

Full List of Publications

Journal Articles - Submitted

- [1] Jeannin, P-Y, ... et. mult. (2021). Karst modelling challenge 1: Results of hydrological modelling. *Journal of Hydrology*. (submitted).
- [2] Kavousi A, Reimann T, **Wöhling T**, Birk S, Luhmann AJ, Kordilla J, Noffz T, Sauter M, Liedl R (2021). Joint-Inversion of Spring Flow and Transport Signatures: A Multi-Purpose Approach for Characterization and Forecast of a Karst System. (submitted).
- [3] Seidel S, Palosuo T, Thorburn, P. ... et. mult. (2021). The chaos in calibrating crop models. *Environmental Modelling and Software*, (submitted).

Journal Articles

- [1] Gosses M & **Wöhling T** (2021). Robust data worth analysis with surrogate models. *Groundwater*. doi: 10.1111/gwat.13098.
- [2] Wallach D, Palosuo T, ... et. mult. (2021). How well do crop modeling groups predict wheat phenology, given calibration data from the target population? *European Journal of Agronomy*, 124, 126195, doi: 10.1016/j.eja.2020.126195.
- [3] Wallach D, Palosuo T, Thorburn, P. ... et. mult. (2021). Multi-model evaluation of phenology prediction for wheat in Australia. *Agricultural and Forest Meteorology*. 298–299, 108289, doi: 10.1016/j.agrformet.2020.108289.
- [4] **Wöhling T**, Burbery L (2020). Eigenmodels to forecast groundwater levels in unconfined river-fed aquifers during flow recession. *Science of the Total Environment*, 747, 141220, doi: 10.1016/j.scitotenv.2020.141220.
- [5] **Wöhling T**, Wilson SR, Wadsworth V, Davidson P. (2020). Detecting the cause of change using uncertain data: Natural and anthropogenic factors contributing to declining groundwater levels and flows of the Wairau Plain Aquifer, New Zealand. *Journal of Hydrology: Regional Studies*, 31, 100715, doi: 10.1016/j.ejrh.2020.100715.
- [6] Chow, R., Bennet, J., Dugge, J, **Wöhling, T.**, Nowak, W. (2019). Evaluating subsurface parameterization to simulate hyporheic exchange: The Steinlach River Test Site. *Groundwater*, 58(1), 93-109, doi: 10.1111/gwat.12884.
- [7] **Wöhling, T.** (2019). Natürliche und anthropogene Einflussfaktoren auf das hydrologische Regime des Wairau Plain Aquifer in Neuseeland. *Hydrologie und Wasserbewirtschaftung*. 63(3), 147-157, doi: 10.5675/HyWa_2019.3.2.
- [8] M. Loschko, **Wöhling, T.**, Rudolph, D.L., Cirpka, O.A. (2019). An electron-balance based approach to predict the decreasing denitrification potential of an aquifer. *Groundwater*, 57(6), 925-939, doi: 10.1111/gwat.12876.
- [9] Gosses, M. & **Wöhling, T.** (2019). Simplification error analysis for groundwater predictions with reduced order models. *Advances in Water Research*, 125, 41-56, doi: 10.1016/j.advwatres.2019.01.006.
- [10] Chow, R., Wu, H., Bennet, J., Dugge, J, **Wöhling, T.**, Nowak, W. (2018). Sensitivity of simulated hyporheic exchange to river bathymetry: The Steinlach River Test Site. *Groundwater*, 57(3), 378-391, doi: 10.1111/gwat.12816.
- [11] Gosses, M., Nowak, W., **Wöhling, T.** (2018). Explicit treatment for Dirichlet, Neumann and Cauchy boundary conditions in POD-based reduction of groundwater models. *Advances in Water Research*, 115, 160-171, doi: 10.1016/j.advwatres.2018.03.011.
- [12] Höge, M., **Wöhling, T.**, Nowak, W. (2018). A primer for model selection: The decisive role of model complexity. *Water Resources Research*, 54(3), 1688-1715, doi: 10.1002/2017WR021902.

