shaikhah Sabri and **Salmiati**. (2014). Metals in Tropical Seagrass-Accumulation of Mercury and Lead. *World Applied Sciences Journal*. 32(8), 1468-147. (Scopus Indexed)
10. **Salmiati**, Mohd Razman Salim, Zaini Ujang, Farrah Aini Dahalan, Gustaf Olsson. (2014). Polyhydroxyalkanoates (PHAs) Production from Complex Polymer Organic Waste Using Anaerobic and Aerobic Sequence Batch Reactor. *Journal of Biochemistry, Microbiology and Biotechnology*. 2(2), 22-27
11. Mohammed Saidu, Ali Yuzir, Mohd Razman Salim, **Salmiati**, Shamila Azman, Norhayati Abdullah. (2014). Biological pre-treated oil palm mesocarp fiber with cattle manure for biogas production by anaerobic digestion during acclimatization phase. *International Biodeterioration & Biodegradation*. 95, 189-194. (**IF: 2.24**)
12. Muhamed Zuhaili Muhamed Najib, Zaini Ujang, **Salmiati**. (2013). Morphological Characterization of Photosynthetic Microbial Granule in Palm Oil Mill Effluent (POME) For Reduction of Carbon Dioxide (CO₂) Emission. *The Malaysian Journal of Analytical Sciences*. 17(3), 445-453. (Scopus Indexed)
13. Nor Zaiha Arman, **Salmiati**, Mohd. Ismid Mohd. Said, Shamila Azman (2013). Anthropologic Influences on Aquatic life Community and Water Quality Status in Mengkibol River, Kluang, Johor, Malaysia. *Journal of Applied Sciences and Environmental Sanitation*. 8(3), 151-160. (Scopus Indexed)
14. Nor Zaiha Arman, Mohd. Ismid Mohd. Said, **Salmiati**, Shamila Azman, Muhammad Hazim Mat Hussin. (2013). Comparison Between Water Quality Index (WQI) and Biological Indicator Water Quality Index (BWQI) from Water Quality Assessment: Case Study of Melana River, Johor. *The Malaysian Journal of Analytical Sciences*. 17(2), 224 – 229 (Scopus Index)
15. Mohammed Saidu, Ali Yuzir, Mohd Razman Salim, **Salmiati**, Shamila Azman, Norhayati Abdullah (2013). Influence of palm oil mill effluent as inoculum on anaerobic digestion of cattle manure for biogas production. *Bioresource Technology*. 141, 174-176. (**IF: 5.04**)
16. M.F.Md. Din, M. Ponraj, Z. Ujang, M.v. Loosdrecht, **Salmiati**, S. Chelliapan, V. Zambare, G. Olsson (2012). Development of Bio-Rec[®] system for polyhydroxyalkanoates (PHA) production and its storage in mixed cultures of palm oil mill effluent (POME). *Bioresource Technology*. 124, 208-216. (**IF: 5.04**)
17. M.F.Md. Din, S.C. Huey, **Salmiati**, M.A. Ahmad, M. Ponraj, Z. Ujang and S. Chelliapan. (2012). Raw material resource for biodegradable plastic production from cafeteria wastes. *Journal of Scientific & Industrial Research*. 71, 573-578. (**IF: 0.5**)

