

## LORENZO BENEDETTI, PH.D.

### Publications in international peer reviewed journals

1. **Benedetti, L.**, Langeveld, J., Amerlinck, Y., de Jonge, J., de Klein, J.J.M., Flameling, T., Nopens, I., van Zanten, O. and Weijers, S. (2016) Cost-effective integrated optimization of the Eindhoven wastewater system: stepwise implementation of selected measures for river DO control. *Water Science and Technology* (in preparation).
2. Hadjimichael, A., Morera, S., **Benedetti, L.**, Flameling, T., Corominas, L., Weijers, S. and Comas, J. (2016) Assessing urban wastewater system upgrades using integrated modeling, life cycle analysis and shadow pricing. *Environmental Science and Technology* (accepted).
3. Holguin-Gonzalez, J. E., Boets, P., Everaert, G., Pauwels, I. S., Lock, K., Gobeyn, S., **Benedetti, L.**, Amerlinck, Y., Nopens, I. and Goethals, P. L. M. (2014) Development and assessment of an integrated ecological modelling framework to assess the effect of investments in wastewater treatment on water quality. *Water Science and Technology* 70(11), 1798-1807.
4. Vezzano, L., **Benedetti, L.**, Gevaert, V., De Keyser, W., Verdonck, F., De Baets, B., Nopens, I., Cloutier, F., Vanrolleghem, P.A. and Mikkelsen, P.-S. (2014) Dynamic Transport and Fate Models for Micro-pollutants in Integrated Urban Wastewater Systems. *Environmental Modelling & Software* 53, 98-111.
5. Langeveld, J.G., **Benedetti, L.**, de Klein, J.J.M., Nopens, I., Amerlinck, Y., van Nieuwenhuijzen, A., Flameling, T., van Zanten, O. and Weijers, S. (2013) Impact-based integrated real-time control for improvement of the Dommel River water quality. *Urban Water Journal* 10(5), 312-329.
6. **Benedetti, L.**, Langeveld, J.G., Comeau, A., Corominas, L., Daigger, G.T., Martin, C., Mikkelsen, P.-S., Vezzano, L., Weijers, S. and Vanrolleghem, P.A. (2013) Modelling and monitoring of integrated urban wastewater systems: Review on status and perspectives. *Water Science and Technology* 68(6), 1203-1215.
7. **Benedetti, L.**, Langeveld, J.G., de Jonge, J., de Klein, J.J.M., Flameling, T., Nopens, I., van Nieuwenhuijzen, A., van Zanten, O. and Weijers, S. (2013) Cost-effective solutions for water quality improvement in the Dommel River supported by sewer-WWTP-river integrated modelling. *Water Science and Technology* 68(5), 965-973.
8. Langeveld, J., Nopens, I., Schilperoort, R., **Benedetti, L.**, de Klein, J., Amerlinck, Y. and Weijers, S. (2013) On data requirements for calibration of integrated models for urban water systems. *Water Science and Technology* 68(3), 728-736.
9. Jeppsson, U., Alex, J., Batstone, D.J., **Benedetti, L.**, Comas, J., Copp, J.B., Corominas, L., Flores-Alsina, X., Gernaey, K.V., Nopens, I., Pons, M.-N., Rodríguez-Roda, I., Rosen, C., Steyer, J.-P., Vanrolleghem, P.A., Volcke, E.I.P. and Vrecko, D. (2013) *Quo Vadis* Benchmark Simulation Models? *Water Science and Technology* 68(1), 1-15.
10. **Benedetti, L.**, Belia, E., Cierkens, K., Flameling, T., De Baets, B., Nopens, I. and Weijers, S. (2013) The incorporation of variability and uncertainty evaluations in WWTP design by means of stochastic dynamic modeling: the case of the Eindhoven WWTP upgrade. *Water Science and Technology* 67(8), 1841-1850.
11. Plósz, B.G., **Benedetti, L.**, Daigger, G.T., Langford, K.H., Larsen, H. F., Monteith, H., Ort, C., Seth, R., Steyer, J.-P. and Vanrolleghem, P.A. (2013) Modelling micropollutants fate in wastewater collection and treatment systems: status and challenges. *Water Science and Technology* 67(1), 1-15.

