# Publication bibliography

Adeola, Samuel; Revitt, Michael; Shutes, Brian; Garelick, Hemda; Jones, Huw; Jones, Clive (2009): CONSTRUCTED WETLAND CONTROL OF BOD LEVELS IN AIRPORT RUNOFF. In *International Journal of Phytoremediation* 11 (1), pp. 1–10. DOI: 10.1080/15226510802363220.

Al-Baldawi, Israa Abdulwahab; Abdullah, Siti Rozaimah Sheikh; Suja, Fatihah; Anuar, Nurina; Mushrifah, Idris (2013): Effect of aeration on hydrocarbon phytoremediation capability in pilot sub-surface flow constructed wetland operation. In *Ecological Engineering* 61, pp. 496–500. DOI: 10.1016/j.ecoleng.2013.10.017.

Araya, F.; Vera, I.; Sáez, K.; Vidal, G. (2016): Effects of aeration and natural zeolite on ammonium removal during the treatment of sewage by mesocosm-scale constructed wetlands. In *Environmental technology* 37 (14), pp. 1811–1820. DOI: 10.1080/09593330.2015.1133715.

Arias, C. A.; Oirschot, D. V.; Kilian, R.; Pascual, A.; Carvalho, P.; Lv, T. et al. (2015): Design and performance evaluation of a highly loaded aerated treatment wetland managing effluents from a food processing industry in Denmark. In *Water Practice and Technology* 10 (4), pp. 644–651. DOI: 10.2166/wpt.2015.074.

Auvinen, Hannele; Gebhardt, Wilhelm; Linnemann, Volker; Du Laing, Gijs; Rousseau, Diederik P. L. (2017): Laboratory- and full-scale studies on the removal of pharmaceuticals in an aerated constructed wetland: effects of aeration and hydraulic retention time on the removal efficiency and assessment of the aquatic risk. In *Water science and technology : a journal of the International Association on Water Pollution Research* 76 (5-6), pp. 1457–1465. DOI: 10.2166/wst.2017.328.

Auvinen, Hannele; Havran, Iva; Hubau, Laurens; Vanseveren, Lize; Gebhardt, Wilhelm; Linnemann, Volker et al. (2017): Removal of pharmaceuticals by a pilot aerated sub-surface flow constructed wetland treating municipal and hospital wastewater. In *Ecological Engineering* 100, pp. 157–164. DOI: 10.1016/j.ecoleng.2016.12.031.

Avila, Cristina; Nivala, Jaime; Olsson, Linda; Kassa, Kinfe; Headley, Tom; Mueller, Roland A. et al. (2014): Emerging organic contaminants in vertical subsurface flow constructed wetlands: influence of media size, loading frequency and use of active aeration. In *The Science of the total environment* 494-495, pp. 211–217. DOI: 10.1016/j.scitotenv.2014.06.128.

Boog, Johannes; Nivala, Jaime; Aubron, Thomas; Wallace, Scott; van Afferden, Manfred; Müller, Roland Arno (2014): Hydraulic characterization and optimization of total nitrogen removal in an aerated vertical subsurface flow treatment wetland. In *Bioresource technology* 162, pp. 166–174. DOI: 10.1016/j.biortech.2014.03.100.

Boog, Johannes; Nivala, Jaime; Aubron, Thomas; Wallace, Scott; Sullivan, Christopher; van Afferden, Manfred; Müller, Roland (2016): Treatment Wetland Aeration without Electricity? Lessons Learned from the First Experiment Using a Wind-Driven Air Pump. In *Water* 8 (11), p. 502. DOI: 10.3390/w8110502.

Boog, Johannes; Nivala, Jaime; Aubron, Thomas; Mothes, Sibylle; van Afferden, Manfred; Müller, Roland A. (2018): Resilience of carbon and nitrogen removal due to aeration interruption in aerated treatment wetlands. In *The Science of the total environment* 621, pp. 960–969. DOI: 10.1016/j.scitotenv.2017.10.131.

Brix, Hans: Do macrophytes play a role in constructed treatment wetlands?

Butterworth, E.; Dotro, G.; Jones, M.; Richards, A.; Onunkwo, P.; Narroway, Y.; Jefferson, B. (2013): Effect of artificial aeration on tertiary nitrification in a full-scale subsurface horizontal flow constructed wetland. In *Ecological Engineering* 54, pp. 236–244. DOI: 10.1016/j.ecoleng.2013.01.034.

Butterworth, Eleanor; Richards, Andrew; Jones, Mark; Brix, Hans; Dotro, Gabriela; Jefferson, Bruce (2016): Impact of aeration on macrophyte establishment in sub-surface constructed wetlands used for tertiary treatment of sewage. In *Ecological Engineering* 91, pp. 65–73. DOI: 10.1016/j.ecoleng.2016.01.017.

Butterworth, Eleanor; Richards, Andrew; Jones, Mark; Mansi, Gabriella; Ranieri, Ezio; Dotro, Gabriela; Jefferson, Bruce (2016): Performance of Four Full-Scale Artificially Aerated Horizontal Flow Constructed Wetlands for Domestic Wastewater Treatment. In *Water* 8 (9), p. 365. DOI: 10.3390/w8090365.

Carballeira, T.; Ruiz, I.; Soto, M. (2017): Aerobic and anaerobic biodegradability of accumulated solids in horizontal subsurface flow constructed wetlands. In *International Biodeterioration & Biodegradation* 119, pp. 396–404. DOI: 10.1016/j.ibiod.2016.10.048.

Costa-Pierce, Barry A. (1998): Preliminary investigation of an integrated aquaculture–wetland ecosystem using tertiary-treated municipal wastewater in Los Angeles County, California. In *Ecological Engineering* 10, pp. 341–354.

Cottingham, P. D.; Davies, T. H.; Hart, B. T. (1999): Aeration to Promote Nitrification in Constructed Wetlands. In *Environmental technology* 20 (1), pp. 69–75. DOI: 10.1080/09593332008616794.

Craig D. Martin; Keith D. Johnson: The use of extended aeration and in-series surface-flow wetlands for landfill leachate treatment.

Dickopp, Jan; Kazda, Marian; Čížková, Hana (2011): Differences in rhizome aeration of Phragmites australis in a constructed wetland. In *Ecological Engineering* 37 (11), pp. 1647–1653. DOI: 10.1016/j.ecoleng.2011.06.030.

