

Journal Publications

- 1.) Pervissian A., Parker W.J., Legge R. (2011) Combined MBBR-MF For Industrial Wastewater Treatment, Accepted in Environmental Progress and Sustainability
- 2.) Zhu H., Parker W., Conidi D., Basnar R., Seto P. (2011) Eliminating methanogenic activity in hydrogen reactor to improve biogas production in a two-stage anaerobic digestion process co-digesting municipal food waste and sewage sludge, Accepted in Bioresource Technology
- 3.) Kianmehr P., Parker W., Seto P. (2010) An Assessment of the Feasibility of Employing BAP Tests for Characterizing Anaerobic Biodegradability of Raw and Pretreated WAS, Accepted in Wat. Environ Res (NSERC)
- 4.) Ward M, Corsi R., Morton R., Knapp T., Apgar D., Quigley C., Easter C., Pramanik A., and Parker W. (2010) Characterization Of Natural Ventilation In Municipal Wastewater Collection Systems, Accepted in Wat. Environ. Res.
- 5.) Kianmehr P., Parker W., Seto P. (2010) An Evaluation of Protocols for Characterization of Ozone Impacts on WAS Properties and Digestibility, Bioresource Technology, 101, 8565-8572
- 6.) M. Ward, G. Hamer, A. McDonald, J. Witherspoon, E. Loh and W. Parker, A Sewer Ventilation Model Applying Conservation of Momentum, Water Science and Technology
- 7.) Dagnew M., Parker W. Seto P. (2010) A Pilot Study Of Anaerobic Membrane Digesters for Concurrent Thickening and Digestion of WAS" Accepted in Water Science and Technology
- 8.) J.M. Challen Urbanic, B. VanOpstal, W. Parker (2009) Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste (OFMSW): Full Scale vs Laboratory Results, Accepted for publication in The Journal of Solid Waste Technology and Management
- 9.) Seaman L., Sherif R., Parker K., Kennedy K., Seto P. (2009) Sludge Pretreatment Before Aerobic Digestion To Enhance Pathogen Destruction, Canadian Journal of Civil Engineering, **36**: 871–880
- 10.) Parker W., Monteith H., Pilleggi V., "Estimation of Biodegradation and Liquid-Solid Partitioning Coefficients for PAHs in Municipal Wastewater Treatment", Water Quality Research Journal of Canada, 44(2), 166-173.

- 11.) Huguang Zhu, Wayne Parker, Robert Basnar, Alex Proracki, Pat Falletta, Michel Béland, Peter Seto (2009) Buffer requirements for enhanced hydrogen production in acidogenic digestion of food wastes, *Bioresource Technology*, 100, 5097-5102.
- 12.) P. Champagne, P. Van Geel and W. Parker (2008) Impact of Temperature and Loading on the Mitigation of AMD in Peat Biofilter Columns, *Mine Water Environment*, 27, 225–240.
- 13.) Jones R., Parker W., Zhu H., Houweling D., Murthy S. (2009) Predicting the Degradability of Waste Activated Sludge (2008) *Water Environ Research*, 81 (8), 765-771.
- 14.) Maas C., Parker W., Legge R. (2008) Detachment Of Solids And Nitrifiers In IFAS Systems, *Water Environment Research*, 80(12), 2008, 2202 - 2208
- 15.) Jones R., Parker W., Khan Z., Murthy S. and Rupke M. (2008) Characterization of sludges for predicting anaerobic digester performance, *Water Science and Technology*, v 57, n 5, p 721-726
- 16.) Maas C., Parker W., Legge R. (2008) Oxygen Uptake Rate Tests To Evaluate Integrated Fixed Film Activated Sludge Processes, *Water Environment Research*, 80(12), 2008, 2276 – 2283.
- 17.) Zhu H., Parker W., Basnar R., Proracki A., Falletta P., Béland M., Seto P. (2008) Biohydrogen production by anaerobic co-digestion of municipal food waste and sewage sludges, *International Journal of Hydrogen Energy*, v 33, n 14, 3651-3659.
- 18.) H.R. Salsali, W.J. Parker, S.A. Sattar (2008) The effect of volatile fatty acids on the inactivation of *Clostridium perfringens* in anaerobic digestion, *World Journal of Microbiology and Biotechnology*, 24(5), 2008, 659 - 665
- 19.) Hamid Reza Salsali and Wayne J. Parker (2007) An Evaluation Of 3 Stage Anaerobic Digestion Of Municipal Wastewater Treatment Plant Sludges, *Water Practice*, (1).
- 20.) Kim Y. and Parker W. (2008) A Technical and Economic Evaluation of the Pyrolysis of Sewage Sludge for the Production of Bio-Oil, *Bioresource Technology*, 99 (5), 1409-1416.
- 21.) Dereix M., Parker W., Kennedy K., (2006) Steam-Explosion Pre-Treatment for Enhancing Anaerobic Digestion Of Municipal Wastewater Sludge, *Water Environment Research*, 78 (5) pp 474-485.