12. Guo, L., Porro, J., Sharma, K., Amerlinck, Y., **Benedetti, L.**, Nopens, I., Shaw, A., Vanrolleghem, P.A., Van Hulle, S.W.H. and Yuan, Z. (2012) Towards a benchmarking tool for minimizing wastewater utility greenhouse gas footprints. *Water Science and Technology* 66(11), 2483-2495.
13. **Benedetti, L.**, Batstone, D.J., De Baets, B., Nopens, I. and Vanrolleghem, P.A. (2012) Uncertainty analysis of WWTP control strategies made feasible. *Water Quality Research Journal of Canada* 47(1), 14-29.
14. Prat, P., **Benedetti, L.**, Corominas, L., Comas, J. and Poch, M. (2012) Model-based knowledge acquisition in environmental decision support system for wastewater integrated management. *Water Science and Technology* 65(6), 1123-1129.
15. De Schepper, V.C.J., Holvoet, K.M.A., **Benedetti, L.**, Seuntjens, P. and Vanrolleghem, P.A. (2012) Extension of the River Water Quality Model N°1 with the fate of pesticides. *Journal of Hydroinformatics* 14(1), 48-64.
16. Cierkens, K., Plano, S., **Benedetti, L.**, Weijers, S., de Jonge, J. and Nopens, I. (2012) Impact of influent data frequency and model structure on the quality of WWTP model calibration and uncertainty. *Water Science and Technology* 65(2), 233-242.
17. Gernaey, K., Flores-Alsina, X., Rosen, C., **Benedetti, L.** and Jeppsson, U. (2011) Dynamic influent pollutant disturbance scenario generation using a phenomenological modelling approach. *Environmental Modelling & Software* 26(11), 1255-1267.
18. **Benedetti, L.**, Claeys, F., Nopens, I. and Vanrolleghem P.A. (2011) Assessing the convergence of LHS Monte Carlo simulations of wastewater treatment models. *Water Science and Technology* 63(10), 2219-2224.
19. Plósz, B.D., De Clercq, J., Nopens, I., **Benedetti, L.** and Vanrolleghem, P.A. (2011) Shall we upgrade one-dimensional secondary settler models used in WWTP simulators? – An assessment of model structure uncertainty and its propagation. *Water Science and Technology* 63(8), 1726-1738.
20. Nopens, I., **Benedetti, L.**, Jeppsson, U., Pons, M.-N., Alex, J., Copp, J.B., Gernaey, K.V., Rosen, C., Steyer, J.-P. and Vanrolleghem P.A. (2010) Benchmark Simulation Model No 2: finalisation of plant layout and default control strategy. *Water Science and Technology* 62(9), 1967-1974.
21. Verrecht, B., Maere, T., **Benedetti, L.**, Nopens, I. and Judd, S. (2010) Model-based energy optimisation of a small-scale decentralised membrane bioreactor for urban reuse. *Water Research* 44(14), 4047-4056.
22. De Keyser, W., Gevaert, V., Verdonck, F., Nopens, I., De Baets, B., Vanrolleghem, P.A., Mikkelsen, P.S. and **Benedetti, L.** (2010) Combining multimedia models with integrated urban water system models for micropollutants. *Water Science and Technology* 62(7), 1614-1622.
23. **Benedetti, L.**, De Keyser, W., Nopens, I. and Vanrolleghem, P.A. (2010) Probabilistic modelling and evaluation of waste water treatment plant upgrades in the EU Water Framework Directive context. *Journal of Hydroinformatics* 12(4), 380-395.
24. Claeys, P., van Griensven, A., **Benedetti, L.**, De Baets, B. and Vanrolleghem, P.A. (2010) On numerical solver selection and related uncertainty terminology. *Journal of Hydroinformatics* 12(3), 241-250.
25. **Benedetti, L.**, De Baets, B., Nopens, I. and Vanrolleghem, P.A. (2010) Multi-criteria analysis of wastewater treatment plant design and control scenarios with the Benchmark Simulation Model No.2 under uncertainty. *Environmental Modelling & Software*, 25(5), 616-621.