Ding, Yi; Wang, Wei; Liu, Xingpo; Song, Xinshan; Wang, Yuhui; Ullman, Jeffrey L. (2016): Intensified nitrogen removal of constructed wetland by novel integration of high rate algal pond biotechnology. In *Bioresource technology* 219, pp. 757–761. DOI: 10.1016/j.biortech.2016.08.044.

Dong, Huiyu; Qiang, Zhimin; Li, Tinggang; Jin, Hui; Chen, Weidong (2012): Effect of artificial aeration on the performance of vertical-flow constructed wetland treating heavily polluted river water. In *Journal of Environmental Sciences* 24 (4), pp. 596–601. DOI: 10.1016/S1001-0742(11)60804-8.

Du, Xin; Shi, Chunhong; Ma, Fangshu (2016): Influence of intermittent aeration and organic loading rate on lab-scale constructed wetland systems treating synthetic wastewater. In *Desalination and Water Treatment* 57 (21), pp. 9651–9659. DOI: 10.1080/19443994.2015.1033649.

Fan, Jinlin; Liang, Shuang; Zhang, Bo; Zhang, Jian (2013): Enhanced organics and nitrogen removal in batch-operated vertical flow constructed wetlands by combination of intermittent aeration and step feeding strategy. In *Environmental science and pollution research international* 20 (4), pp. 2448–2455. DOI: 10.1007/s11356-012-1130-7.

Fan, Jinlin; Wang, Wengang; Zhang, Bo; Guo, Yeye; Ngo, Huu Hao; Guo, Wenshan et al. (2013): Nitrogen removal in intermittently aerated vertical flow constructed wetlands: impact of influent COD/N ratios. In *Bioresource technology* 143, pp. 461–466. DOI: 10.1016/j.biortech.2013.06.038.

Fan, Jinlin; Zhang, Bo; Zhang, Jian; Ngo, Huu Hao; Guo, Wenshan; Liu, Feifei et al. (2013): Intermittent aeration strategy to enhance organics and nitrogen removal in subsurface flow constructed wetlands. In *Bioresource technology* 141, pp. 117–122. DOI: 10.1016/j.biortech.2013.03.077.

Fan, Jinlin; Zhang, Jian; Guo, Wenshan; Liang, Shuang; Wu, Haiming (2016): Enhanced long-term organics and nitrogen removal and associated microbial community in intermittently aerated subsurface flow constructed wetlands. In *Bioresource technology* 214, pp. 871–875. DOI: 10.1016/j.biortech.2016.05.083.

Fang, Yingke; Hu, Zhen; Zou, Yina; Fan, Jinlin; Wang, Qingsong; Zhu, Zhuoran (2017): Increasing economic and environmental benefits of media-based aquaponics through optimizing aeration pattern. In *Journal of Cleaner Production* 162, pp. 1111–1117. DOI: 10.1016/j.jclepro.2017.06.158.

Foladori, Paola; Ruaben, Jenny; Ortigara, Angela R. C. (2013): Recirculation or artificial aeration in vertical flow constructed wetlands: a comparative study for treating high load wastewater. In *Bioresource technology* 149, pp. 398–405. DOI: 10.1016/j.biortech.2013.09.099.

Forbes, Dean A.; Reddy, G. B.; Hunt, Patrick G.; Poach, M. E.; Ro, Kyoung S.; Cyrus, Johnsely S. (2010): Comparison of aerated marsh-pond-marsh and continuous marsh constructed wetlands for treating swine wastewater. In *Journal of environmental science and health. Part A, Toxic/hazardous substances & environmental engineering* 45 (7), pp. 803–809. DOI: 10.1080/10934521003708927.

Freeman, Andrew I.; Surridge, Ben W. J.; Matthews, Mike; Stewart, Mark; Haygarth, Philip M. (2018): New approaches to enhance pollutant removal in artificially aerated wastewater treatment systems. In *The Science of the total environment* 627, pp. 1182–1194. DOI: 10.1016/j.scitotenv.2018.01.261.

Fu, Guiping; Yu, Tianyu; Huangshen, Linkun; Han, Jingyi (2018): The influence of complex fermentation broth on denitrification of saline sewage in constructed wetlands by heterotrophic nitrifying/aerobic denitrifying bacterial communities. In *Bioresource technology* 250, pp. 290–298. DOI: 10.1016/j.biortech.2017.11.057.

Gu, Dungang; Xu, Huan; He, Yan; Zhao, Feng; Huang, Minsheng (2015): Remediation of Urban River Water by Pontederia Cordata Combined with Artificial Aeration: Organic Matter and Nutrients Removal and Root-Adhered Bacterial Communities. In *International Journal of Phytoremediation* 17 (11), pp. 1105–1114. DOI: 10.1080/15226514.2015.1045121.

Guan, Yidong; Zhang, Yuan; Zhong, Chun-Ni; Huang, Xiao-Feng; Fu, Jie; Zhao, Dongye (2015): Effect of operating factors on the contaminants removal of a soil filter: multi-soil-layering system. In *Environ Earth Sci* 74 (3), pp. 2679–2686. DOI: 10.1007/s12665-015-4288-8.

Guo, Luchen; He, Keli; Wu, Shubiao; Sun, Hao; Wang, Yanfei; Huang, Xu; Dong, Renjie (2016): Optimization of high-rate TN removal in a novel constructed wetland integrated with microelectrolysis system treating high-strength digestate supernatant. In *Journal of environmental management* 178, pp. 42–51. DOI: 10.1016/j.jenvman.2016.04.044.

Hong, Jun-Ming; Hu, Miao-Miao; Sun, Rong; Chen, Bor-Yann (2016): Unraveling characteristics of nutrient removal and microbial community in a novel aerated landscape - Activated sludge ecological system. In *Bioresource technology* 212, pp. 280–288. DOI: 10.1016/j.biortech.2016.04.042.

Hou, Jie; Wang, Xin; Wang, Jie; Xia, Ling; Zhang, Yiqing; Li, Dapeng; Ma, Xufa (2018): Pathway governing nitrogen removal in artificially aerated constructed wetlands: Impact of aeration mode and influent chemical oxygen demand to nitrogen ratios. In *Bioresource technology* 257, pp. 137–146. DOI: 10.1016/j.biortech.2018.02.042.