18. Shamila Azman, Benedict Chan Wei Chiang, Razali Ismail, Jafariah Jaafar, Mohd Ismid Mohd Said, and **Salmiati**. (2012). Effect of Land Use on Coastal Water and *Perna viridis* at Johor Straits, Malaysia. *International Journal of Environmental Science and Development*. **3**(3), 237-239.
19. Shaikhah Sabri, Mohd Ismid Mohd Said, Shamila Azman, Khalida Muda, Mohd Azraai Mohd Kassim, and **Salmiati** (2012). Copper in Water, Sediment and *Strombus Canarium* at South Western Coast of Peninsular Malaysia. *International Journal of Environmental Science and Development*. **3**(3). 217-219.
20. Tony Hadibarata, Abdull Rahim Mohd Yusoff, **Salmiati**, Azmi Aris, Topik Hidayat, Risky Ayu Kristanti. (2012). Decolorization of Azo, Triphenylmethane and Anthraquinone Dyes by Laccase of a Newly Isolated *Armillaria sp.* F022. *Water, Air and Soil Pollution. Springer*. **223**, 1045-1054. (IF: 1.69)
21. **Salmiati**, Zaini Ujang, Mohd Razman Salim, Gustaf Olsson. (2010). COD Fractionation of Palm Oil Mill Effluent (POME): Typical Treatment, Biodegradability and Modeling. *Sustain. Environ. Res.*, 20(6), 353-359. (IF: 0.98)
22. **Salmiati**, Mohd Razman Salim, Ruhaidah Md Hassan, K.Y. Tan. (2007). Application of Biochemical Products as a Bioremediation Technique for Domestic Sewage Treatment Plants. *Water Science Technology*, Vol. 56 (7), 33-40. (IF: 1.24)
23. **Salmiati**, Zaini Ujang, Mohd Razman Salim, Mohd Fadhil Md Din, Mohd Azlan Ahmad. (2007). Intracellular Biopolymer Production Using Mixed Microbial Cultures from Fermented POME. *Water Science Technology*, Vol. 56 (8), 179-185. (IF: 1.24)
24. Mohd Fadhil Md Din, Zaini Ujang, M.C.M van Loosdrecht, **Salmiati**, Mohd Azlan Ahmad. (2006). Polyhydroxyalkanoates (PHAs) Production from Aerobic-Mixed Cultures. *Malaysian Journal of Civil Engineering*. Vol.18 (2), 109-128.
25. Mohd Fadhil Md Din, **Salmiati Muhd Yunus**, Zaini Ujang, Mohd Razman Salim, M.C.M. van Loosdrecht, Azlan Ahmad and Marpongahtun. (2005). A Complete Analysis on PHA Production and Their Rates Using Sunflower Oil and Mixed Cultures: Hydraulic Retention Times (HRT) Effects. *Journal of Chemical Science* Vol. 9 No. 3, 31-40.
26. **Salmiati Muhd Yunus**, Mohd Razman Salim, Yusof Ahmad, Ahmad Mahir Makhtar and Dewi Dwirianti. (2005). Solidifikasi dan Stabilisasi Bahan Buangan Kerak Baja dari Industri Baja Malaysia. *Jurnal Purifikasi* Vol. 6 No. 1, 31-36.
27. Mohd Fadhil Md Din, Azmi Aris, **Salmiati Muhd Yunus**, Wan Azelee Wan Abu Bakar and Mohd Razman Salim. Influence of Varying Reacting Conditions in the Degradation of Azo Dye Using Immobilised TiO₂ Photocatalysis. *Water Science Technology*, Vol. 46 (9), 255-262. (IF: 1.24).
28. Johan Sohaili, **Salmiati Muhd Yunus** and Mohd Razman Salim. (2002). The Cause and Prevention Methods of Peat Forest Fire. *Jurnal Purifikasi* Vol. 3 No. 3, 149-154.

Book Chapter

1. Zaini Ujang and **Salmiati**. (2011). Malaysia. *Wastewater Sludge: A Global Overview of the Current Status and Future Prospects* Editor(s): Ludovico Spinosa. ISBN: 978-184-339-388-7. IWA Publishing London.
2. Zaini Ujang, **Salmiati**, M. R. Salim. (2010). Microbial Biopolymerization Production from Palm Oil Mill Effluent (POME). *Biopolymers*. Magdy Elnashar (Ed.). ISBN 978-953-307-109-1. Sciyo. www.sciyo.com. Croatia Publisher

3. **Salmiati**, Zaini Ujang, Mohd Razman Salim. Microbial Community Analysis with High PHA Storage Capacity from Palm Oil Mill Effluent (POME). *Water Malaysia Magazine*, Issue no.17 August/September 2008, ISSN:1675-2392.
4. Mohd. Razman Salim, Zaini Ujang and **Salmiati** (2008) Horizontal Subsurface Constructed Wetlands (HSFCW). In: Waste Book. Penerbit UTM, Johor.