- 22.) Parker W.J. and Wu G.-H. (2006) *Modifying ADM1 to Include Formation and Emission of Odourants*, *Water Science and Technology*, 54(4), 111-117.
- 23.) Ousmanova D. and Parker W. (2007) Fungal Generation of Organic Acids for Removal of Lead from Contaminated Soil, *Water Air & Soil Pollution*, v 179(1-4), 365-380
- 24.) Champagne P., Van Geel P., Parker W. (2005) *A Bench Scale Assessment of a Combined Passive System to Reduce Concentrations of Metals and Sulphate in Acid Mine Drainage*, *Mine Water and Environment*, 24(3), 124-133.
- 25.) Shanchayan B., Parker W., Pride C. *Dynamic Analysis of a Biofilter Treating ATAD Offgas*, (2006) *Journal of Environmental Engineering and Science*, 5(3), 263-272.
- 26.) H.R. Salsali, W.J. Parker, S.A. Sattar (2006) *Inactivation of Salmonella Spp. In Advanced Anaerobic Digestion. Effects of Concentration, Temperature and pH of Volatile Fatty Acids Mixtures*, *Canadian Journal of Microbiology*, 52(4), 279-286.
- 27.) Visan M. and Parker W.J. (2004) *An Evaluation of Solid Phase Microextraction for Analysis of Odorant Emissions from Stored Biosolids Cake*, *Water Research*, v 38, pp 3800-3808.
- 28.) Parker W.J. (2004) *Application Of The ADM1 Process Model To Advanced Digestion Technologies*, v 96, n 16, p 1832-1842.
- 29.) Monteith H.D., Bell J.P., Parker W.J., Harvey R.T. and Melcer H. (2003) *Impact Of Bubble-Induced Surface Turbulence On Gas-Liquid Mass Transfer In Diffused Aeration Systems*, *Water Environment Research*, v 77 (2), pp 128-137.
- 30.) N. Meyer, W. Parker, P. Van Geel, M. Adiga (2005) *Development of an Electrodeionization Process for Removal of Nitrate from Drinking Water: Part 1- Single Species Testing*, *Desalination*, 175, pp 153-165.
- 31.) N. Meyer, W. Parker, P. Van Geel, M. Adiga (2005) *Development of an Electrodeionization Process for Removal of Nitrate from Drinking Water: Part 2- Multi-Species Testing*, *Desalination*, 175, pp 166-177.
- 32.) Thompson A-M, Van Geel P., Parker W. (2004) *Evaluating the Dissolution and Natural Attenuation of Jet Fuel at a Former Tank Farm*, *Journal of Environmental Engineering and Science*, v 3, n 2, pp 107-118.

- 33.) Wasay S.A., Parker W.J., Van Geel P.J., (2002) *Removal of Lead from a Calcareous Soil by Chloride Chelation*, Journal of Soil and Sediment Contamination, v 11, n 6, pp 841-859.
- 34.) Van Geel P., Parker W.J. (2002) Water Budget For A Peat Filter Treating Septic Tank Effluent In The Field, Journal of Hydrology, v 271, pp 52-64
- 35.) Parker W.J., Yu J. (2001) Dynamic Modelling to Assess Worker Exposure to Gas Phase VOCs in Collector Sewers, Water Environment Research, 73, pp 450-460.
- 36.) Parker W.J., Ryan H. (2001) *A Tracer Study Of Headspace Ventilation In A Collector Sewer*, Journal of the Air & Waste Management Association, 51, pp 582-592.
- 37.) Pearce P., Parker W., Van Geel P. (2001) *Long Term Monitoring of Hydrocarbon Contamination Using Multi-Level Vapor Phase Piezometers*, Environmental Forensics, v3, n2, pp 163-179.
- 38.) Wasay S., Parker W.J., Van Geel P.J. (2001) Characterization of Soil Contaminated by Disposal of Battery Industry Wastes, Journal of the Canadian Society of Civil Engineers, **28**, pp 341-348.
- 39.) Wasay S., Parker W.J., Van Geel P.J. (2001) *Treatment of Soil Contaminated by Disposal of Battery Industry Wastes*, Journal of the Canadian Society of Civil Engineers, **28**, pp 349-354
- 40.) Johnson J., Parker W., Kennedy K. (2001) *Enhanced Scrubbing of Chlorinated Compounds from Air Streams*, Environmental Progress, 19, pp 157-166.
- 41.) Kemp J., Zytner R., Bell J., Parker W., Thompson D., Rittmann B, (2000) *A Method for Determining VOC Biotransformation Rates*, Water Research, 34, pp 3531-3542
- 42.) Zytner R.G., Rahme Z.G., Corsi R.L., Labocha M., Parker W. (1999) *Volatile Organic Compound Stripping at Clarifier Weirs*, Water Environment Research, 71, pp 1188-1196
- 43.) Wasay S.A., W. Parker, P.J. Van Geel, S. Barrington, S. Tokunaga (1999) *Arsenic Pollution of a Loam Soil: Retention Form and Decontamination*, Journal of Soil Contamination, **9**, 51-64
- 44.) P. Champagne, Parker W.J., P. VanGeel (1999) *Modeling Cometabolic Biodegradation of Organic Compounds in Biofilms*, Water Science and Technology, **39**, n7, 147-152.