- [13] Loschko, M., **Wöhling, T.**, Rudolph, D., Cirpka, O.A. (2018). Accounting for the decreasing reaction potential of heterogeneous aquifers in a stochastic framework of aquifer-scale reactive transport. *Water Resources Research*, 54, 442–463, doi: 10.1002/2017WR021645.
- [14] **Wöhling T.**, Gosses, M., Wilson, S., Davidson, P. (2018). Quantifying river-groundwater interactions of New Zealand’s gravel-bed rivers: The Wairau Plain. *Groundwater*, 56(4), 647–666, doi:10.1111/gwat.12625.
- [15] Woodward, S.J.R., **Wöhling Th.**, Rode, M., Stenger, R. (2017). Predicting nitrate discharge dynamics in mesoscale catchments using the lumped StreamGEM model and Bayesian parameter inference. *Journal of Hydrology*, 552(9), 684–703, doi: 10.1016/j.jhydrol.2017.07.021.
- [16] Loschko, M., **Wöhling, Th.**, Rudolph, D., Cirpka, O.A. (2016). Cumulative relative reactivity: A concept for modeling aquifer-scale reactive transport. *Water Resources Research*, 52(10), 8117–8137, doi:10.1002/2016WR019080.
- [17] von Gunten, D., **Wöhling, Th.**, Haslauer, C. Merchán, D., Causape, J., Cirpka, O.A. (2016). Using an integrated hydrological model to estimate the usefulness of meteorological drought indices in a changing climate. *Hydrology and Earth System Sciences*, 20, 4159–4175, doi:10.5194/hess-20-4159-2016.
- [18] Vereecken H, Schnepf A, Hopmans JW, Javaux M, Or D, Roose T, Vanderborght J, Young M, Amelung W, Aitkenhead M, Allison SD, Assouline S, Baveye P, Berli M, Brüggemann N, Finke P, Flury M, Gaiser T, Govers G, Ghezzehei T, Hallett P, Hendricks Franssen HJ, Heppel J, Horn R, Huisman JA, Jacques D, Jonard F, Kollet S, Lafolie F, Lamorski K, Leitner D, McBratney A, Minasny B, Montzka C, Nowak W, Pachepsky Y, Padarian J, Romano N, Roth K, Rothfuss Y, Rowe EC, Schwen A, Šimůnek J, Van Dam J, van der Zee SEATM, Vogel HJ, Vrugt JA, **Wöhling T**, Young IM (2016). Modelling soil processes: Key challenges and new perspectives, *Vadose Zone Journal*, 15(5), 57p, doi: 10.2136/vzj2015.09.0131.
- [19] Hannes, M., Wollschläger, U. **Wöhling, T.**, Vogel, H.-J. (2016). Revisiting hydraulic hysteresis based on long term monitoring of hydraulic states in lysimeters. *Water Resources Research*, 52, 3847–3865, doi: 10.1002/2015WR018319.
- [20] **Wöhling, Th.**, Geiges, A., Nowak, W. (2016). Optimal design of multi-type groundwater monitoring networks using easily accessible tools. *Groundwater*, 54 (6), 861–870, doi: 10.1111/gwat.12430.
- [21] Woodward, S.J.R., **Wöhling Th.**, Stenger, R. (2016). Uncertainty in the modelling of spatial and temporal patterns of shallow groundwater flow paths: the role of geological and hydrological site information. *Journal of Hydrology*, 534, 680–694, doi: 10.1016/j.jhydrol.2016.01.045.
- [22] Schöniger, A., **Wöhling, Th.**, Nowak, W. (2015). A statistical concept to assess the uncertainty in Bayesian model weights and its impact on model ranking. *Water Resources Research*, 51(7), 7524–7546, doi: 10.1002/2015WR016918.
- [23] von Gunten, D., **Wöhling, Th.**, Haslauer, C. Merchán, D., Causape, J., Cirpka, O.A. (2015). Estimating climate-change effects on a Mediterranean catchment under various irrigation conditions. *Journal of Hydrology Regional Studies*, 4, 550–570, doi: 10.1016/j.ejrh.2015.08.001.
- [24] Schöniger, A., Illman, W., **Wöhling, Th.**, Nowak, W. (2015). Finding the right balance between groundwater model complexity and experimental effort via Bayesian Model selection. *Journal of Hydrology*, 531(1), 96–110, doi: 10.1016/j.jhydrol.2015.07.047.
- [25] **Wöhling, Th.**, Schöniger, A., Gayler, S., Nowak, W. (2015). Bayesian model averaging to explore the worth of data for maximum-confidence soil-plant model selection and prediction. *Water Resources Research*, 51, 2825–2846, doi:10.1002/2014WR016292.
- [26] Schöniger, A., **Wöhling, Th.**, Samaniego, L., Nowak, W. (2014). Model selection on solid ground: Rigorous comparison of nine ways to evaluate Bayesian model evidence. *Water Resources Research*, 50(12), 9484–9513, doi:10.1002/2014WR016062.
- [27] von Gunten, D., **Wöhling, Th.**, Haslauer, C. Merchán, D., Causape, J., Cirpka, O.A. (2014). Efficient calibration of a distributed pde-based hydrological model using grid coarsening. *Journal of Hydrology*, 519, 3290–3304.