26. De Keyser, W., Gevaert, V., Verdonck, F., De Baets, B. and **Benedetti, L.** (2010) An emission time series generator for pollutant release modelling in urban areas. *Environmental Modelling & Software*, 25(4), 554-561.
27. **Benedetti, L.**, Prat, P., Nopens, I., Poch, M., Turon, C., De Baets, B. and Comas, J. (2009) A new rule generation method to develop a DSS for integrated management at river basin scale. *Water Science and Technology* 60(8), 2035-2040.
28. Belia, E., Amerlinck, Y., **Benedetti, L.**, Johnson, B., Sin, G., Vanrolleghem, P.A., Gernaey, K.V., Gillot, S., Neumann, M.B., Rieger, L., Shaw, A. and Villez, K. (2009) Wastewater treatment modelling: dealing with uncertainties. *Water Science and Technology* 60(8), 1929-1941.
29. Gevaert, V., Verdonck, F., **Benedetti, L.**, De Keyser, W. and De Baets, B. (2009) Evaluating the usefulness of dynamic pollutant fate models for implementing the EU Water Framework Directive. *Chemosphere* 79, 27-35.
30. Hug, T., **Benedetti, L.**, Hall, E.R., Johnson, B., Morgenroth, E., Nopens, I., Rieger, L., Shaw, A. and Vanrolleghem, P.A. (2009) Wastewater treatment models in teaching and training: the mismatch between education and requirements for jobs. *Water Science and Technology* 59(04), 745-753.
31. Ghermandi, A., Vandenberghe, V., **Benedetti, L.**, Bauwens, W. and Vanrolleghem, P.A. (2009) Model-based assessment of the effect of shading on river water quality. *Ecological Engineering* 35(1), 92-104.
32. **Benedetti, L.**, Dirckx, G., Bixio, D., Thoeye, C. and Vanrolleghem, P.A. (2008) Environmental and economic performance assessment of the integrated urban wastewater system. *Journal of Environmental Management* 88, 1262-1272.
33. Borsányi, P., **Benedetti, L.**, Dirckx, G., De Keyser, W., Muschalla, D., Solvi, A.-M., Vandenberghe, V., Weyand, M. and Vanrolleghem, P.A. (2008) Modelling real time control options on benchmark sewer systems. *Journal of Environmental Engineering and Science* 7, 395-410.
34. **Benedetti, L.**, Bixio, D., Claeys, F. and Vanrolleghem, P.A. (2008) Tools to support a model-based methodology for emission/immission and benefit/cost/risk analysis of wastewater treatment systems which considers uncertainties. *Environmental Modelling & Software* 23(8), 1082-1091.
35. **Benedetti, L.**, Meirlaen, J., Sforzi, F., Facchi, A., Gandolfi, C. and Vanrolleghem, P. A. (2007) Dynamic integrated modelling: A case study on the river Lambro. *Water SA* 33(5), 627-632.
36. Zaher, U., Grau, P., **Benedetti, L.**, Ayasa, E. and Vanrolleghem, P. A. (2007) Transformers for interfacing anaerobic digestion models to pre- and post-treatment processes in a plant-wide modelling context. *Environmental Modelling & Software* 22(1), 40-85.
37. **Benedetti, L.**, Bixio, D. and Vanrolleghem, P.A. (2006) Benchmarking of WWTP design by assessing costs, effluent quality and process variability. *Water Science and Technology* 54(10), 95-102.
38. **Benedetti, L.**, Bixio, D. and Vanrolleghem, P. A. (2006) Assessment of WWTP design and upgrade options: balancing costs and risks of standards' exceedance. *Water Science and Technology* 54(6-7), 371-378.
39. **Benedetti, L.**, Dirckx, G., Bixio, D., Thoeye, C. and Vanrolleghem, P.A. (2006) Substance flow analysis of the wastewater collection and treatment systems. *Urban Water Journal* 3(1), 33-42.
40. Devisscher, M., Ciacci, G., Fé, L., **Benedetti, L.**, Bixio, D., Thoeye, C., De Gueldre, G.,