- 45.) Parker, W.J., Monteith H.D., Shi J., Fendinger N., Chandra (1999) *Pilot Plant Study to Assess the Fate of Two Volatile Methyl Siloxane Compounds During Municipal Wastewater Treatment*, Environmental Toxicology and Chemistry, **18**, n 2
- 46.) Champagne P., Van Geel P.J., Parker W.J. (1998) A Transient Model for Cometabolism in Biofilm Systems, Biotechnology and Bioengineering, **50**, n 5, 541-550.
- 47.) Parker, W.J. (1996) A Multi-Parameter Sensitivity Analysis of a Model Describing the Fate of Volatile Organic Compounds in Trickling Filters, Journal of the Air and Waste Management Association, **47**, 871-880.
- 48.) Parker W.J., Monteith H.D., Bell J.P., Melcer H. (1996) *A Field Scale Evaluation of the Airstripping of Volatile Organic Compounds by Mechanical Aerators*, Water Environment Research, **68**, 1132-1139.
- 49.) Parker W.J., Monteith H.D., Melcer H (1996) *Toxic Organic Compounds in Municipal Sludge Digestion*, Canadian Journal of Civil Engineering, **23**, 471-479.
- 50.) Parker W.J., Monteith H.D., Melcer H (1996) *Volatile Organic Compounds in Trickling Filters and Rotating Biological Contactors: Part I - Pilot Studies*, ASCE Journal of Environmental Engineering, **122**, 557-563
- 51.) Parker W.J., Monteith H.D., Melcer H (1996) *Volatile Organic Compounds in Trickling Filters and Rotating Biological Contactors: Part II - Model Studies*, ASCE Journal of Environmental Engineering, **122**, 564-570.
- 52.) Parker W.J., Monteith H.D. (1996) *Stripping of VOC's from Dissolved Air Flotation*, Environmental Progress, **15**, 73-81.
- 53.) Monteith H.D., Parker W.J., Bell J.P., Melcer H. 1995 *Modeling the Fate of Pesticides in Municipal Wastewater Treatment*, Water Environment Research, **67**, 964-970.
- 54.) Melcer H., Parker W.J., Rittmann B.E. 1995 Modeling of Volatile Organic Compounds in Trickling Filter Systems Water Science and Technology, v **31**, 95-104.
- 55.) Parker W.J., Monteith H.D. 1995 Modeling the Fate of Polynuclear Aromatic Hydrocarbons during Anaerobic Digestion of Municipal Sludges, Water Environment Research, **67**, 1052-1059.

- 56.) Parker, H. Monteith, H. Melcer 1995 *Preliminary Assessment of the Removal of Volatile Organic Compounds in Selector Processes*, Water Environment Research, v **67**, 798-801.
- 57.) Parker W.J., Monteith H.D., Bell J.P., Melcer H., Berthouex P.M. 1994 *A Comprehensive Predictive Fate Model for Metals in Municipal Wastewater Treatment*, ASCE Journal of Environmental Engineering, v 120, 1266-1283.
- 58.) Parker W.J., Monteith H.D., Melcer H. 1994 Estimation of Anaerobic Biodegradation Rates for Toxic Organic Compounds in Municipal Sludge Digestion, Water Research, v 28, 1779-1789.
- 59.) Parker W.J., Bell J.P., Melcer H. 1993 Modeling the Fate of Chlorinated Phenols in Wastewater Treatment Plants, Environmental Progress, v13, 98-104.
- 60.) Parker W., Thompson D., Bell J., Melcer H. 1993 *Fate of Volatile Organic Compounds in Municipal Activated Sludge Plants*, Water Environment Research, v 65, 58-65.
- 61.) Parker W.J., Hall E.R., Farquhar G.J. 1993 Investigation of Dechlorination Mechanisms During Anaerobic Fermentation of Bleached Kraft Mill Effluent, Water Research, v 27 1269-1273.
- 62.) Parker W.J., Farquhar G.J., Hall E.R. 1993 The Removal of Chlorophenolics and Toxicity During High Rate Anaerobic Treatment of Segregated Kraft Mill Bleach Plant Effluents, Environmental Science and Technology, v 27, 1783-1789.
- 63.) Parker W., Hall E.R., Farquhar G.J. 1993 Assessment of Design and Operating Parameters for High Rate Anaerobic Dechlorination of Segregated Kraft Mill Bleach Plant Effluents, Water Environment Research, v 65, 264
- 64.) Parker W.J., Hall E.R., Farquhar G.J., Cornacchio L-A. 1992 Inhibitory Effects of Kraft Bleachery Effluents on Methanogenic Consortia, Water Research, v 26, 955-961.
- 65.) Parker W.J., Farquhar G.J. 1989 *Treatment of a Petrochemical Wastewater in an Anaerobic Packed Bed Reactor*, Water Pollution Research Journal of Canada, v 24, 195-205.

Chapters in Books

1. Farquhar G.J., Parker W.J. 1989 *Interactions of Leachates with Natural and Synthetic Liners*, Lecture Notes in Earth Sciences (P. Baccini Editor), Springer Verlag, New York, New York.