Hou, Jie; Xia, Ling; Ma, Tao; Zhang, Yiqing; Zhou, Yiyong; He, Xugang (2017): Achieving short-cut nitrification and denitrification in modified intermittently aerated constructed wetland. In *Bioresource technology* 232, pp. 10–17. DOI: 10.1016/j.biortech.2017.02.027.

Hyun, Kyounghak; Choi, Joungjoo; Ki, Dongwon; Park, Joonhong; Ahn, Soojeung; Oh, Hyunje; Choung, Youn-Kyoo (2016): Bathroom wastewater treatment in constructed wetlands with planting, non-planting and aeration, non-aeration conditions. In *Desalination and Water Treatment* 57 (2), pp. 709–717. DOI: 10.1080/19443994.2014.997991.

Chazarenc, F.; Gagnon, V.; Comeau, Y.; Brisson, J. (2009): Effect of plant and artificial aeration on solids accumulation and biological activities in constructed wetlands. In *Ecological Engineering* 35 (6), pp. 1005–1010. DOI: 10.1016/j.ecoleng.2008.07.008.

Cheng, Hao; Wang, You-Shao; Fei, Jiao; Jiang, Zhao-Yu; Ye, Zhi-Hong (2015): Differences in root aeration, iron plaque formation and waterlogging tolerance in six mangroves along a continues tidal gradient. In *Ecotoxicology (London, England)* 24 (7-8), pp. 1659–1667. DOI: 10.1007/s10646-015-1474-0.

Chyan, Jih Ming; Jhu, Yu Xian; Chen, I. Ming; Shiu, Ruei Feng (2016): Improvement of nitrogen removal by external aeration and intermittent circulation in a subsurface flow constructed wetland of landscape garden ponds. In *Process Safety and Environmental Protection* 104, pp. 587–597. DOI: 10.1016/j.psep.2016.02.016.

Chyan, Jih Ming; Lin, Chien Jung; Lin, Yu Chi; Chou, Yi An (2016): Improving removal performance of pollutants by artificial aeration and flow rectification in free water surface constructed wetland. In *International Biodeterioration & Biodegradation* 113, pp. 146–154. DOI: 10.1016/j.ibiod.2016.04.034.

Ilyas, Huma; Masih, Ilyas (2018): The effects of different aeration strategies on the performance of constructed wetlands for phosphorus removal. In *Environmental science and pollution research international* 25 (6), pp. 5318–5335. DOI: 10.1007/s11356-017-1071-2.

Johnson, Michelle L.; Mara, D. Duncan (2007): Ammonia Removal from Facultative Pond Effluents in a Constructed Wetland and an Aerated Rock Filter: Performance Comparison in Winter and Summer. In *Water Environment Research* 79 (5), pp. 567–570. DOI: 10.2175/106143007X197939.

Kirui, Wesley K.; Wu, Shubiao; Kizito, Simon; Carvalho, Pedro N.; Dong, Renjie (2016): Pathways of nitrobenzene degradation in horizontal subsurface flow constructed wetlands: Effect of intermittent aeration and glucose addition. In *Journal of environmental management* 166, pp. 38–44. DOI: 10.1016/j.jenvman.2015.10.001.

Kirzhner, F.; Zimmels, Y. (2006): Water Vapor and Air Transport Through Ponds with Floating Aquatic Plants. In *Water Environment Research* 78 (8), pp. 880–886. DOI: 10.2175/106143005X73127.

Kõiv, Margit; Mahadeo, Kunaal; Brient, Stephen; Claveau-Mallet, Dominique; Comeau, Yves (2016): Treatment of fish farm sludge supernatant by aerated filter beds and steel slag filters—effect of organic loading rate. In *Ecological Engineering* 94, pp. 190–199. DOI: 10.1016/j.ecoleng.2016.05.060.

Kumari, Menka; Tripathi, B. D. (2014): Effect of aeration and mixed culture of Eichhornia crassipes and Salvinia natans on removal of wastewater pollutants. In *Ecological Engineering* 62, pp. 48–53. DOI: 10.1016/j.ecoleng.2013.10.007.

Labella, Alessandro; Caniani, Donatella; Hughes-Riley, Theodore; Morris, Robert H.; Newton, Michael I.; Hawes, Patrick et al. (2015): Assessing the economic suitability of aeration and the influence of bed heating on constructed wetlands treatment efficiency and life-span. In *Ecological Engineering* 83, pp. 184–190. DOI: 10.1016/j.ecoleng.2015.06.028.

Lee, Soyoung; Maniquiz-Redillas, Marla C.; Kim, Lee-Hyung (2018): Assessment of aeration pond operation in a constructed wetland receiving high nitrogen content wastewater from livestock area. In *dwt* 101, pp. 101–107. DOI: 10.5004/dwt.2018.21816.

Lehl, Harvinder Kaur; Ong, Soon-An; Ho, Li-Ngee; Wong, Yee-Shian; Naemah Mohd Saad, Farah; Oon, Yoong-Ling et al. (2016): Multiple aerobic and anaerobic baffled constructed wetlands for simultaneous nitrogen and organic compounds removal. In *Desalination and Water Treatment* 57 (60), pp. 29160–29167. DOI: 10.1080/19443994.2016.1189698.

Lehl, Harvinder Kaur; Ong, Soon-An; Ho, Li-Ngee; Wong, Yee-Shian; Saad, Farah Naemah Mohd; Oon, Yoong-Ling et al. (2017): Decolorization and mineralization of Amaranth dye using multiple zoned aerobic and anaerobic baffled constructed wetland. In *International Journal of Phytoremediation* 19 (8), pp. 725–731. DOI: 10.1080/15226514.2017.1284748.

Li, Huai; Chi, Zifang; Yan, Baixing; Cheng, Long; Li, Jianzheng (2017): Nitrogen removal in wood chip combined substrate baffled subsurface-flow constructed wetlands: impact of matrix arrangement and intermittent aeration. In *Environmental science and pollution research international* 24 (5), pp. 5032–5038. DOI: 10.1007/s11356-016-8227-3.

Li, Fengmin; Lu, Lun; Zheng, Xiang; Zhang, Xiuwen (2014): Three-stage horizontal subsurface flow constructed wetlands for organics and nitrogen removal: Effect of aeration. In *Ecological Engineering* 68, pp. 90–96. DOI: 10.1016/j.ecoleng.2014.03.025.