Proceeding

1. Mohamed Zuhaili Mohamed Najib, **Salmiati**, Zaini Ujang, Mohd Razman Salim. (2015). Formation and Characteristics of Microbial Granules Containing Photosynthetic Bacteria Using Palm Oil Mill Effluent (POME). The 2nd IWA Malaysia, Young Water Professionals Conference 2015. 17-20 March 2015. Vivatel Hotel Kuala Lumpur, Malaysia.
2. Mahdi Rafieizonooz, Mohd Razman Salim, Ernaz Khankhaje, Mohd Warid Hussein, **Salmiati**. (2014). Determining the Causes of Delay in Construction Projects in Tehran Using Factor Analysis. IGCESH2014. Universiti Teknologi Malaysia, Johor Bahru. Malaysia. 19-21 August 2014.
3. Omar Danial, **Salmiati**, Mohd Razman Salim. (2014). Nutrient Removal in GreyWater from Wet Market Using Sequencing Batch Reactor. 27th Regional Symposium of Malaysia Analytical Sciences (SKAM). KSL Hotel, Johor Bahru-Malaysia. 8-10 December 2014.
4. Mohamed Najib, **Salmiati**, Z. Ujang, M.R.Salim. (2014). Photosynthetic Microbial Granules Developed From Palm Oil Mill Effluent (POME). The 7th International Conference on Challenges in Environmental Science & Engineering (CESE) 2014, Persada Convention Center, Johor-Malaysia. 12-16 October 2014.
5. **Salmiati**, Farrah Aini Dahalan, Mohamed Zuhaili Mohamed Najib, Mohd Razman Salim, Zaini Ujang. (2014). Characteristics of Developed Granules Containing Phototrophic Aerobic Bacteria for Minimizing Carbon Dioxide Emission. The 7th International Conference on Challenges in Environmental Science & Engineering (CESE) 2014, Persada Convention Center, Johor-Malaysia. 12-16 October 2014.
6. **Salmiati**, Nor Zaiha Arman, Mohd Hazim Mat Hussin, Shahrul Azri Mohd Safeai, Mohd. Ismid Mohd. Said, Shamila Azman. (2013). Benthic Macroinvertebrate as an Alternative Tool for Biological Monitoring in Assessing River Water Quality. The 5th IWA-ASPIRE Conference and Exhibition. Daejeon Convention Center, Daejeon, Korea. 8-12 September 2013
7. M. Z. Mohamed Najib, **Salmiati**, M.R. Salim, and Z. Ujang. (2013). Characterization of Photosynthetic Microbial Granule - Reducing Carbon Dioxide Emission. The 5th IWA-ASPIRE Conference and Exhibition. Daejeon Convention Center, Daejeon, Korea. 8-12 September 2013.
8. Nor zaiha Arman, **Salmiati**, Mohd Ismid Mohd Said, Shamila Azman (2012). Application of Biological Water Quality Index (BWQI) in Assessing Pollution Level of Melana River, Johor. SKAM 25 INTERNATIONAL SEMINAR OF ANALYTICAL SCIENCES, 12-14 November 2012.
9. Shaikhah Sabri, Mohd Ismid Mohd Said, Shamila Azman, **Salmiati**. (2012). Lead (Pb) and Zinc (Zn) Concentration in Marine Gastropod *Strombus canarium* in Johor Coastal Waters. SKAM 25 INTERNATIONAL SEMINAR OF ANALYTICAL SCIENCES, 12-14 November 2012.
10. **Salmiati**, M.R Salim, Z. Ujang and G. Olsson.(2012). Recovery and Purification of Polyhydroxyalkanoates (PHAs) from Mixed Microbial Cultures of Palm Oil Mill Effluent (POME) SKAM 25 INTERNATIONAL SEMINAR OF ANALYTICAL SCIENCES, 12-14 November 2012.
11. Muhamed Zuhaili Muhamed Najib, Zaini Ujang, **Salmiati**. (2012). Morphological Characterization of Photosynthetic Microbial Granule in Palm Oil Mill Effluent (POME) For Reduction of Carbon Dioxide

(CO₂) Emission. SKAM 25 INTERNATIONAL SEMINAR OF ANALYTICAL SCIENCES, 12-14 November 2012.