2. VOC Emissions from Wastewater Treatment Plants: Characterization, Control and Compliance, Ed. Tata P., Witherspoon J. and Lue-Hing C. (2003) Lewis Publishers, Boca Raton, FL. (Contributing Author on Fixed Film Processes, Dissolved Air Flotation and Biosolids Dewatering)

Conference Proceedings

- 1.) Jessica Pickel, Wayne J. Parker, Peter Seto (2010) AnMBR For WAS Digestion Using Hollow Fibre Membranes, WEAO Annual Conference, London, ON.
- 2.) Ateghna Pervissian, Wayne J. Parker, Raymond Legge (2010) Combined MBBR-MR For Industrial Wastewater Treatment, WEAO Annual Conference, London, ON
- 3.) Weiwei Du, Wayne J. Parker (2010) Behavior of Volatile Sulfur Compounds in Mesophilic and Thermophilic Anaerobic Digestion, WEF Biosolids, Savannah, GA
- 4.) Weiwei Du, Wayne J. Parker (2010) Sulfur Related Characteristics Of Different Sludges, WEFTEC, New Orleans, LA
- 5.) 5. Weiwei Du, Wayne J. Parker (2010) Modeling the Degradation of Volatile Organic Sulfur Compounds in Mesophilic and Thermophilic Anaerobic Digestion, IWA, Montreal
- 6.) M. Dagnew, W. Parker, M. Basuvaraj, S. Liss (2010) Biopolymer and Cation Behavior during WAS Digestion with an AnMBR Process and Their Contribution to Membrane Fouling WEF Biosolids, Savannah GA
- 7.) Peiman Kianmehr, Wayne Parker, Peter Seto (2010) An Assessment of the Feasibility of Employing BAP Tests for Characterizing Anaerobic Biodegradability of Raw and Pretreated WAS, WEF Biosolids, Savanna GA
- 8.) Martha Dagnew, Wayne J. Parker, Peter Seto (2009) Performance Of A Pilot Scale AnMBR Digesting WAS Under Normal And Higher VS Loading Condition, Proceedings of the 5th Canadian Residuals And Biosolids Conference, Niagara Falls, ON.
- 9.) Martha Dagnew, Wayne J. Parker, Peter Seto (2009) Performance of a Pilot Scale AnMBR Digesting WAS, Proceedings of the Water Environment Federation Technical Exhibition and Conference, October, Orlando, FL.
- 10.) J. Musser, R. Jones, W. Parker (2009) WAS Reduction Efficiency: Incorporating Ozone Pretreatment Into A Whole-Plant Simulator, Proceedings of The Water Environment Federation Technical Exhibition And Conference, October, Orlando, FL.

- 11.) Wayne Parker, Rich Jones, Imre Takacs, Henry Zhu, Sudhir Murthy (2009) Integrated Simulation of Wastewater Treatment, the Sludge Pre-Treatment and Anaerobic Digestion, Proceedings of the Water Environment Federation Technical Exhibition And Conference, October, Orlando, FL.
- 12.) Peiman Kianmehr, Wayne Parker, Peter Seto (2009) Characterization of Ozone Impacts on WAS Properties and Digestibility, Proceedings of the Water Environment Federation Technical Exhibition And Conference, October, Orlando, FL.
- 13.) Weiwei Du, Wayne J. Parker (2009) Behavior Of Volatile Sulfur Compounds In Anaerobic Digestion, Proceedings of the Water Environment Federation Technical Exhibition And Conference, October, Orlando, FL.
- 14.) Wayne J. Parker, Hugh D. Monteith, Vince Pileggi, (2009) Estimation of Biodegradation and Liquid-Solid Partitioning Coefficients for Complex PAHs in Wastewater Treatment, Proceedings of the Water Environment Federation Technical Exhibition And Conference, October, Orlando, FL.
- 15.) Matthew Ward, Wayne Parker, Richard Corsi, Chris Quigley, Chris Easter, Robert Morton, And Dirk Apgar (2009) Characterization Of Natural Ventilation In Municipal Wastewater Collection Systems, Proceedings of the Water Environment Federation Technical Exhibition And Conference, October, Orlando, FL.
- 16.) Martha Dagnew, Wayne J. Parker, Peter Seto (2009) AnMBR For Concurrent WAS Digestion And Co-Thickening, Proceedings of WEAO Annual Conference, Toronto, Ontario
- 17.) Weiwei Du, Wayne Parker (2009) Sulfur in Anaerobic Digestion, Proceedings of WEAO Annual Conference, Toronto, Ontario
- 18.) Peiman Kianmehr, Wayne Parker, Peter Seto (2009) Characterization of WAS Pretreatment by Ozonation, Proceedings of WEAO Annual Conference, Toronto, Ontario
- 19.) J. Musser, R. Jones, W. Parker (2009) Improving The Prediction Of Ozone Sludge Pre-Treatment Performance By Integration With A Whole-Plant Model, Proceedings Of Weao Annual Conference, Toronto, Ontario
- 20.) Martha Dagnew, Wayne J. Parker, Peter Seto (2009) A Pilot Study Of Anaerobic Membrane Digesters For Concurrent Thickening And Digestion Of WAS, Proceedings of the IWA Leading Edge Technologies Conference, Singapore.
- 21.) Wayne Parker, Richard Jones, Henry Zhu, Sudhir Murthy (2009) Integrated Modeling Of Thermal Hydrolysis Pretreatment And Anaerobic

Digestion Of Wastewater Treatment Sludges, Proceedings Of The Water Environment Federation Residuals And Biosolids Conference, Portland, OR

