


REFERENCES

<http://www.watawalaplantations.lk/crops/palm-oil.html>

Abdul Karim Shah, S.Farman Ali Shah, and Hafeez Ur Rehman Memon, 2013 “*Coagulation-Adsorption Hybrid process for the treatment of dyes and pigments wastewater,*” Mehran University research journal of Engineering &Technology Journal of Information and Control, vol. 32, no. 4, pp. 595-602.

Abdul Shukor Abdul Aziz, Latifah Abdul Manaf, Hasfalina Che Man and Nadavala Siva Kumar,. 2014 “*Kinetic Modeling and Isotherm Studies for Copper (II) Adsorption onto Palm Oil Boiler Mill Fly Ash (POFA) as a Natural Low Cost Adsorbent*” Bio Resources 9(1), 336-356.

Aber, S., & M.Sheydaei,. 2012 “*Removal of COD from Industrial Effluent Containing Indigo Dye Using Adsorption Method by Adsorption Method by Activated Carbon Cloth: Optimization, Kinetic, and Isotherm Studies. Clean -Soil, Air, Water*” 40(1), 87-94.

 **University of Moratuwa, Sri Lanka.**
Abdul. Latif Ahmad, Norliza Ibrahim, Suzylawati Ismail, and Subash Bhatia,. 2002 “*Coagulation-Sedimentation-Extraction pretreatment methods for the removal of suspended solids and residual oil from Palm oil mill effluent(POME),*” IUUM Engineering Journal, vol. 3, no. 1, pp. 25–33.

Ahmad, A.L., S. Ismail and S. Bhatia, 2005. Ultrafiltration behavior in the treatment of agro-industry effluent: Pilot scale studies. Chemical Engineering Sci., 60: 5385-5394.

Ahmad, A.L., S. Bhatia, N. Ibrahim and J.M. Tan., 2000. “*Membrane technology in palm oil mill effluent treatment*” Chemical and process engineering conference 2000, Singapore.

A.M.Rusnani and A.N.Ma, 1999 “*Physical properties of boiler ash from various palm oil mills*” PORIM Bulletin 38, pp 14-19.

A.M.Abdelaal, 2004 “Using a natural coagulant for the treatment of wastewater” IWTC, pp 781-792.

A S M Abdul Awal , Siew Kiat Nguong, 2010 “A short-term investigation on high volume palm Palm oil fuel ash (POFA) concrete” 35thConference on Our world in concrete & structure: 25 - 27, Singapore Article Online Id: 100035023.

Ashraful Islam, Arun Kanti Guha ,. 2006 “Removal of pH, TDS and Color from Textile Effluent by Using Coagulants and Aquatic/Non Aquatic Plants as Adsorbents” Ind. Eng. Chem. , 45, 3969-3973.

B.H.A.K.T. Ariyadasa ,. 2003“Study on processes of coagulation and adsorption to remove perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) from domestic wastewater and industrial wastewater”.

C. C. Lee, Shun Dar., 2007 “Lin Handbook of Environmental Engineering Calculations”, 2nd edition, McGraw-Hill Companies, ISBN: 0071475834.

Chris .O Nwoko and Sola Ogunyemi ,2010 “Effect of Palm Oil Mill Effluent (POME) on Microbial Characteristics in a Humid Tropical Soil under Laboratory Conditions” *International Journal of Environmental Science and Development*” Vol. 1, No. 4,pp 307-314.

Donald W. Sundstrom and H.E.KLEI, 1979 “Wastewater treatment” Prentice hall, INC. Englewood Cliffs, N.J.07632.

Dogan Karadag*,Sema Tok, Eda Akgul, Kubra Ulucan, Hulya Evden, and Mehmet A.Kaya ,. 2006 “Combining Adsorption and Coagulation for the Treatment of Azo and Anthraquinone Dyes from Aqueous Solution” Ind. Eng. Chem. Res., 45, 3969-3973.