Li, Yi; Zhang, Kaisong (2018): Pilot scale treatment of polluted surface waters using membrane-aerated biofilm reactor (MABR). In *Biotechnology & Biotechnological Equipment* 32 (2), pp. 376–386. DOI: 10.1080/13102818.2017.1399826.

Lin, J. L.; Tu, Y. T.; Chiang, P. C.; Chen, S. H.; Kao, C. M. (2015): Using aerated gravel-packed contact bed and constructed wetland system for polluted river water purification: A case study in Taiwan. In *Journal of Hydrology* 525, pp. 400–408. DOI: 10.1016/j.jhydrol.2015.03.049.

Liu, Fei-Fei; Fan, Jinlin; Du, Jinhui; Shi, Xia; Zhang, Jian; Shen, Youhao (2019): Intensified nitrogen transformation in intermittently aerated constructed wetlands: Removal pathways and microbial response mechanism. In *The Science of the total environment* 650 (Pt 2), pp. 2880–2887. DOI: 10.1016/j.scitotenv.2018.10.037.

Liu, Mao; Li, Boyuan; Xue, Yingwen; Wang, Hongyu; Yang, Kai (2017): Constructed wetland using corncob charcoal substrate: pollutants removal and intensification. In *Water science and technology : a journal of the International Association on Water Pollution Research* 76 (5-6), pp. 1300–1307. DOI: 10.2166/wst.2017.305.

Liu, Guoqiang; Wang, Jianmin (2017): Achieving advanced nitrogen removal for small flow wastewater using a baffled bioreactor (BBR) with intermittent aeration. In *Journal of environmental management* 199, pp. 222–228. DOI: 10.1016/j.jenvman.2017.05.047.

Liu, Xiaoling; Zhang, Ke; Fan, Liangqian; Luo, Hongbing; Jiang, Mingshu; Anderson, Bruce C. et al. (2018): Intermittent micro-aeration control of methane emissions from an integrated vertical-flow constructed wetland during agricultural domestic wastewater treatment. In *Environmental science and pollution research international* 25 (24), pp. 24426–24444. DOI: 10.1007/s11356-018-2226-5.

Liu, Lei; Zhao, Xinhua; Zhao, Nan; Shen, Zheng; Wang, Mei; Guo, Yuzhang; Xu, Yinbo (2013): Effect of aeration modes and influent COD/N ratios on the nitrogen removal performance of vertical flow constructed wetland. In *Ecological Engineering* 57, pp. 10–16. DOI: 10.1016/j.ecoleng.2013.04.019.

Lopsik, K. (2013): Life cycle assessment of small-scale constructed wetland and extended aeration activated sludge wastewater treatment system. In *Int. J. Environ. Sci. Technol.* 10 (6), pp. 1295–1308. DOI: 10.1007/s13762-012-0159-y.

Lu, X. M.; Huang, M. S. (2010): Nitrogen and phosphorus removal and physiological response in aquatic plants under aeration conditions. In *Int. J. Environ. Sci. Technol.* 7 (4), pp. 665–674.

Lu, Xiao-Ming; Lu, Peng-Zhen; Huang, Min-Sheng; Dai, Ling-Peng (2013): Seasonal variations and aeration effects on water quality improvements and physiological responses of Nymphaea tetragona Georgi. In *International Journal of Phytoremediation* 15 (6), pp. 522–535. DOI: 10.1080/15226514.2012.716103.

Lyu, Tao; He, Keli; Dong, Renjie; Wu, Shubiao (2018): The intensified constructed wetlands are promising for treatment of ammonia stripped effluent: Nitrogen transformations and removal pathways. In *Environmental pollution (Barking, Essex : 1987)* 236, pp. 273–282. DOI: 10.1016/j.envpol.2018.01.056.

Maltais-Landry, Gabriel; Chazarenc, Florent; Comeau, Yves; Troesch, Stéphane; Brisson, Jacques (2007): Effects of artificial aeration, macrophyte species, and loading rate on removal efficiency in constructed wetland mesocosms treating fish farm wastewater. In *Journal of Environmental Engineering and Science* 6 (4), pp. 409–414. DOI: 10.1139/s06-069.

Maltais-Landry, Gabriel; Maranger, Roxane; Brisson, Jacques (2009): Effect of artificial aeration and macrophyte species on nitrogen cycling and gas flux in constructed wetlands. In *Ecological Engineering* 35 (2), pp. 221–229. DOI: 10.1016/j.ecoleng.2008.03.003.

Maltais-Landry, Gabriel; Maranger, Roxane; Brisson, Jacques; Chazarenc, Florent (2009): Greenhouse gas production and efficiency of planted and artificially aerated constructed wetlands. In *Environmental pollution (Barking, Essex : 1987)* 157 (3), pp. 748–754. DOI: 10.1016/j.envpol.2008.11.019.

Maltais-Landry, Gabriel; Maranger, Roxane; Brisson, Jacques; Chazarenc, Florent (2009): Nitrogen transformations and retention in planted and artificially aerated constructed wetlands. In *Water research* 43 (2), pp. 535–545. DOI: 10.1016/j.watres.2008.10.040.

Masi, F.; Rizzo, A.; Bresciani, R.; Martinuzzi, N.; Wallace, S. D.; van Oirschot, D. et al. (2019): Lessons learnt from a pilot study on residual dye removal by an aerated treatment wetland. In *The Science of the total environment* 648, pp. 144–152. DOI: 10.1016/j.scitotenv.2018.08.113.

Matamoros, Víctor; Rodríguez, Yolanda; Albaigés, Joan (2016): A comparative assessment of intensive and extensive wastewater treatment technologies for removing emerging contaminants in small communities. In *Water research* 88, pp. 777–785. DOI: 10.1016/j.watres.2015.10.058.

Matsuura, Asana; An, Ping; Murata, Kouhei; Inanaga, Shinobu (2016): Effect of pre- and post-heading waterlogging on growth and grain yield of four millets. In *Plant Production Science* 19 (3), pp. 348–359. DOI: 10.1080/1343943X.2016.1146907.