- 22.) Weiwei Du, Wayne J. Parker (2009) Modeling The Conversion And Fate Of Sulfur Containing Compounds In Mesophilic Anaerobic Digestion, Proceedings Of The Water Environment Federation Residuals And Biosolids Conference, Portland, Or
- 23.) Parker W., Jones R., Murthy S. (2008) Characterization of the COD/VSS Ratio During Anaerobic Digestion of Waste Activated Sludge: Experimental and Modeling Studies, Proceedings of Water Environment Federation Technical Exhibition And Conference, October, Chicago, IL,
- 24.) Jones R., Parker W., Zhu H., Houweling D., Murthy S. (2008) Predicting the Degradability of Waste Activated Sludge, Proceedings of Water Environment Federation Technical Exhibition And Conference, October, Chicago, IL,
- 25.) Kianmehr P., Parker W., Challen-Urbanc J. (2008) Development of Protocols for Evaluating WAS Pre-Treatment Processes, Proceedings of Water Environment Federation Technical Exhibition And Conference, October, Chicago, IL,
- 26.) Dagnew M., Parker W., Challen-Urbanc J. (2008) Anaerobic Membrane Bioreactors For Digestion Of WAS: Short Term Membrane Fouling Tests, Proceedings of Water Environment Federation Technical Exhibition And Conference, October, Chicago, IL,
- 27.) Nadim Khandaker, David Lee, Yathu Kaileswaran, Wayne Parker, Peter Seto (2008) Optimization of Hydrogen Production by Mixed Culture in an Acidogenic Reactor Using Food processing Waste and Waste Activated Sludge as Substrate, Proceedings of the Tobago Gas Technology Conference
- 28.) Dagnew M., Parker W., Challen-Urbanc J. (2008) Anaerobic Membrane Bioreactors For Digestion Of WAS; Short Term Membrane Fouling Tests, Proceedings of WEAO Annual Conference, Collingwood, Ontario
- 29.) Kianmehr P., Parker W., Challen-Urbanc J (2008) Characterization of WAS Pretreatment, Proceedings of WEAO Annual Conference, Collingwood, Ontario
- 30.) Kianmehr P., Parker W., Challen-Urbanc J. (2008) Development of Protocols for Predicting the Impact of Pre-Treatment Technologies on WAS Digestibility, Proceedings of the WEF Specialty Conference on Residuals and Biosolids Management, Philadelphia PA
- 31.) Parker W., Jones R., Zhu H., Houweling D., Murthy S., Rupke M. (2008) Tools For Modeling Sludge Digestibility, Proceedings of the WEF Specialty Conference on Residuals and Biosolids Management, Philadelphia PA

- 32.) Carol L.A. Maas, Wayne J. Parker and Raymond L. Legge (2007) Detachment of Solids and Nitrifiers In IFAS Systems, Proceedings of WEFTEC, San Diego, CA
- 33.) Wayne J. Parker, Richard M. Jones, Sudhir Murthy, Mark Rupke (2007) Modeling Anaerobic Digestion Of Municipal Wastewater Sludges: An Elemental Approach, Proceedings of Water Environment Association of Ontario Annual Conference, London, Ontario.
- 34.) R. Jones, W. Parker, Z. Khan, S. Murthy, M. Rupke (2007) A Study Of The Biodegradable Fraction Of Sludges In Aerobic And Anaerobic Systems, Proceedings of the WEF Specialty Conference on Residuals and Biosolids Management, Denver, CO.
- 35.) J.M. Challen Urbanic, B. VanOpstal, W. Parker (2007) Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste (OFMSW): Full-scale vs Laboratory Results, Proceedings of IWA Biosolids Specialty Conference, June, Moncton, NB
- 36.) R. Jones, W. Parker, Z. Khan, S. Murthy, M. Rupke (2007) Characterization Of Sludges For Predicting Anaerobic Digester Performance, Proceedings of IWA Biosolids Specialty Conference, June, Moncton, NB
- 37.) Seaman L , Sherif R., Parker W.J., Kennedy K., Seto P. (2006) Pre-Treatment Of Sludges Before Aerobic Digestion To Enhance Sludge Quality, Proceedings of WEFTEC, Dallas, TX.
- 38.) Maas C.L.A., Parker Wayne J., Legge R.L., (2006) Oxygen Uptake Rate Tests To Evaluate Integrated Fixed Film Activated Sludge Processes, Proceedings of WEFTEC, Dallas, TX
- 39.) Salsali H.R. and Parker W.J. (2006) An Evaluation Of 3 Stage Anaerobic Digestion Of Municipal Wastewater Treatment Plant Sludges, Proceedings of the WEF Specialty Conference on Residuals and Biosolids Management, Cincinnati, OH.
- 40.) Parker W.J., Seaman L., Sherif R., Kennedy K., Seto P. (2006) Pre-Treatment Of Sludges Before Aerobic Digestion To Enhance Sludge Quality, Proceedings of Water Environment Association of Ontario Annual Conference, Toronto, Ontario.
- 41.) Maas C.L.A., Parker W.J., Legge R.L., (2006) Process Observations From Start-Up Of An Integrated Fixed-Film Activated Sludge Process, Proceedings of Water Environment Association of Ontario Annual Conference, Toronto, Ontario.
- 42.) Salsali H.R., Parker W.J., Sattar S.A. (2006) A Look At Microbial Diversity Of Staged Operation Of Anaerobic Digestion Of Municipal Sewage Sludge, Proceedings of Water Environment Association of Ontario Annual Conference, Toronto, Ontario.