- Marsili-Libelli, S. and Vanrolleghem, P. A. (2006) Estimating costs and benefits of advanced control for wastewater treatment plants - the MaGIC methodology. *Water Science and Technology* 53(4-5), 215-223.
41. Claeys, F., Chtepen, M., **Benedetti, L.**, Dhoedt, B. and Vanrolleghem, P. A. (2006) Distributed virtual experiments in water quality management. *Water Science and Technology* 53(1), 297-305.
  42. **Benedetti, L.**, Blumensaat, F., Bönisch, G., Dirckx, G., Jardin, N., Krebs, P. and Vanrolleghem, P. A. (2005) Systems Analysis of urban wastewater systems - two systematic approaches to analyse a complex system. *Water Science and Technology* 52(12), 171-179.
  43. Vanrolleghem, P. A., Rosen, C., Zaher, U., Copp, J., **Benedetti, L.**, Ayesa, E. and Jeppsson, U. (2005) Continuity-based interfacing of models for wastewater systems described by Peterson matrices. *Water Science and Technology* 52(1-2), 493-500.
  44. Vanrolleghem, P. A., **Benedetti, L.** and Meirlaen, J. (2005) Modelling and real-time control of the integrated urban wastewater system. *Environmental Modelling & Software* 20(4), 427-442.
  45. Meirlaen, J., Huyghebaert, B., Sforzi, F., **Benedetti, L.** and Vanrolleghem, P. A. (2001) Fast, simultaneous simulation of the integrated urban wastewater system using mechanistic surrogate models. *Water Science and Technology* 43(7), 301-309.

#### Books and book chapters

1. Belia, E., Neumann, M., Vanrolleghem, P. A., Johnson, B., **Benedetti, L.**, Murthy, S. and Weijers, S. (in preparation) *Uncertainty in Wastewater Treatment Design and Operation: Addressing Current Practices and Future Directions*, IWA Publishing, ISBN: 9781780401027.
2. **Benedetti, L.** (2016) Modelling integrated wastewater systems for design and operation in Eindhoven (Netherlands). In: *Smart Water Utilities: Complexity Made Simple*, Ingildsen, P. and Olsson, G. (eds.), IWA Publishing, ISBN: 9781780407579, pp. 231-236.
3. Alex, J., Batstone, D., **Benedetti, L.**, Comas, J., Copp, J. B., Corominas, L., Flores-Alsina, X., Gernaey, K. V., Jeppsson, U., Nopens, I., Pons, M.-N., Rodriguez-Roda, I., Rosen, C., Steyer, J.-P., Vanrolleghem, P. A., Volcke, E. I. P. and Vrecko, D. (2014) Benchmark models. In: *Benchmarking of Control Strategies for Wastewater Treatment Plants*, Gernaey, K. V., Jeppsson, U., Vanrolleghem, P. A. and Copp, J. B. (eds.), IWA Publishing, ISBN: 9781843391463, pp. 15-54.
4. Nopens, I., De Keyser, W., Corominas, L., **Benedetti, L.**, Pons, M.-N., Alex, J., Copp, J. B., Dudley, J., Rosen, C., Vanrolleghem, P. A. and Jeppsson, U. (2014) Ring-testing. In: *Benchmarking of Control Strategies for Wastewater Treatment Plants*, Gernaey, K. V., Jeppsson, U., Vanrolleghem, P. A. and Copp, J. B. (eds.), IWA Publishing, ISBN: 9781843391463, pp. 81-88.
5. Vanrolleghem, P. A., **Benedetti, L.**, Moisisio, S. and Sahni, N. (2014) Modeling for Wet Weather. In: *Wet Weather Design and Operation in Water Resource Recovery Facilities*, Water Environment Federation, ISBN: 9781572783041, pp. 89-107.
6. **Benedetti, L.**, Meirlaen, J. and Vanrolleghem, P. A. (2004) Model connectors for integrated simulations of urban wastewater systems. In: *Sewer Networks and Processes within Urban Water Systems*. J.-L. Bertrand-Krajewski, M. Almeida, J. Matos and S. Abdul-Talib (eds.), *Water and Environment Management Series (WEMS)*, IWA Publishing, ISBN: 9781843395065, pp. 13-21.