Muñoz, Pete; Drizo, Aleksandra; Cully Hession, W. (2006): Flow patterns of dairy wastewater constructed wetlands in a cold climate. In *Water research* 40 (17), pp. 3209–3218. DOI: 10.1016/j.watres.2006.06.036.

Murphy, Clodagh; Rajabzadeh, Amin R.; Weber, Kela P.; Nivala, Jaime; Wallace, Scott D.; Cooper, David J. (2016): Nitrification cessation and recovery in an aerated saturated vertical subsurface flow treatment wetland: Field studies and microscale biofilm modeling. In *Bioresource technology* 209, pp. 125–132. DOI: 10.1016/j.biortech.2016.02.065.

Murphy, Clodagh; Wallace, Scott; Knight, Russell; Cooper, David; Sellers, Tori (2015): Treatment performance of an aerated constructed wetland treating glycol from de-icing operations at a UK airport. In *Ecological Engineering* 80, pp. 117–124. DOI: 10.1016/j.ecoleng.2014.05.032.

Nivala, J.; Hoos, M. B.; Cross, C.; Wallace, S.; Parkin, G. (2007): Treatment of landfill leachate using an aerated, horizontal subsurface-flow constructed wetland. In *The Science of the total environment* 380 (1-3), pp. 19–27. DOI: 10.1016/j.scitotenv.2006.12.030.

NOORVEE, ALAR; REPP, KALEV; MANDER, Ü. L.O.; PÕLDVERE, ELAR (2005): The Effects of Aeration and the Application of the k-C\* Model in a Subsurface Flow Constructed Wetland. In *Journal of Environmental Science and Health, Part A* 40 (6-7), pp. 1445–1456. DOI: 10.1081/ESE-200055884.

Ong, Soon-An; Ho, Li-Ngee; Wong, Yee-Shian; Che, Siaw-Fun (2012): Artificial aeration to enhance the mineralization of mono azo (methyl orange)-containing wastewater using recirculated up-flow constructed wetland. In *Environmental Engineering and Management Journal* 13 (1), pp. 37–42.

Ong, Soon-An; Ho, Li-Ngee; Wong, Yee-Shian; Chen, Siaw-Fun; Viswanathan, Murali; Bahari, Rohazita (2012): Mineralization of diazo dye (Reactive Black 5) in wastewater using recirculated up-flow constructed wetland reactor. In *Desalination and Water Treatment* 46 (1-3), pp. 312–320. DOI: 10.1080/19443994.2012.677558.

Ong, S. A.; Uchiyama, K.; Inadama, D.; Ishida, Y.; Yamagiwa, K. (2009): Phytoremediation of industrial effluent containing azo dye by model up-flow constructed wetland. In *Chinese Chemical Letters* 20 (2), pp. 225–228. DOI: 10.1016/j.cclet.2008.10.028.

Ong, Soon-An; Uchiyama, Katsuhiro; Inadama, Daisuke; Yamagiwa, Kazuaki (2009): Simultaneous removal of color, organic compounds and nutrients in azo dye-containing wastewater using up-flow constructed wetland. In *Journal of hazardous materials* 165 (1-3), pp. 696–703. DOI: 10.1016/j.jhazmat.2008.10.071.

Ong, Soon-An; Uchiyama, Katsuhiro; Inadama, Daisuke; Ishida, Yuji; Yamagiwa, Kazuaki (2010): Performance evaluation of laboratory scale up-flow constructed wetlands with different designs and emergent plants. In *Bioresource technology* 101 (19), pp. 7239–7244. DOI: 10.1016/j.biortech.2010.04.032.

Ong, Soon-An; Uchiyama, Katsuhiro; Inadama, Daisuke; Ishida, Yuji; Yamagiwa, Kazuaki (2010): Treatment of azo dye Acid Orange 7 containing wastewater using up-flow constructed wetland with and without supplementary aeration. In *Bioresource technology* 101 (23), pp. 9049–9057. DOI: 10.1016/j.biortech.2010.07.034.

Oon, Yoong-Ling; Ong, Soon-An; Ho, Li-Ngee; Wong, Yee-Shian; Dahalan, Farrah Aini; Oon, Yoong-Sin et al. (2017): Role of macrophyte and effect of supplementary aeration in up-flow constructed wetland-microbial fuel cell for simultaneous wastewater treatment and energy recovery. In *Bioresource technology* 224, pp. 265–275. DOI: 10.1016/j.biortech.2016.10.079.

Ouellet-Plamondon, Claudiane; Chazarenc, Florent; Comeau, Yves; Brisson, Jacques (2006): Artificial aeration to increase pollutant removal efficiency of constructed wetlands in cold climate. In *Ecological Engineering* 27 (3), pp. 258–264. DOI: 10.1016/j.ecoleng.2006.03.006.

Pan, Jizheng; Zhang, Houhu; Li, Wenchao; Ke, Fan (2012): Full-Scale Experiment on Domestic Wastewater Treatment by Combining Artificial Aeration Vertical- and Horizontal-Flow Constructed Wetlands System. In *Water Air Soil Pollut* 223 (9), pp. 5673–5683. DOI: 10.1007/s11270-012-1306-2.

Pascual, A.; La Varga, D. de; Arias, C. A.; van Oirschot, D.; Kilian, R.; Álvarez, J. A.; Soto, M. (2017): Hydrolytic anaerobic reactor and aerated constructed wetland systems for municipal wastewater treatment - HIGHWET project. In *Environmental technology* 38 (2), pp. 209–219. DOI: 10.1080/09593330.2016.1188995.

Patil, Sagar; Chakraborty, Saswati (2017): Effects of step-feeding and intermittent aeration on organics and nitrogen removal in a horizontal subsurface flow constructed wetland. In *Journal of environmental science and health. Part A, Toxic/hazardous substances & environmental engineering* 52 (4), pp. 403–412. DOI: 10.1080/10934529.2016.1262608.

Phenrat, Tanapon; Teeratitayangkul, Pimpawat; Prasertsung, Isarawut; Parichatprecha, Rattapoohm; Jitsangiam, Peerapong; Chomchalow, Narong; Wichai, Siriwan (2017): Vetiver plantlets in aerated system degrade phenol in illegally dumped industrial wastewater by phytochemical and rhizomicrobial degradation. In *Environmental science and pollution research international* 24 (15), pp. 13235–13246. DOI: 10.1007/s11356-016-7707-9.