Edris Bazrafshan, Ferdos Kord Mostafapour, Mehdi Farzadkia, Kamal Aldin Ownagh, Amir Hossein Mahvi,.2012 “Slaughterhouse Wastewater Treatment by Combined Chemical Coagulation and Electrocoagulation Process” PloS, vol 7, issue 6, pp 1-8.

Fakhrul-Razi, A. and M.J.M.M. Noor, 1999. Treatment of palm oil mill effluent (POME) with the membrane anaerobic system (MAS). *Water Science Technology*, 39(10-11): 159-163.

Frank R. Spellman., 2003 “*Handbook of Water and Wastewater Treatment Plant Operations*” Lewis Publishers.

G.M. Ayoub ., A. Hamzeh, L. Semerjian., 2011 “Post treatment of tannery wastewater using lime/bittern coagulation and activated carbon adsorption” Elsevier, *Desalination*, 273, pp 359- 365.

G. Vijayaraghavan, T. Sivakumar, A. Vimal Kumar, 2011 “*Application of plant based Coagulant for wastewater treatment*”, IJAERS, Vol. I, Issue I, pp 88-92.

Hameed, B.H., A.L. Ahmad and N. Hoon, 2003 “*Removal of residual oil from palm oil mill effluent using solvent extraction method*” *Journal Teknologi.*, 33-42.



University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Hendrik Nollet a, Murielle Roels a, Pierre Lutgen b, Paul Van der Meeren c, Willy Verstraete ., 2003 “*Removal of PCBs from wastewater using fly ash*” *Chemosphere* 53 ,pp 655–665.

Hojjat, M. and M.A.M. Salleh, 2009. “*Optimization of POME Anaerobic Pond*” *J. European Scientific Res.*, 32: 455-459.

Hongtao Wang, Arturo A. Keller, M. ASCE and Fengting Li., 2010 “*Natural Organic Matter Removal by Adsorption onto Carbonaceous Nanoparticles and Coagulation*” *J. Environ.* 136:1075-108

I.A.W. Tan, A.L. Ahmad, B.H. Hameed, 2008 “*Preparation of activated carbon from coconut husk: Optimization study on removal of 2, 4, 6-trichlorophenol using response surface methodology*”, *Journal of Hazardous Materials* 153, 709–71.

I. Bodlund, A. R. Pavankumar, R. Chelliah, S. Kasi, K. Sankaran, G. K. Rajarao ,.
“Coagulant proteins identified in Mustard: a potential water treatment agent”. Int. J. Environ. Sci. Technol. Springer 11:873–880

Ida Bodlund,. 2013 “Coagulant Protein from plant materials: Potential Water Treatment Agent” .,2013 M.Sc thesis in Royal institute of technology. Stockholm.

Igwe,J.C, Onyegbado C.O, Abia A.A, 2010 “Studies on the Kinetics and the intraparticle diffusivities of BOD, Colour and TSS reduction from Palm oil mill effluent (POME) using boiler fly ash,” African journal of Environmental science and technology, vol. 4(6), pp. 392-400.

Ir. Dr. Ma Ah Ngan, Mr. Godwin Singam, Ms. Jenny Tan Suat Eam and Mr. Lim Thian Leong,. 1999 “ Industrial processes and environment – Crude Palm oil production” a hand book.

 University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk
James .R Pfafflin, and Edward .N .Zeigler,. 2006 “Encyclopedia of Environmental science and Engineering,” 5th edition, CRC Press Taylor and Francis Group, vol.1 A-L.

J. Beltrán-Heredia, J. Sánchez-Martín, 2009, “Improvement of water treatment pilot plant with *Moringa oleifera* extract as flocculant agent,” Environmental Technology, vol. 30(6), pp. 525-534.

J.C. Igwe and C.C. Onyegbado,. 2007 “A Review of Palm Oil Mill Effluent (Pome) Water Treatment” Global Journal of Environmental Research, 1 (2): 54-62.

Jonathan T. Alexander, Faisal I. Hai, Turki M. Al-aboud. 2012 “Chemical coagulation-based processes for trace organic contaminant removal: Current state and future potential”, Journal of Environmental Management, Volume 111, pp 195–207.