Publications in national journals and not peer reviewed journals

1. Harold, E., Slawewski, T. A. D., Vallabhaneni, S., Vanrolleghem, P. A. and **Benedetti, L.** (2015) Pulling Together the Pieces: Integrated modeling improves water quality outcomes and reduces utility risks and costs. *Water Environment and Technology*, 27(9), 60-64.
2. Weijers, S., de Jonge, J., van Zanten, O., Flameling, T., **Benedetti, L.**, de Klein, J., Langeveld, J., van Nieuwenhuijzen, A. and Nopens, I. (2012) KALLISTO: successfully using an integrated modelling approach for cost-effective Water Framework Directive compliance. *Water21*, IWA Publishing, Issue October 2012.
3. Cierkens, K., Nopens, I., De Keyser, W., Van Hulle, S., Plano, S., Torfs, E., **Benedetti, L.**, van Nieuwenhuijzen, A.F., Weijers, S.R., de Jonge, J. (2012) Integrated model-based optimisation efforts at the WWTP of Eindhoven. *Water Practice and Technology* 7(2), doi:10.2166/wpt.2012.035.
4. Weijers, S.R., de Jonge, J., van Zanten, O., **Benedetti, L.**, Langeveld, J., Menkveld, H.W. and van Nieuwenhuijzen, A.F. (2012) KALLISTO: Cost Effective and Integrated Optimization of the Urban Wastewater System Eindhoven. *Water Practice and Technology* 7(2), doi:10.2166/wpt.2012.036.
5. **Benedetti, L.** (2012) Modeling for Integrated Urban Water Management. *The Droplet – Newsletter of the Florida Water Environment Association Integrated Water Resources Committee*, Volume 4, Issue 2, May 2012, 2-3.
6. Belia, E., **Benedetti, L.**, Johnson, B., Murthy, S., Neuman, M., Vanrolleghem, P.A., Weijers, S. and Copp, J. (2009) Wastewater treatment modelling: discussing uncertainty. *Influents – Official Publication of the Water Environment Association of Ontario*, Spring 2009, Volume 4.
7. **Benedetti, L.**, Casadio, A., Maglionico, M. and Vanrolleghem, P.A. (2008) Metodologia di realizzazione di un connettore fra ASM2d e RWQM1 per un modello di simulazione integrato: rete fognaria – impianto di depurazione – corpo idrico ricettore. *Ingegneria Ambientale* 37(1-2), 26-33.
8. De Keyser, W. and **Benedetti, L.** (2006) Ontwerp en renovatie van rwzi's: een modelgebaseerde afweging van kosten en risico's. *Afvalwaterwetenschap jaargang 5, nr.4*, 222-226.

Publications in conference proceedings

1. Gill, E., **Benedetti, L.**, Hénonin, J., Brink-Kjaer, A., Nielsen, P.H., Nedergaard Pedersen, A. and Hallager, P. (2016) Planning for the future: using an integrated model to support long-term strategies in wastewater collection and treatment.. In: *Proceedings of WEFTEC2016*, New Orleans, LA, USA, 24-28 September 2016. Platform presentation.
2. Gill, E., **Benedetti, L.**, Hénonin, J., Brink-Kjaer, A., Nielsen, P.H., Nedergaard Pedersen, A. and Hallager, P. (2016) Integrated wastewater system modelling provides fresh insight into wet weather dynamics and supports development of long term integrated plan. In: *Proceedings of Singapore International Water Week 2016*, Singapore, 10-14 July 2016. Poster presentation.
3. **Benedetti, L.**, Hénonin, J., Gill, E., Brink-Kjaer, A., Nielsen, P.H., Nedergaard Pedersen, A. and Hallager, P. (2016) Using an integrated model to support long term strategies in wastewater collection and treatment. In: *Proceedings of NOVATECH 2016*, Lyon, France, 28 June – 1 July 2016. Platform presentation.
4. Moisis S., Gill E.J., **Benedetti L.** and Nielsen P.H. (2016) Using An Integrated Modeling Approach to Better Understand Wet Weather Dynamics and Deliver Environmental Outcomes