Pozo-Morales, L.; Franco, M.; Garvi, D.; Lebrato, J. (2014): Experimental basis for the design of horizontal subsurface-flow treatment wetlands in naturally aerated channels with an anti-clogging stone layout. In *Ecological Engineering* 70, pp. 68–81. DOI: 10.1016/j.ecoleng.2014.04.010.

Redmond, Eric D.; Just, Craig L.; Parkin, Gene F. (2014): Nitrogen removal from wastewater by an aerated subsurface-flow constructed wetland in cold climates. In *Water Environment Research* 86 (4), pp. 305–313.

Rossmann, Maike; Matos, Antonio Teixeira de; Abreu, Edgar Carneiro; e Silva, Fabyano Fonseca; Borges, Alisson Carraro (2012): Performance of constructed wetlands in the treatment of aerated coffee processing wastewater: Removal of nutrients and phenolic compounds. In *Ecological Engineering* 49, pp. 264–269. DOI: 10.1016/j.ecoleng.2012.08.017.

Rossmann, Maike; Matos, Antonio Teixeira; Abreu, Edgar Carneiro; Silva, Fabyano Fonseca; Borges, Alisson Carraro (2013): Effect of influent aeration on removal of organic matter from coffee processing wastewater in constructed wetlands. In *Journal of environmental management* 128, pp. 912–919. DOI: 10.1016/j.jenvman.2013.06.045.

S. Admon; S. Tarre; I. Sabbah; O. Lahav; M. Beliavski; and M. Green (2005): Treatment of Presettled Municipal Wastewater Using a Passively Aerated Vertical Bed. In *Environmental Engineering Science* 22 (6), pp. 707–715.

Selvamurugan, M.; Doraisamy, P.; Maheswari, M. (2010): An integrated treatment system for coffee processing wastewater using anaerobic and aerobic process. In *Ecological Engineering* 36 (12), pp. 1686–1690. DOI: 10.1016/j.ecoleng.2010.07.013.

Shi, Xia; Fan, Jinlin; Zhang, Jian; Shen, Youhao (2017): Enhanced phosphorus removal in intermittently aerated constructed wetlands filled with various construction wastes. In *Environmental science and pollution research international* 24 (28), pp. 22524–22534. DOI: 10.1007/s11356-017-9870-z.

Srivastava, Pratiksha; Dwivedi, Saurabh; Kumar, Naresh; Abbassi, Rouzbeh; Garaniya, Vikram; Yadav, Asheesh Kumar (2017): Performance assessment of aeration and radial oxygen loss assisted cathode based integrated constructed wetland-microbial fuel cell systems. In *Bioresource technology* 244 (Pt 1), pp. 1178–1182. DOI: 10.1016/j.biortech.2017.08.026.

Stefanakis, Alexandros I.; Tsihrintzis, Vassilios A. (2012): Effects of loading, resting period, temperature, porous media, vegetation and aeration on performance of pilot-scale vertical flow constructed wetlands. In *Chemical Engineering Journal* 181-182, pp. 416–430. DOI: 10.1016/j.cej.2011.11.108.

Sun, Haimeng; Yang, Zhongchen; Wei, Caijie; Wu, Weizhong (2018): Nitrogen removal performance and functional genes distribution patterns in solid-phase denitrification sub-surface constructed wetland with micro aeration. In *Bioresource technology* 263, pp. 223–231. DOI: 10.1016/j.biortech.2018.04.078.

Svensson, Henric; Ekstam, Börje; Marques, Marcia; Hogland, William (2015): Removal of organic pollutants from oak leachate in pilot scale wetland systems: How efficient are aeration and vegetation treatments? In *Water research* 84, pp. 120–126. DOI: 10.1016/j.watres.2015.07.017.

Tang, Xianqiang; Huang, Suiliang; Scholz, Miklas (2008): Nutrient Removal in Wetlands During Intermittent Artificial Aeration. In *Environmental Engineering Science* 25 (9), pp. 1279–1290. DOI: 10.1089/ees.2007.0260.

Tao, Wendong; Wang, Jing (2009): Effects of vegetation, limestone and aeration on nitritation, anammox and denitrification in wetland treatment systems. In *Ecological Engineering* 35 (5), pp. 836–842. DOI: 10.1016/j.ecoleng.2008.12.003.

Tao, Min; Wang, Qi Shuo; Li, Ji Guang; Qu, Juan Juan; Zhan, Ya Qun; Li, Wei Qin; Luo, Ying Bo (2013): Treatment of Wastewater with Different Ratios of Carbon to Nitrogen Using an Enhanced Nitrogen Removal System of Constructed Wetland. In *AMR* 864-867, pp. 1287–1292. DOI: 10.4028/www.scientific.net/AMR.864-867.1287.

Uggetti, Enrica; Hughes-Riley, Theodore; Morris, Robert H.; Newton, Michael I.; Trabi, Christophe L.; Hawes, Patrick et al. (2016): Intermittent aeration to improve wastewater treatment efficiency in pilot-scale constructed wetland. In *The Science of the total environment* 559, pp. 212–217. DOI: 10.1016/j.scitotenv.2016.03.195.

Vera, I.; Araya, F.; Andrés, E.; Sáez, K.; Vidal, G. (2014): Enhanced phosphorus removal from sewage in mesocosm-scale constructed wetland using zeolite as medium and artificial aeration. In *Environmental technology* 35 (13-16), pp. 1639–1649. DOI: 10.1080/09593330.2013.877984.

Wang, Ling; Li, Tian (2017): Seasonal effects of pre-aeration on microbial processes for nitrogen removal in constructed wetlands. In *Environmental science and pollution research international* 24 (4), pp. 3810–3819. DOI: 10.1007/s11356-016-7958-5.

Wang, Xiaoou; Tian, Yimei; Zhao, Xinhua; Peng, Sen; Wu, Qing; Yan, Lijian (2015): Effects of aeration position on organics, nitrogen and phosphorus removal in combined oxidation pond-constructed wetland systems. In *Bioresource technology* 198, pp. 7–15. DOI: 10.1016/j.biortech.2015.08.150.