12. Sopor Chea, Nur Zulaika Yusof, Chanveasna Huy, Vuth Mam, Tommy A Ngai, In Sambo, **Salmiati**, Abdull Rahim Mohd Yusoff and Davin Uy. (2012). Development of low cost arsenic adsorbent using porous ceramic for arsenic contaminated groundwater treatment. The 3rd International Symposium on Health Hazards of Arsenic Contamination of Groundwater and its Countermeasures. The 3rd Arsenic-Symposium in MIYAZAKI, November 23-25, 2012
13. Mohd Razman Salim, Alia Damayanti, **Salmiati**, Zaini Ujang and Muhamad Ali Muhammad Yuzir. (2012). The effects of flux variation and enhancing chemicals on biofouling of MBR treating palm oil mill effluent. International Conference on Challenges in Environmental Science & Engineering (CESE 2012). 9-13 September 2012. Melbourne, Australia.
14. Mohd Razman Salim, **Salmiati**, Muhamad Ali Muhammad Yuzir, Normala Hashim. (2012). Renewable energy: Bioconversion of organic wastes using anaerobic co-digestion for biofuel production International of Conference on Challenges in Environmental Science & Engineering (CESE 2012). 9-13 September 2012. Melbourne, Australia.
15. **Salmiati**, Mohd Razman Salim, Zaini Ujang and Shamila Azman. (2012). Potential Application of Sewage Sludge as Soil Amendment. International Proceeding of Chemical, Biological and Environmental Engineering Vol. 35. ISBN 978-981-07-2428-3. 66-67
16. Nor zaiha Arman, **Salmiati**, Mohd Ismid Mohd Said, Shamila Azman and Shahrul Azri Mohd Safeai. (2012). Benthic Macroinvertebrate as an Alternative Tool for Biological Monitoring in Assessing River Water Quality. International Proceeding of Chemical, Biological and Environmental Engineering Vol. 35. ISBN 978-981-07-2428-3. 52-56.
17. **Salmiati**, Z. Ujang and M.R. Salim. Respirometric Test of Palm Oil Mill Effluent Using COD- fractionation at Different Substrates as Carbon Sources. The 4th IWA-ASPIRE Conference and Exhibition, Tokyo International Forum, Tokyo, Japan. 2-6 Oct 2011.
18. Nor zaiha Arman, **Salmiati** and Mohd Ismid Mohd Said. The Macroinvertebrata Community as a Tool for Biological Monitoring in Mengkibol River, Kluang, Johor. The 4th IWA-ASPIRE Conference and Exhibition, Tokyo International Forum, Tokyo, Japan. 2-6 Oct 2011.
19. Liew Wai Loan, Mohd. Azraai Kassim, Khalida Muda, Mohd Ismid Mohd Said, Shamila Azman, Aznah Nor Anuar and **Salmiati**. Palm Oil Mill Effluent: A Comprehensive Review of Treatment methods and Polishing Technologies. The 4th IWA-ASPIRE Conference and Exhibition, Tokyo International Forum, Tokyo, Japan. 2-6 Oct 2011
20. **Salmiati**, Z.Ujang and M.R. Salim. Characterization of Agricultural Wastewater and Biomass in a Sequencing Batch Reactor (SBR) Using Respirometric Analysis. 8th International IWA Symposium Waste Management Problems in Agro-Industries. Çeşme, Izmir, Turkey. 22-24 June 2011.
21. Nor zaiha Arman, Mohd Ismid Mohd Said and **Salmiati**. Composition of Benthic Macroinvertebrates in the Gabai River, Peninsular Malaysia. ITS & UTM International Conference on Sustainable Urban Environment. ITS Surabaya, Indonesia. 8-10 December 2010.
22. Z. Ujang, A. Aris, **Salmiati**, A. Damayanti and A. Yuniarto. Hybrid Membrane Bioreactor (MBR) for Biotransformation and Biomineralization of Palm Oil Mill Effluent (POME). National Biotechnology Seminar. Putra World Trade Convention (PWTC), Kuala Lumpur. 24-26 May 2010.
23. Norhayati Abdullah, Zaini Ujang, Thomas Curtis, Adibah Yahya, Khalida Muda, **Salmiati**. Formation of Aerobic Granular Sludge with Palm Oil Mill Effluent (POME). Best Western Premier Seri Pacific Hotel,

Kuala Lumpur, Malaysia. 2-4 March 2010.