- at Least Cost. In: *Proceedings of WEF Collection Systems Conference 2016*, Atlanta, GE, USA, 28 June – 1 July 2016. Platform presentation.
5. **Benedetti, L.** (2016) An empirical settler model for fast simulation including wet-weather conditions. In: *Proceedings of the 5<sup>th</sup> IWA/WEF Wastewater Treatment Modelling Seminar*, Annecy, France, 2-6 April 2016. Poster presentation.
  6. **Benedetti, L.**, Hénonin, J., Brink-Kjaer, A., Gill, E., Nielsen, P.H., Nedergaard Pedersen, A. and Hallager, P. (2015) Integrated wastewater and watershed planning in Odense, Denmark. In: *Proceedings of NORDIWA2015*, Bergen, Norway, 4-6 November 2015. Poster presentation.
  7. Gill, E., **Benedetti, L.**, Brink-Kjaer, A., Nedergaard Pedersen, A., Nielsen, P.H., Moisiso, S., Hénonin, J., Sandino, J. and Hallager, P. (2015) An Integrated Model-based Planning Approach to Achieve River Water Quality Objectives in Wet Weather Using the Best Mix of Green and Grey Technologies. In: *Proceedings of WEFTEC2015*, Chicago, IL, USA, 26-30 September 2015. Platform presentation.
  8. Nielsen, P.H., **Benedetti, L.**, Brink-Kjaer, A., Gill, E., Nedergaard Pedersen, A., Moisiso, S., Hénonin, J., Sandino, J. and Hallager, P. (2015) Alternative Investment Schemes Evaluated with Integrated Water Quality Modeling: The Experience of Odense. In: *Proceedings of WEFTEC2015*, Chicago, IL, USA, 26-30 September 2015. Workshop presentation.
  9. **Benedetti, L.** (2015) Introduction to Integrated Modeling: Terminology, Approaches and Tools. In: *Proceedings of WEFTEC2015*, Chicago, IL, USA, 26-30 September 2015. Workshop presentation.
  10. **Benedetti, L.**, Langeveld, J., Amerlinck, Y., de Jonge, J., de Klein, J.J.M., Flaming, T., Nopens, I., van Zanten, O. and Weijers, S. (2015) Cost-Effective and Integrated Optimization of the Eindhoven Urban Wastewater System: From Modelling to Implementation. In: *Proceedings of WEFTEC2015*, Chicago, IL, USA, 26-30 September 2015. Platform presentation.
  11. **Benedetti, L.**, Brink-Kjaer, A., Gill, E., Nedergaard Pedersen, A., Moisiso, S., Hénonin, J., Sandino, J. and Hallager, P. (2015) Integrated Wastewater Catchment Modelling And Planning In Odense, Denmark. In: *Proceedings of UDM 2015 10<sup>th</sup> International Conference on Urban Drainage Modelling*, Mont-Sainte-Anne QC, Canada, 20-23 September 2015. Platform presentation.
  12. Langeveld, J., **Benedetti, L.**, de Klein, J.J.M., Nopens, I., Amerlinck, Y., Flaming, T., van Zanten, O. and Weijers, S. (2015) Ecological evaluation criteria driving integrated urban water quality modelling and system optimisation. In: *Proceedings of WATERMATEX 2015, 9<sup>th</sup> IWA Symposium on Systems Analysis and Integrated Assessment*, Gold Coast, Queensland, Australia, 14-17 June 2015. Platform presentation.
  13. **Benedetti, L.**, Brink-Kjaer, A., Gill, E., Nedergaard Pedersen, A., Moisiso, S., Hénonin, J., Sandino, J. and Hallager, P. (2014) Integrated Wastewater Catchment Modelling & Planning in Odense, Denmark. In: *Proceedings of UDG 30<sup>th</sup> Anniversary Autumn Conference & Exhibition 2014*, Blackpool, UK, 11-13 November 2014. Platform presentation.
  14. **Benedetti, L.**, Brink-Kjaer, A., Gill, E., Nedergaard Pedersen, A., Moisiso, S., Hénonin, J., Sandino, J. and Hallager, P. (2014) Dynamic Integrated Modeling for Wastewater and Stormwater Management Optimization. In: *Proceedings of WEFTEC2014*, New Orleans, LA, USA, 27 September - 1 October 2014. Platform presentation.
  15. **Benedetti, L.** and Vanrolleghem, P.A. (2014) Wet Weather Modelling: Why and How Should We Tame the Beast? In: *Proceedings of WEFTEC2014*, New Orleans, LA, USA, 27 September - 1 October 2014. Platform presentation.
  16. Vanrolleghem, P.A., **Benedetti, L.**, Lamaire-Chad, C. and Tik, S. (2014) Evaluation of Wet

Weather Operation Alternatives using Innovative WRRF Models In: *Proceedings of WEFTEC2014*, New Orleans, LA, USA, 27 September - 1 October 2014. Platform presentation.