Wang, Changhui; Wu, Yu; Bai, Leilei; Wang, Chunliu; Jiang, Helong; Wei, Zixun et al. (2018): Intermittent aeration incubation of drinking water treatment residuals for recycling in aquatic environment remediation. In *Journal of Cleaner Production* 183, pp. 220–230. DOI: 10.1016/j.jclepro.2018.02.151.

Wosiack, Priscila Arcoverde; Lopes, Deize Dias; Rissato Zamariolli Damianovic, Márcia Helena; Foresti, Eugenio; Granato, Daniel; Barana, Ana Cláudia (2015): Removal of COD and nitrogen from animal food plant wastewater in an intermittently-aerated structured-bed reactor. In *Journal of environmental management* 154, pp. 145–150. DOI: 10.1016/j.jenvman.2015.02.026.

Wu, Haiming; Fan, Jinlin; Zhang, Jian; Ngo, Huu Hao; Guo, Wenshan; Hu, Zhen; Liang, Shuang (2015): Decentralized domestic wastewater treatment using intermittently aerated vertical flow constructed wetlands: impact of influent strengths. In *Bioresource technology* 176, pp. 163–168. DOI: 10.1016/j.biortech.2014.11.041.

Wu, Haiming; Fan, Jinlin; Zhang, Jian; Ngo, Huu Hao; Guo, Wenshan; Liang, Shuang et al. (2016): Intensified organics and nitrogen removal in the intermittent-aerated constructed wetland using a novel sludge-ceramsite as substrate. In *Bioresource technology* 210, pp. 101–107. DOI: 10.1016/j.biortech.2016.01.051.

Wu, Shubiao; Lei, Ming; Lu, Qimin; Guo, Luchen; Dong, Renjie (2016): Treatment of pig manure liquid digestate in horizontal flow constructed wetlands: Effect of aeration. In *Eng. Life Sci.* 16 (3), pp. 263–271. DOI: 10.1002/elsc.201500030.

Wu, Shubiao; Lv, Tao; Lu, Qimin; Ajmal, Zeeshan; Dong, Renjie (2017): Treatment of anaerobic digestate supernatant in microbial fuel cell coupled constructed wetlands: Evaluation of nitrogen removal, electricity generation, and bacterial community response. In *The Science of the total environment* 580, pp. 339–346. DOI: 10.1016/j.scitotenv.2016.11.138.

Wu, Yifeng; Zhu, Wenbo; Lu, Xiwu (2013): Identifying key parameters in a novel multistep bio-ecological wastewater treatment process for rural areas. In *Ecological Engineering* 61, pp. 166–173. DOI: 10.1016/j.ecoleng.2013.09.049.

Yan, Xu; Han, Yunping; Li, Qilu; Sun, Jianhui; Su, Xianfa (2016): Impact of internal recycle ratio on nitrous oxide generation from anaerobic/anoxic/oxic biological nitrogen removal process. In *Biochemical Engineering Journal* 106, pp. 11–18. DOI: 10.1016/j.bej.2015.11.005.

Yan, Lei; Li, Zhenguo; Wang, Guoxing; Gao, Yamei; Wang, Yanjie; Gu, Ji-Dong; Wang, Weidong (2016): Diversity of ammonia-oxidizing bacteria and archaea in response to different aeration rates during cattle manure composting. In *Ecological Engineering* 93, pp. 46–54. DOI: 10.1016/j.ecoleng.2016.05.002.

Yang, Zhongchen; Yang, Luhua; Wei, Caijie; Wu, Weizhong; Zhao, Xufei; Lu, Ting (2018): Enhanced nitrogen removal using solid carbon source in constructed wetland with limited aeration. In *Bioresource technology* 248 (Pt B), pp. 98–103. DOI: 10.1016/j.biortech.2017.07.188.

Yang, Yongqiang; Zhan, Xuan; Wu, Shijun; Kang, Mingliang; Guo, Jianan; Chen, Fanrong (2016): Effect of hydraulic loading rate on pollutant removal efficiency in subsurface infiltration system under intermittent operation and micro-power aeration. In *Bioresource technology* 205, pp. 174–182. DOI: 10.1016/j.biortech.2015.12.088.

Yu, Ran; Wu, Qiping; Lu, Xiwu (2012): Constructed Wetland in a Compact Rural Domestic Wastewater Treatment System for Nutrient Removal. In *Environmental Engineering Science* 29 (8), pp. 751–757. DOI: 10.1089/ees.2011.0209.

Zapater-Pereyra, M.; Gashugi, E.; Rousseau, D. P. L.; Alam, M. R.; Bayansan, T.; Lens, P. N. L. (2014): Effect of aeration on pollutants removal, biofilm activity and protozoan abundance in conventional and hybrid horizontal subsurface-flow constructed wetlands. In *Environmental technology* 35 (13-16), pp. 2086–2094. DOI: 10.1080/09593330.2014.893024.

Zapater-Pereyra, M.; Kyomukama, E.; Namakula, V.; van Bruggen, J. J. A.; Lens, P. N. L. (2016): The effect of aeration and recirculation on a sand-based hybrid constructed wetland treating low-strength domestic wastewater. In *Environmental technology* 37 (15), pp. 1923–1932. DOI: 10.1080/09593330.2015.1135994.

Zhai, Jun; Xiao, Jun; Rahaman, Md.; John, Yasinta; Xiao, Jingsong (2016): Seasonal Variation of Nutrient Removal in a Full-Scale Artificial Aerated Hybrid Constructed Wetland. In *Water* 8 (12), p. 551. DOI: 10.3390/w8120551.

Zhang, Dong Qing; Gersberg, Richard M.; Hua, Tao; Zhu, Junfei; Tuan, Nguyen Anh; Tan, Soon Keat (2012): Pharmaceutical removal in tropical subsurface flow constructed wetlands at varying hydraulic loading rates. In *Chemosphere* 87 (3), pp. 273–277. DOI: 10.1016/j.chemosphere.2011.12.067.

ZHANG, Peng; HAI, Reti; ZHOU, Dongkai; HE, Yiqun; BAI, Zhiyuan (2011): Synergism of Novel Sequence Bio-ecological Process and Biological Aerated Filter for Sewage Treatment in Cold Climate. In *Chinese Journal of Chemical Engineering* 19 (5), pp. 881–890. DOI: 10.1016/S1004-9541(11)60069-4.