24. **Salmiati**, Mohd Razman Salim, Zaini Ujang and Gustaf Olsson. Process Development to Produce PHAs from Fermented Palm Oil Mill Effluent Using Anaerobic-Aerobic Sequencing Batch Reactor. 1st IWA Malaysia Young Water Professional International Conference (IWAYP2010), Best Western Premier Seri Pacific Hotel, Kuala Lumpur, Malaysia. 2-4 March 2010.
25. Farrah Aini Dahalan, Zaini Ujang, Zainura Zainon Noor, **Salmiati**, Aznah Nor Anuar. Sustainable Value of Phototrophic Bacteria in Reducing CO₂ Emission in an SBR. Proceeding of Postgraduate Seminar on Water Sustainability. Rumah Alumni, Universiti Teknologi Malaysia, 20 January 2010. ISBN 978-983-9805-82-6.
26. F.A. Dahalan, A. Nor Anuar, Z. Z. Noor, **Salmiati**, Z. Ujang and G.Olsson. Formation of Photosynthetic Aerobic Granular Sludge. International Congress of Malaysian Society for Microbiology (ICMSM) 2009, 1 – 4 December 2009, Parkroyal Hotel, Penang, Malaysia.
27. **Salmiati**, Zaini Ujang, Mohd Razman Salim, Gustaf Olsson. Recovery of Polyhydroxyalkanoates (PHAs) from Mixed Microbial Cultures by Simple Digestion and Saponification. The 3rd IWA-Aspire, Conference and Exhibition. Working for Asia-Pacific Water Sustainability. October 18-22, 2009. Taipei, Taiwan
28. **Salmiati**, Zaini Ujang, Mohd Razman Salim, Gustaf Olsson. COD Fractionation of Palm Oil Mill Effluent (POME): Typical Treatment, Biodegradability and Modeling. The 3rd IWA-Aspire, Conference and Exhibition. Working for Asia-Pacific Water Sustainability. October 18-22, 2009. Taipei, Taiwan.
29. Mohd Razman Salim, **Salmiati**, Zaini Ujang. PHA Production and Microbial Community Analysis from Palm Oil Mill Effluent (POME) Using Mixed Microbial Cultures. International Conference 2008, Sustainable Environmental Technology and Sanitation for Tropical Region. Institut Teknologi Sepuluh November Surabaya (ITS). 18-19 November 2008.
30. Zulkifli Ahmad, **Salmiati**, Zaini Ujang. A Novel Approach for POME Treatment and Recovery Using Hybrid MBR. Asia Water 2008, 1-4 April 2008, Putra Jaya, KLCC, Kuala Lumpur.
31. **Salmiati**, Zaini Ujang, Mohd Razman Salim, Mohd Fadhil Md. Din and Moh Azlan Ahmad. Intracellular biopolymer production using mixed microbial cultures from fermented palm oil mill effluent (POME). Proc. IWA Conference on Water Management in Developing Countries. 2007. Kuala Lumpur
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38. **Salmiati Muhd Yunus**, Johan Sohaili and Mohd Razman Salim. Managing Peat Forest Fire. Proceeding 2nd Bangi World Conference on Environmental Management – Facing Changing Conditions, Bangi. 13-14 Sept. 2004, 618 – 623.
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41. **Salmiati Muhd Yunus** and Johan Suhaili . The Cause and Prevention Methods of Peat Forest Fire. SANREM, UMS, Sabah 17-18 October 2002
42. Mohd Fadhil Md Din, Azmi Aris, **Salmiati Muhd Yunus**, Wan Azelee Wan Abu Bakar and Mohd Razman Salim Performance of Kinetic Rates, Biodegradability and Mineralization of Dye Azo in Immobilised System. Persidangan Kebangsaan Kedua Kejuruteraan Awam (AWAM 2001). USM, 5 –8 February 2002
43. **Salmiati Muhd Yunus**, Mohd Fadhil Md Din, Mohd Razman Salim, Yusof Ahmad, Ahmad Mahir Makhtar Pemejalan Dan Penstabilan Untuk Olahan Bahan Buangan Industri Jermang Keluli Tempatan. Persidangan Kebangsaan Kedua Kejuruteraan Awam (AWAM 2001). USM, 5 – 8 February 2002.
44. Mohd Fadhil Md Din, **Salmiati Muhd Yunus**, Azmi Aris, Mohd Razman Salim and Wan Azelee Wan Abu Bakar Influence of Varying Reacting Conditions in the Degradation of Azo Dye Using Immobilised TiO₂ Photocatalysis. The Proc. of IWA Conference on Water & Wastewater Management for Developing Countries, pp 309-316, Kuala Lumpur. 29 – 31 October 2001.
45. **Salmiati Muhd Yunus**, Muhd Fadhil Md Din, Mohd Razman Salim, Yusof Ahmad, Ahmad Mahir Makhtar Analisis Kimia Ke atas Jermang Keluli Tempatan dan Penggunaannya Sebagai Agregat Dalam Mortar. Seminar Kimia Analisis Malaysia (SKAM XVII), Melaka. 20 – 21 September 2001
46. Yusof Ahmad, Ahmad Mahir Makhtar and **Salmiati Muhd Yunus**. Kajian Penggunaan Jermang Keluli dari Kilang Penghasilan Keluli Tempatan untuk Batu Baur Kasar dalam Konkrit. Presented and Proceeding Seminar Persekitaran 2000, Tronoh. 20-21 November 2000.