J.P. Sutherland, G.K. Folkard, M.A. Mtawali and W.D. Grant,1994 “*Moringa oleifera as a natural coagulant*” 20th WEDC Conference,pp. 297-299.

K.Qureshi, I.Bhatti, and M.S.Shaikh,. 2011 “*Development of Bio-Coagulant from Mango Pit for the purification of Turbid water,*” Sindh University Research Journal (Science series) Computer Magazine, vol. 43(1), pp. 105–110.

Kutty, S.R.M., S.N.I.Ngatenah, N.A.Johan, & K.A.C.Amat,. 2011 “*Removal of Zn(II), Cu(II), Chemical Oxygen Demand (COD) and Color from Anaerobically Treated Palm Oil Mill Effluent (POME)using Microwave Incinerated Rice Husk Ash (MIRHA)*”, IPCBEE vol.12.

Linke, B., 2006“*Kinetic study of thermophilic anaerobic digestion of solid wastes from potato processing*” Biomass and Bioenergy, 30: 892-896.

Mancy ,K.H., 1971 “*Instrumental Analysis for water Pollution Control*” Ann Arbor Science Publishers, Inc., Michigan.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Macci, C., G. Masciandaro and B. Ceccanti, 2009. “*Vermicomposting of olive oil mill wastewaters*” Waste Manage Resources, 28(8): 738.

Metcalf and Eddy. 2003 “*Wastewater Engineering; Treatment and reuse*” McGraw Hill Publication

M. Megersa, A. Beyene, Argaw Ambelu,B. Woldeab,. 2014 “*The use of indigenous plant species for drinking water treatment in developing countries: a review*” JBES, Vol. 5, No. 3, p. 269-281

Mohd Omar Fatehah, Md. Sohrab Hossain, Tjoon Tow Teng ,. 2013 “*Comparative Study on Natural and Commercial Coagulants: Treatment of Semiconductor Wastewater in Sludge Production and Removal of Heavy Metals*” (IJISME), Volume-1, Issue-7,pp.1-8.

M. Sciban, M. Klasnja, J. Stojimirovic, 2005 “*Investigation of coagulation activity of natural coagulants from seeds of different leguminose species,*” Acta Periodica Technologica, vol. 36, pp. 81-87.

Munirat, A.I.2010. “*Use of hybrid membrane system for the production of process water biologically treated palm oil mill effluent (POME)*” Unpublished master dissertation, International Islamic University Malaysia, Kuala Lumpur.

Nicholas.p. Cheremissinoff ., 2002 “*Handbook of water and wastewater treatment technology*” Butterworth-Heinemann.

Nawawi Mohd, M.G., N. Othman, A.N. Sadikin, S.S. Khalid and N. Yusof, 2008. “*Development of empty fruit bunch filter with addition of chitosan for pre-treatment of palm oil mill effluent*” J. Chemical Natural Resources Eng., 2: 8-16.

Parveen Fatemeh Rupani, Rajeev Pratap Singh, M. Hakimi Ibrahim and Norizan Esa., 2010 “*Review of Current Palm Oil Mill Effluent (POME) Treatment Methods: Vermicomposting as a Sustainable Practice*” World Applied Sciences Journal 11 (1):pp 70-81



University of Moratuwa, Sri Lanka.

Electronic Theses & Dissertations

www.lib.mrt.ac.lk

Parveen Fatemeh Rupani, Rajeev Pratap Singh, M. Hakimi Ibrahim and Norizan Esa .,2010 “*Review of Current Palm Oil Mill Effluent (POME)Treatment Methods: Vermicomposting as a Sustainable Practice*”World Applied Sciences Journal 10(10): pp1190-1201.

Perez, M., L.I. Romero and D. Sales, 2001. “*Organic matter degradation kinetics in an anaerobic*”

P. F. Rupani, R. P. Singh, 2M. H. Ibrahim and Norizan Esa., 2010 “*Review of Current Palm Oil Mill Effluent (POME) Treatment Methods: Vermicomposting as a Sustainable Practice*” World Applied Sciences Journal 11 (1):pp 70-81.