- 43.) Dereix M., Parker W., Kennedy K. (2005) *Steam-Explosion Pre-Treatment for Enhancing Anaerobic Digestion of Municipal Wastewater Sludge*, Proceedings of WEFTEC, Washington, D.C.
- 44.) Maas C.L.A., Legge R.L., Parker Wayne J. (2005) *Modeling as a Tool for Investigating IFAS Processes*, Proceedings of WEFTEC, Washington, D.C.
- 45.) Salsali H., Parker W., Sattar S. (2005) *Influence Of Staged Operation Of Mesophilic Anaerobic Digestion On Microbial Reduction*, Proceedings of WEFTEC, Washington, D.C.
- 46.) Parker W.J. and Wu G.-H. (2005) *Modifying ADM1 to Include Formation and Emission of Odourants*, Proceedings of the 1st International Workshop on the IWA Anaerobic Digestion Model No. 1, Lyngby, DK
- 47.) Monteith H., Beland M., Parker W. (2005) *Assessment of Economic Viability of Digester Gas Cogeneration at Canada's Largest Wastewater Treatment Plants*, Proceedings of Water Environment Association of Ontario Annual Conference, Huntsville, Ontario
- 48.) Dereix M., Parker W., Kennedy K. (2005) *Steam-Explosion Pre-treatment for Enhancing Anaerobic Digestion of Municipal Wastewater Sludge*, Proceedings of Water Environment Association of Ontario Annual Conference, Huntsville, Ontario
- 49.) Salsali H. and Parker W. (2005) *An Evaluation Of Two And Three Stage Mesophilic Anaerobic Digestion Of Municipal Sewage Sludge*, Proceedings of Water Environment Association of Ontario Annual Conference, Huntsville, Ontario
- 50.) Kim Y. and Parker W. (2004) *Pyrolysis of Sewage Sludges for the Production of Bio-Oil and Adsorbent*, Proceedings of the 20th Eastern Canada Symposium of the Canadian Association on Water Quality (CAWQ), Ottawa, ON.
- 51.) Salsali H. and Parker W. (2005) *An Evaluation of Staged Digester Operation for Enhanced Pathogen Reduction*, Proceedings of the WEF Specialty Conference on Residuals and Biosolids Management, Nashville, TN.
- 52.) Shanchayan B., Parker W., Pride C. (2004) *Impact of Operating Conditions on the Treatment of ATAD Offgases with Biofilters*, Proceedings of the WEF Specialty Conference on Residuals and Biosolids Management, Nashville, TN.
- 53.) Shanchayan B., Parker W., Pride C. (2004) *Dynamic Performance of a Biofilter Treating ATAD Offgases Under Cold Weather Conditions*, Proceedings of the USC-CSC-TRG Conference on Biofiltration, Santa Monica, CA.
- 54.) Shanchayan B., Parker W., Pride C. (2004) *Pilot And Full Scale Studies Of The Treatment Of ATAD Offgases With Biofilters*, Proceedings of WEFTEC, New Orleans, LA.

- 55.) Klimento I., Parker W., Lebeau B., Hall S. (2004) *An Evaluation Of Sediment Formation In The Anaerobic Digesters At ROPEC*, Proceedings of WEFTEC, New Orleans, LA.
- 56.) Wu G. and Parker W.J. (2004) *Development of a Structured Model for Odour Formation and Emissions from Anaerobic Sludge Digestion*, Proceedings of WEFTEC, New Orleans, LA.
- 57.) Salsali H.R., Parker W.J. and Sattar S.A. (2004) *The Effect of Volatile Fatty Acids on the Inactivation of Clostridium perfringens in Advanced Anaerobic Digestion*, Proceedings of the 10th World Congress on Anaerobic Digestion, Montreal, Quebec.
- 58.) Rehman A., Parker W. (2004) *Development of an Evaporation Process for Treatment of Landfill Leachate*, Proceedings of the Annual Conference of the Canadian Society for Civil Engineering, Saskatoon, Saskatchewan.
- 59.) Salsali H., Parker W. (2004), *Optimization of Anaerobic Digester Operation for Pathogen Reduction*, Proceedings of the Water Environment Association of Ontario Annual Conference, London, Ontario.
- 60.) Visan M., Parker W. (2004) *An Evaluation of Factors Affecting Odourant Emissions from Stored Biosolids Cake*, Proceedings of the Water Environment Association of Ontario Annual Conference, London, Ontario.
- 61.) Salsali H., Parker W. (2004) *Producing Enhanced Quality Biosolids through Anaerobic Digester Optimization*. Proceedings of the WEF Specialty Conference on Biosolids, Salt Lake City, WA
- 62.) Salsali H., Parker W. Sattar S. (2004) *Impact of Volatile Fatty Acids on the Inactivation of Salmonella spp. in Advanced Anaerobic Digestion*. Proceedings of the WEF Specialty Conference on Biosolids, Salt Lake City, WA
- 63.) Visan M. and Parker W.J. (2004) *An Evaluation of Solid Phase Microextraction for Analysis of Odour Emissions from Stored Biosolids Cakes*. Proceedings of the WEF/A&WMA Specialty Conference on Odors and Air Emissions, Bellevue, WA
- 64.) Parker W. (2003) *Application Of The Adm1 Process Model To Advanced Digestion Technologies*, Proceedings of the Water Environment Association of Ontario Annual Conference, Toronto, Ontario.
- 65.) Shanachayan B., Parker W., Pride C. (2003) *Dynamic Analysis of a Biofilter Treating ATAD Offgas*, Proceedings of the 2nd Canadian Organic Residuals Recycling Conference, Penticton, BC.
- 66.) Parker W. and Beland M. (2003) *Alternatives for Enhancement of Methane Production in Anaerobic Digestion of Municipal Sludges*, Proceedings of the 2nd Canadian Organic Residuals Recycling Conference, Penticton, BC.
- 67.) Cummings L., Parker W. (2002) *Biodegradation of BTEX Under Electron Acceptor and Nutrient Limiting Conditions*, Proceedings of the Joint CSCE-ASCE Environmental Engineering Conference, July 21-24, Niagara Falls, ON

