BioCAST and Dagua Technologies
Scientific Publications

January 2020

BioCAST

1. B. Hosseinpour, N. Saborimanesh, L. Yerushalmi, D. Walsh and C. N. Mulligan (2019) Quick Start-Up of Oxygen-Limited Autotrophic Partial Nitrification-Anammox Process for Treatment of Nitrite-Free Wastewater in a Single-Stage Hybrid Bioreactor, Environmental Technology, Aug 4:1-9. DOI: 10.1080/09593330.2019.1649467.
2. N. Saborimanesh, D. Walsh, L. Yerushalmi, E. Castillo Arriagada and C. N. Mulligan (2019) Pilot-Scale Application of a Single-Stage Hybrid Airlift BioCAST Bioreactor for Treatment of Ammonium from Nitrite-limited Wastewater by a Partial Nitrification/Anammox Process, Environmental Science and Pollution Research, Sep. 26(25):25573-25582. DOI: 10.1007/s11356-019-05754-2.
3. L. Yerushalmi, M. Alimahmoodi, N. Afroze, S. Godbout and C. N. Mulligan (2013) Removal of carbon, nitrogen and phosphorus from the separated liquid phase of hog manure by the multi-zone BioCAST technology, J. Haz. Mat., 254-255, 364-371. DOI: 10.1016/j.jhazmat.2013.04.009.
4. L. Yerushalmi, M. Alimahmoodi, F. Behzadian and C. N. Mulligan (2013) Mixing Characteristics and Liquid Circulation in a new Multi-Environment Bioreactor, Bioprocess Biosyst Eng. Oct;36(10):1339-52. DOI: 10.1007/s00449-012-0836-8.
5. F. Behzadian, L. Yerushalmi, M. Alimahmoodi, and C. N. Mulligan (2013) Hydrodynamic Characteristics and Overall Volumetric Oxygen Transfer Coefficient of a New Multi-Environment Bioreactor, Bioprocess Biosyst Eng. Aug;36(8):1043-52. DOI: 10.1007/s00449-012-0857-3.
6. M. Alimahmoodi, L. Yerushalmi, and C. N. Mulligan (2013) Simultaneous Removal of Carbon, Nitrogen and Phosphorus in a Multi-Zone Wastewater Treatment System, J. Chem. Technol. Biotechnol., 88(6), 1136-1143. DOI: 10.1002/jctb.3953.
7. R. S. D. Calder, L. Yerushalmi and S. S. Li (2013) Computational Fluid Dynamics Model of a BioCAST Multi-environment Air-lift Bioreactor, J. Environ. Eng., 139, 849-863. DOI: 10.1061/(ASCE)EE.1943-7870.0000678.
8. L. Yerushalmi, M. Alimahmoodi, C. N. Mulligan (2012) Treatment of Synthetic Wastewater and Hog Waste with Reduced Sludge Generation by the Multi-Environment BioCAST Technology, Water Sci. Technol. 67, 587-593. DOI: 10.2166/wst.2012.601.

9. M. Alimahmoodi, L. Yerushalmi, and C. N. Mulligan (2012) Development of Biofilm on Geotextile in an Innovative Multi-Zone Treatment System for Simultaneous Removal of COD, Nitrogen and Phosphorus, Biores. Technol., 107, 78-86. DOI: 10.1016/j.biortech.2011.12.034.
10. L. Yerushalmi, M. Alimahmoodi and C. N. Mulligan (2011) Performance Evaluation of the BioCAST Technology: a new Multi-zone Wastewater Treatment System, Wat. Sci. Technol., 64(10), 1967-1972. DOI: 10.2166/wst.2011.776.
11. E. Castillo Arriagada, N. Saborimanesh, L. Yerushalmi, C.N. Mulligan (2019) Improving the Nitrogen Removal Efficiency of the Anammox Process by the Addition of Methane, Anaerobic Digestion Conference AD16, 23-27 June, Delft, The Netherlands.
12. N. Saborimanesh, E. Castillo Arriagada, D. Walsh, L. Yerushalmi and C.N. Mulligan (2017) An Innovative Approach to Treat Ammonia-Rich Wastewater by Partial Nitrification/Anammox in Biocast Reactor, Proceedings of the Canadian Society for Civil Engineering (CSCE) conference, Vancouver, Canada May 31-June 3.
13. N. Saborimanesh, E. Castillo Arriagada, D. Walsh, L. Yerushalmi and C.N. Mulligan (2017) Biological treatment of ammonia-rich wastewater by partial nitrification/Anammox in the BioCAST reactor, Proceedings of the 14th IWA Leading Edge Conference on Water and Wastewater Technologies, Florianópolis, Brazil, 29 May 29- June 2.
14. M. Alimahmoodi, L. Yerushalmi and C. N. Mulligan (2010) Simultaneous Removal of COD, N and P in an Innovative Multi-zone Wastewater Treatment System, 33e Symposium sur les eaux usées, Saint-Hyacinthe, Quebec, Canada, October 26-27
15. F. Behzadian, L. Yerushalmi, C. N. Mulligan (2010) Hydrodynamic Studies and Oxygen Transfer in an Integrated Multi-Environment Wastewater Treatment System, IWA World Water Congress and Exhibition, Montréal, Canada, September 19–24.
16. F. Behzadian, L. Yerushalmi, C. N. Mulligan (2009) A New Multi-Environment Wastewater Treatment Technology: Operation and Hydrodynamic Characteristics**,** 8th World Congress of Chemical Engineering (WCCE8), Montréal, Canada**,** August 23-27.

DAGUA

1. L. Yerushalmi and B. Seyhi (2020) Development of a Full-Cycle Water Remediation Process, Water Practice and Technology, December 24, DOI: 10.2166/wpt.2019.086.
2. L. Yerushalmi (2016) Combined ozonation and ultrafiltration membrane processes for the production of drinking water, Proceedings of the IWA World Water Congress & Exhibition, Brisbane, Australia, October 9-14.
3. L. Yerushalmi (2015) Innovative Drinking Water Treatment Technology and Equipment, Drinking Water Safety and Security: Supplying Technologies, Suzhou, Jiangsu, China, November 7-9.
4. L. Yerushalmi (2014), Drinking Water Treatment using the Combined Ozonation and Membrane Ultrafiltration Processes, Proceedings of the "Ozone: Proven Solution to Emerging Challenges" conference, International Ozone Association-Pan America Group, Montreal, Canada, August 23-27.