“*Powdered Activated Carbon (PAC)*” AENSI Journals Advances in Environmental Bilyg, ISSN:199-50756 EISSN: 1998-1066 , 590-595, 2014.

Ruth E Weiner and Robin A. Matthews., 2003 “*Environmental Engineering*” (Fourth Edition), Butterworth-Heinemann.

Sanjay Motling ; S.N.Mukherjee*; AmitDutta ,. 2014 “*Real life MSW Landfill leachate treatment by combined coagulation-flocculation and carbon adsorption for removal of phenol and organic load (COD)*” International Journal of Chemical and Environmental Engineering, Volume 5, No.1,pp 45-50.

Schuchardt, F., K. Wulfert, D. Darnoko and T. Herawan, 2007. “*Effect of new palm oil mill processes on the EFB and POME utilization*” Proceedings of Chemistry and Technology Conference PIPOC 2007, Kuala Lumpur, 26-30 August 2007.

Sethupathi, S., 2004“*Removal of Residues oil from palm oil mill effluent (POME) using Chitosan*” Universiti Sains Malaysia.

Sheng Chang; T. David Waite; Peter E. A. Ong; Andrea I. Schäfer and Anthony G. Fane, 2004 “*Assessment of Trace Estrogenic Contaminants Removal by Coagulant Addition, Powdered Activated Carbon Adsorption and Powdered Activated Carbon /Microfiltration Processes*” ASCE Journal of Environmental Engineering, 130, 7, 736-742.

Suleyman AremuMuyibi, 1Tamrin Tajari, 1Mohammed Saedi Jami, 1Mutiu Kolade Amosa “*Removal of Organics from Treated Palm Oil Mill Effluent (POME)Using thermophilic fluidised bed Bioreactor. Anaerobe*,7: 25-35.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Suleyman AremuMuyibi, 1Tamrin Tajari, 1Mohammed Saedi Jami, 1Mutiu KoladeAmosa,. 2014 “*Removal of Organics from Treated Palm Oil Mill Effluent (POME) Using Powdered Activated Carbon (PAC)*” Adv. Environ. Biol., 8(3), 590-595.

T.Laohaprapanon, P.Prasertsan and A.H.Kittikun, 2005 “*Physical and chemical Separation of oil and suspended solids from Palm oil mill effluent*” , Asian journal Energy and Environment, Vol.6,pp. 39.55.

Thunyalux Ratpukdi, 2012 “*Decolonization of Anaerobically Treated Palm Oil Mill Wastewater Using Combined Coagulation and Vacuum Ultraviolet-Hydrogen Peroxide*” IJCEA, Vol. 3, pp333-336.

Wood, B.J., K.R. Pillai and J.A. Rajaratnam, 1979. “*Palm oil mill effluent disposal on land*” Agricultural Wastes, 1: 103-127.

WU, T.Y., A.W. Mohammad, J.M. Jahim and N. Anuar, 2009 "A holistic approach to managing palm oil mill effluent (POME): Biotechnological advances in the sustainable reuse of POME" *Biotechnology Advances*, 27: 40-52.

Y.K.Singh,. 2006 "Environmental science "New age international publisher, ISBN (10) : 81-224-2330-2 ISBN (13) : 978-81-224-2330-3.

Y.Zarina, A.M. Mustafa al-Bakri, H.Kamarudin,I.Khairul Nizar and A.R.Rafiza,2012 "Review on various ash from Palm oil waste as Geopolymer material"

Zalina Othman,S.Bhatia, Abdul Latif Ahmad, 2008 "Influence of the settle ability parameters for Palm oil mill effluent (POME) Pretreatment by using *Moringa Oleifera* seeds as an environmental friendly coagulant" *ICENV*. pp. 1-9.

Zahrim, A.Y., F.M. Rachel, S. Menaka, S.Y. Su, F. Melvin and E.S. Chan, 2009. "Decolourisation of Anaerobic Palm Oil Mill Effluent via Activated Sludge-Granular Activated Carbon" *World Applied Sciences J. Volume 5* (Special Issue for Environment), pp: 126-129.



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