- 68.) Champagne, P., P. Van Geel and W. Parker (2002); *A Combined Passive System For The Mitigation Of Acid Mine Drainage*; Poster at the Joint CSCE-ASCE Environmental Engineering Conference, July 21-24; Niagara Falls, ON.
- 69.) Wasay S.A., Parker W.J., Van Geel P.J., (2001) *Removal of Lead from a Calcareous Soil by Chloride Chelation*, Proceedings of the 17th Annual International Conference on Contaminated Soils Sediment and Water, Amherst, MA
- 70.) Pearce P., Parker W., Van Geel P. (2001) *Long Term Monitoring of Hydrocarbon Contamination Using Multi-Level Vapor Phase Piezometers*, Proceedings of the 17th Annual International Conference on Contaminated Soils Sediment and Water, Amherst, MA
- 71.) Van Geel P.J. and Parker W.J. (2001) *Modelling the Water Budget for a Peat Filter Using SoilCover: A Soil-Atmosphere Flux Model*, Proceedings of the 2nd Joint Conference of the International Association of Hydrogeologists and the Canadian Geotechnical Society, Calgary, Alberta.
- 72.) Thompson A.M., Van Geel P.J., Parker W.J. (2001) *Using Bioredox-MT3DMS To Model The Natural Attenuation Of Jet Fuel Contamination At A Former Tank Farm Site*, Proceedings of the 29th Annual Conference of the Canadian Society of Civil Engineers, Victoria, BC.
- 73.) Thompson A.M., Van Geel P.J., Parker W. (2000) *Evaluation of Natural Attenuation at a Jet Fuel Contaminated Site*, Presented at the 16th Eastern Regional Conference of the Canadian Association on Water Quality, Ottawa, Ontario.
- 74.) Meyer N., Parker W., Van Geel P. (2000) *Treatment of Nitrate-Contaminated Water by Electro-Deionization*, Presented at the 16th Eastern Regional Conference of the Canadian Association on Water Quality, Ottawa, Ontario.
- 75.) Thompson A.M., Van Geel P.J., Parker W.J. (2000) *Evaluation of the Impact of the Source Term on Natural Attenuation of Jet Fuel Contamination*, Proceedings of the CSCE 6th Annual Environmental Engineering Specialty Conference, London, Ontario.
- 76.) Pearce P., Parker W.J., Van Geel P. (2000) *Study of Hydrocarbon Contamination in the Vadose Zone Using Multi-Level Vapor Phase Piezometers*, Proceedings of the CSCE 6th Annual Environmental Engineering Specialty Conference, London, Ontario.
- 77.) Meyer N., Parker W., Van Geel P. (2000) *Treatment of Nitrate-Contaminated Water by Electro-Deionization*, Proceedings of the CSCE 6th Annual Environmental Engineering Specialty Conference, London, Ontario.
- 78.) Wasay S., Parker W.J., Van Geel P.J. (2000) *Characterization and Treatment of Battery Waste- Contaminated Soil*, Proceedings of the Air & Waste Management Association's 93rd Annual Meeting & Exhibition, Salt Lake City, UT
- 79.) Pearce P., Parker W.J., Van Geel P.J. (2000) *Evaluation of Natural Attenuation of Residual Contamination at a Petroleum-Impacted Site*, Proceedings of the Air & Waste Management Association's 93rd Annual Meeting & Exhibition, Salt Lake City, UT