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1. Development of Awareness Programs for Safe and Sustainable Rural Water Supply in Cambodia, Ministry of Education Malaysia. 2014
2. Clean Water Well for Water Supply Enhancement in Cambodia, Ministry of Education Malaysia. 2013
3. The Study on Proposed Centralized Effluent Treatment System for Seaport Worldwide – IMREC and Seaport Worldwide. 2012.
4. The Use of Constructed Wetland for Removal of Organic and Heavy Metals Landfill Leachate. Final Report submitted to MOSTI. 2005.
5. Application of Biochemical Products in Improving/Assisting Sewage Treatment Plant in Malaysia, Final Report submitted to IWK. 2004.

Other Task

1. Committee at the 2nd IWA Malaysia Young Water Professionals Conference 2015, Vivatel Hotel, Kuala

- Lumpur, 17 – 20 March 2015
2. Chairman at the 2nd IWA Malaysia Young Water Professionals Conference 2015, Vivatel Hotel, Kuala Lumpur, 17 – 20 March 2015
 3. Kumpulan Inovatif dan Kreatif (KIK) Kumpulan ReH2O Pejabat Hal Ehwal Mahasiswa. Universiti Teknologi Malaysia, 2014.
 4. Committee of JSPS Asian Core Program Comprehensive Symposium (CS4), Seminar Hall, Building V01, FBME, UTM, 3-4 December 2014.
 5. Facilitator of Water Awareness Conjunction with Boot Varsity Race. Putra Jaya. Malaysia. 15 – 19 October 2014.
 6. Facilitator at Summer Course Program 2014: Managing Water Environment in Tropical Countries, 20 January – 9 February 2014
 7. Editor of Journal of Environmental Bioremediation and Toxicology (JEBAT), Universiti Malaysia Perlis (UNIMAP). 2013-2015.
 8. Committee of Workshop on Water resources in Cambodia. BATC UTM Kuala Lumpur. 25-27 September 2013.
 9. Committee of SKAM25-International Seminar of Analytical Science. Medan-Indonesia. 12-14 November 2012.
 10. Facilitator at Summer Course Program 2012: Managing Water Environment in Tropical Countries, Department of Environmental Engineering, Faculty of Civil Engineering, Universiti Teknologi Malaysia, Johor-Malaysia. 2-19 July 2012
Committee of ITS & UTM International Conference on Sustainable Urban Environment. ITS Surabaya, Indonesia. 8-10 December 2010.
 11. Committee of Water Awareness Conjunction with Boot Varsity Race. Putra Jaya. Malaysia. 4 – 10 October 2010.
 12. Committee of The 1st IWA Malaysia Young Water Professional International Conference (IWAYP2010), Best Western Premier Seri Pacific Hotel, Kuala Lumpur, Malaysia 2-4 March 2010
 13. Committee of Postgraduate Seminar on UTM & UNESCO 2010 Water Sustainability Collaboration, 20 January 2010, Rumah Alumni, Universiti Teknologi Malaysia.
 14. Committee of Water Forum, Collaboration British High Commission, 28 October 2009, Senate Building, Universiti Teknologi Malaysia, Johor Bahru, Malaysia
 15. Committee of International Graduate Conference on Engineering and Science (IGCES 2008), UTM
 16. Facilitator of Environmental Public Awareness Program, Larut Matang-Perak and GeoPark, Langkawi, May 2008
 17. Facilitator of the World Water 2007, Terengganu, April 2007
 18. Committee of 1st Regional Postgraduate Conference on Engineering and Science (RPCES 2006), UTM
 19. Member/Participant of Administration Indonesian General Election, 2004, Johor Bahru, Malaysia