Zhang, Xinwen; Hu, Zhen; Zhang, Jian; Fan, Jinlin; Ngo, Huu Hao; Guo, Wenshan et al. (2018): A novel aerated surface flow constructed wetland using exhaust gas from biological wastewater treatment: Performance and mechanisms. In *Bioresource technology* 250, pp. 94–101. DOI: 10.1016/j.biortech.2017.08.172.

Zhang, Liang; Lyu, Tao; Zhang, Yang; Button, Mark; Arias, Carlos A.; Weber, Kela P. et al. (2018): Impacts of design configuration and plants on the functionality of the microbial community of mesocosm-scale constructed wetlands treating ibuprofen. In *Water research* 131, pp. 228–238. DOI: 10.1016/j.watres.2017.12.050.

Zhang, Dong Qing; Tan, Soon Keat; Gersberg, Richard M.; Zhu, Junfei; Sadreddini, Sara; Li, Yifei (2012): Nutrient removal in tropical subsurface flow constructed wetlands under batch and continuous flow conditions. In *Journal of environmental management* 96 (1), pp. 1–6. DOI: 10.1016/j.jenvman.2011.10.009.

Zhang, Linlin; Tang, Ze; Zhang, Sijian; Jia, Xueying; Yu, Xiaofei; Sun, Guangzhi; Zou, Yuanchun (2018): Effects of artificial aeration and iron inputs on the transformation of carbon and phosphorus in a typical wetland soil. In *J Soils Sediments* 18 (11), pp. 3244–3255. DOI: 10.1007/s11368-018-1988-1.

Zhang, Min; Wang, Junming; Zhang, Zhongzhi; Song, Zhaozheng; Zhang, Zhenjia; Zhang, Beiyu et al. (2016): A field pilot-scale study of biological treatment of heavy oil-produced water by biological filter with airlift aeration and hydrolytic acidification system. In *Environmental science and pollution research international* 23 (5), pp. 4919–4930. DOI: 10.1007/s11356-015-5721-y.

Zhang, Lie-yu; Zhang, Lan; Liu, Yong-ding; Shen, Yin-wu; Liu, Hao; Xiong, Ying (2010): Effect of limited artificial aeration on constructed wetland treatment of domestic wastewater. In *Desalination* 250 (3), pp. 915–920. DOI: 10.1016/j.desal.2008.04.062.

Zhao, Xiaohong; Hu, Yuansheng; Zhao, Yaqian; Kumar, Lordwin (2018): Achieving an extraordinary high organic and hydraulic loadings with good performance via an alternative operation strategy in a multi-stage constructed wetland system. In *Environmental science and pollution research international* 25 (12), pp. 11841–11853. DOI: 10.1007/s11356-018-1464-x.

Zhao, Jun; Lang, Xian Ming; Chao, Lei (2011): The Pilot-Scale Study of Constructed Intensified Biological Bed on the Purification of Northern Transboundary Polluted River Water. In *AMR* 347-353, pp. 2727–2734. DOI: 10.4028/www.scientific.net/AMR.347-353.2727.

Zheng, Fanping; Huang, Linli; Pan, Jing; Fan, Linlin; Wang, Shiyao; Tan, Chaoquan (2018): Does influent surface organic loading and aeration mode affect nitrogen removal and N2O emission in subsurface wastewater infiltration systems? In *Ecological Engineering* 123, pp. 168–174. DOI: 10.1016/j.ecoleng.2018.09.015.

Zhong, Fei; Wu, Juan; Dai, Yanran; Cheng, Shuiping; Zhang, Zhaohui; Ji, Hongjiu (2014): Effects of front aeration on the purification process in horizontal subsurface flow constructed wetlands shown with 2D contour plots. In *Ecological Engineering* 73, pp. 699–704. DOI: 10.1016/j.ecoleng.2014.09.119.

Zhong, Fei; Wu, Juan; Dai, Yanran; Yang, Lihua; Zhang, Zhaohui; Cheng, Shuiping; Zhang, Qiong (2015): Bacterial community analysis by PCR-DGGE and 454-pyrosequencing of horizontal subsurface flow constructed wetlands with front aeration. In *Applied microbiology and biotechnology* 99 (3), pp. 1499–1512. DOI: 10.1007/s00253-014-6063-2.

Zhong, Fei; Wu, Juan; Dai, Yanran; Xiang, Dongfang; Cheng, Shuiping; Ji, Hongjiu (2015): Performance evaluation of wastewater treatment using horizontal subsurface flow constructed wetlands optimized by micro-aeration and substrate selection. In *Water science and technology : a journal of the International Association on Water Pollution Research* 71 (9), pp. 1317–1324. DOI: 10.2166/wst.2015.090.

Zhou, Xu; Gao, Lei; Zhang, Hai; Wu, Haiming (2018): Determination of the optimal aeration for nitrogen removal in biochar-amended aerated vertical flow constructed wetlands. In *Bioresource technology* 261, pp. 461–464. DOI: 10.1016/j.biortech.2018.04.028.

Zhou, Xu; Jia, Lixia; Liang, Chenglong; Feng, Likui; Wang, Ruigang; Wu, Haiming (2018): Simultaneous enhancement of nitrogen removal and nitrous oxide reduction by a saturated biochar-based intermittent aeration vertical flow constructed wetland: Effects of influent strength. In *Chemical Engineering Journal* 334, pp. 1842–1850. DOI: 10.1016/j.cej.2017.11.066.

Zhou, Xu; Wang, Xuezhen; Zhang, Hai; Wu, Haiming (2017): Enhanced nitrogen removal of low C/N domestic wastewater using a biochar-amended aerated vertical flow constructed wetland. In *Bioresource technology* 241, pp. 269–275. DOI: 10.1016/j.biortech.2017.05.072.

Zhu, Liandong; Takala, Josu; Hiltunen, Erkki; Li, Zhaohua; Kristianto, Yohanes (2013): Comparison of vertical-flow constructed wetlands with and without supplementary aeration treating decentralized domestic wastewater. In *Environmental technology* 34 (1-4), pp. 53–60. DOI: 10.1080/09593330.2012.679701.

Zimmels, Y.; Kirzhner, F.; Kadmon, A. (2009): Effect of circulation and aeration on wastewater treatment by floating aquatic plants. In *Separation and Purification Technology* 66 (3), pp. 570–577. DOI: 10.1016/j.seppur.2009.01.019.