- 80.) Parker W.J., Ryan H., Filipovich P. (2000) *An Evaluation of Ventilation Patterns in a Regional Collector Sewer*, Proceedings of the Water Environment Federations Specialty Conference "Odors and VOC Emissions 2000", April 16-19, Cincinnati, OH
- 81.) Parker W.J. (1999) *Modeling Reductive Dechlorination of Tetrachloroethylene in Activated Sludge Flocs*, Poster Presentation at the IWA Conference on Biofilm Systems, Oct 17-21, New York, NY
- 82.) Parker, W.J., Collins, J., Wells J., Kennedy K. (1999) *Three Phase Biological Treatment Process for Chlorinated Compounds in Air Streams*, Proceedings of the 92nd Annual Conference of the Air and Waste Management Association, June 21-24, St. Louis, MO.
- 83.) Parker W.J., Allen V., Robertson D. (1998) *An Investigation of Factors Influencing Biosolids Dewatering at the Regional Municipality of Ottawa-Carleton's Robert O. Pickard Centre*; Proceedings of the 29th Annual Conference of the Water Environment Association of Ontario, March 28-31, Toronto, Ontario.
- 84.) P. Champagne, Parker W.J., P. VanGeel (1998) *Modeling Cometabolic Biodegradation of Organic Compounds in Biofilms*; Proceedings of the IAWQ Specialty Conference on Microbial Ecology of Biofilms, Oct. 8-10, Lake Bluff, IL.
- 85.) Parker W.J., J. Collins, J. Wells, K. Kennedy (1998) *Biological Treatment of Air Streams Containing Chlorinated Organics*; Proceedings of the 91st Annual Conference of the Air and Waste Management Association, June 15-19, San Diego, CA.
- 86.) Kemp J.R., Bell J., Parker W., Rittmann B., Thompson D., Zytner R. (1996) *A Protocol for Measuring VOC Biotransformation Rates*, Proceeding of the Air and Waste Management Association Annual Conference, Nashville, TN, June 23-28.
- 87.) Thompson D., Sterne L., Bell J., Parker W., Lye A. (1996) *Pilot Scale Investigation of Sustainable BTEX Removal with a Compost Biofilter*, Proceedings of the Air and Waste Management Association Annual Conference, Nashville, TN, June 23-28.
- 88.) Monteith H.D., Parker W.J., Melcer H. (1996) *Impact of Bubble-Induced Turbulence on Gas-Liquid Mass Transfer in Diffused Aeration Systems*, Proceedings of the 69th Annual Water Environment Federation Conference, Dallas, Texas, Oct 5-9.
- 89.) Parker W.J., Monteith H.D. (1995) *Stripping of VOC's from Dissolved Air Flotation*, Proceedings of the 68th Annual Water Environment Federation Conference, Miami, FL, Oct 21-25.
- 90.) Parker W.J., Monteith H.D., Melcer H (1994) *Estimation of Biodegradation Rates for Toxic Organic Compounds in Municipal Sludge Digestion*, Proceedings of the 67th Annual Water Environment Federation Conference, Oct 17-19, Chicago, IL.
- 91.) Parker W.J., Monteith H.D., Bell J.P., Melcer H. (1994) *A Field Scale Evaluation of the Airstripping of Volatile Organic Compounds by Mechanical Aerators*, Proceedings of the 67th Annual Water Environment Federation Conference, Oct. 17-19, Chicago, IL.

- 92.) Parker W.J., Corsi R.L., Bell J.P. (1994) *Modeling the Fate of Volatile Organic Compounds in Fixed Film Wastewater Treatment Processes*, Proceedings of the 67th Annual Water Environment Federation Conference, Oct 17-19, Chicago, IL.
- 93.) Monteith H.D., Parker W.J., Keates K., Kierstead T. (1994) *Assessment of Volatile Emissions from an Industrial Wastewater Treatment Facility*, Proceedings of the 67th Annual Water Environment Federation Conference, Oct. 17-19, Chicago, IL.
- 94.) Parker, W.J., Seed L., Corsi R. (1994) *Biofiltration of Offgases from Soil Venting*, Proceedings of the 4th Annual GASReP Symposium on Groundwater and Soil Remediation, Sept. 21-23, Calgary, Alberta.
- 95.) Melcer, H., Parker W.J. (1994) *Modeling Volatile Organic Contaminants in Trickling Filter Systems*, Presented at the IAWQ Specialized Research Seminar on the Biological Degradation of Organic Chemical Pollutants in Biofilm Systems
- 96.) Monteith H.D., Parker W.J., Bell J.P., Melcer H. 1994 *TOXCHEM - A Predictive Fate Model for the Real World* Proceedings of the Water Environment Association of Ontario Annual Conference, April 18-19, Windsor, Ont.
- 97.) Parker, H.D. Monteith, J.P. Bell, H. Melcer, R. Corsi 1994 *Fugitive Air Emissions of Volatile Organic Compounds from Fixed Film Wastewater Treatment Processes*, Proceedings of the Water Environment Federation Specialty Conference on VOCs and Odors, April 25-27, Jacksonville, FL.
- 98.) Monteith H.D., Parker W.J., Bell J.P., Melcer H. 1993 *Modeling the Fate of Pesticides in Municipal Wastewater Treatment*, Proceedings of the Water Environment Federation Conference, Oct 3-7, Anaheim, CA
- 99.) Seed, B. Harper, W. Parker, R. Corsi 1993 *Biofiltration of BTEX in Soil Remediation Off-gas: Laboratory Studies*, Proceedings of the 3rd Annual GASReP Symposium on Groundwater and Soil Remediation, Sept. 8-10, Quebec City, Quebec.
- 100.) Parker W., Bell J., Melcer H. 1992 *Modelling the Fate of Chlorinated Phenols in Wastewater Treatment Processes*, Proceedings 65 Annual Conference of the Water Environment Federation, September 20-24, New Orleans, La.
- 101.) Parker W.J., Hall E.R., Farquhar G.J. 1991 *Dechlorination of Segregated Kraft Mill Bleach Plant Effluents in High Rate Anaerobic Reactors*, Proceedings of the TAPPI Environmental Conference, April 4-8, San Antonio, Texas.

i.) Other

- 1.) Laha S. and Parker W. (2003) *Biosolids and Sludge Management*, Literature review Chapter in Water Environment Research
- 2.) Parker W. and Laha S. (2004) *Biosolids and Sludge Management*, Literature review Chapter in Water Environment Research

- 3.) Parker W., Laha S., Zhou J. (2005) *Biosolids and Sludge Management*, Literature review Chapter in Water Environment Research
- 4.) Zhou J., Parker W., Laha S., (2006) *Biosolids and Sludge Management*, Literature review Chapter in Water Environment Research