17. **Benedetti, L.**, Langeveld, J., Amerlinck, Y., de Jonge, J., de Klein, J.J.M., Flameling, T., Nopens, I., van Zanten, O. and Weijers, S. (2014) Cost-effective and integrated optimization of the Eindhoven urban wastewater system: step-wise implementation of selected measures. In: *Proceedings of WEFTEC2014*, New Orleans, LA, USA, 27 September - 1 October 2014. Platform presentation.
18. **Benedetti, L.**, Langeveld, J., Amerlinck, Y., de Jonge, J., de Klein, J.J.M., Flameling, T., Nopens, I., van Zanten, O. and Weijers, S. (2014) Cost-effective and integrated optimization of the Eindhoven urban wastewater system: step-wise implementation of selected measures. In: *Proceedings of IWA World Water Congress 2014*, Lisbon, Portugal, 21-26 September 2014. Platform presentation.
19. Langeveld, J., Schilperoort, R., van Daal, P., **Benedetti, L.**, Amerlinck, Y., de Jonge, J., Flameling, T., Nopens, I and Weijers, S. (2014) A new empirical sewer water quality model for the prediction of WWTP influent quality. In: *Proceedings of 13<sup>th</sup> International Conference on Urban Drainage (ICUD)*, Sarawak, Malaysian Borneo, 7-12 September 2014. Platform presentation.
20. Saagi, R., Flores-Alsina, X., Fu, G., **Benedetti, L.**, Gernaey, K.V., Jeppsson, U. and Butler, D. (2014) Benchmarking dry weather integrated control strategies using an extended BSM2 platform. In: *Proceedings of 13<sup>th</sup> International Conference on Urban Drainage (ICUD)*, Sarawak, Malaysian Borneo, 7-12 September 2014. Platform presentation.
21. Langeveld, J., Nopens, I, Schilperoort, R., **Benedetti, L.**, de Klein, J., Amerlinck, Y. and Weijers, S. (2012) Data requirements for calibration of integrated models for urban water systems. In: *Proceedings of New Developments in IT & Water*, Amsterdam, Netherlands, 4-6 November 2012. Platform presentation.
22. **Benedetti, L.**, Langeveld, J., de Klein, J.J.M., Nopens, I., van Nieuwenhuijzen, A., Flameling, T., van Zanten, O. and Weijers, S. (2012) Sewer-WWTP-river integrated modeling for improvement of the Dommel River water quality. In: *Proceedings of WEFTEC2012*, New Orleans, LA, USA, 29 September - 3 October 2012. Platform presentation.
23. Langeveld, J., **Benedetti, L.**, de Klein, J.J.M., Nopens, I., van Nieuwenhuijzen, A., Flameling, T., van Zanten, O. and Weijers, S. (2012) Impact based RTC for improvement of the Dommel River water quality. In: *Proceedings of WEFTEC2012*, New Orleans, LA, USA, 29 September - 3 October 2012. Platform presentation.
24. **Benedetti, L.**, Belia, E., Cierkens, K., Flameling, T., De Baets, B., Nopens, I. and Weijers, S. (2012) The incorporation of variability and uncertainty evaluations in WWTP design by means of probabilistic dynamic modeling: the case of the Eindhoven WWTP upgrade. In: *Proceedings of WEFTEC2012*, New Orleans, LA, USA, 29 September - 3 October 2012. Platform presentation.
25. Belia, E., **Benedetti, L.**, Cierkens, K., Flameling, T., De Baets, B., Nopens, I. and Weijers, S. (2012) Translating safety factors to sources of variability and uncertainty; Model based design evaluation for the Eindhoven WWTP. In: *Proceedings of WEFTEC2012*, New Orleans, LA, USA, 29 September - 3 October 2012. Platform presentation.
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3. Vanrolleghem P.A. and **Benedetti L.** (2007) La gestion de la rivière en milieu urbain à l'heure des changements climatiques. *Colloque régional de Réseau Environnement - Capitale Nationale et Chaudière-Appalaches: La gestion de l'eau à l'heure des changements climatiques - Bilan et perspectives québécoises*. Québec, Canada, 15 February 2007.
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