- [28] Lemke, D., González-Pinzón, R., Liao, Z., **Wöhling, Th.**, Osenbrück, K., Haggerty, R., Cirpka, O.A. (2014). Sorption and transformation of the reactive tracers resazurin and resorufin in natural river sediments. *Hydrology and Earth System Sciences*, 18, 3151–3163.
- [29] Barkle, G.F., Stenger, R. and **Wöhling, Th.** (2014). Fate of urine nitrogen through a volcanic vadose zone and into shallow groundwater. *Soil Research*, 52 (7), 658-670.
- [30] Barkle, G.F., **Wöhling, Th.** and Stenger, R. (2014). Variability of unsaturated Bromide fluxes as measured through a layered volcanic vadose zone in New Zealand. *Hydrological Processes*, 28, 6080-6097.
- [31] Gayler, S., **Wöhling, Th.**, Grzeschik, M., Ingwersen, J., Wizemann, H.-D., Högy, P., Attinger, S., Streck, T., Wulfmeyer, V. (2014). Incorporating dynamic root growth enhances the performance of Noah-MP ensemble simulations at two contrasting winter wheat field sites. *Water Resources Research*, 50(2), 1337-1356, doi: 10.1002/2013WR014634.
- [32] **Wöhling, Th.**, Gayler, S., Priesack, E., Ingwersen, J., Wizemann, H.-D., Högy, P., Cuntz, M., Attinger, S., Wulfmeyer, V., Streck, T. (2013). Multiresponse, multiobjective calibration as a diagnostic tool to compare accuracy and structural limitations of five coupled soil-plant models and CLM3.5. *Water Resources Research*, 49(12), 8200-8221, doi: 10.1002/2013WR014536.
- [33] Lemke, D., Liao, Z., **Wöhling, Th.**, Osenbrück, K., Cirpka, O.A. (2013) Concurrent conservative and reactive tracer tests in a stream undergoing hyporheic exchange. *Water Resources Research*. 49(5), 3024–3037.
- [34] **Wöhling, Th.**, Samaniego, L., Kumar, R. (2013). Evaluating multiple performance criteria to calibrate the distributed hydrological model of the Upper Neckar catchment. *Environ. Earth Sci.* 69 (2), 453-468, Special Issue on Catchment Research, doi: 10.1007/s12665-013-2306-2.
- [35] Gayler, S. Ingwersen, J., Priesack, E., **Wöhling, Th.**, Wulfmeyer, V., Streck, T. (2013). Assessing the relevance of sub surface processes for the simulation of evapotranspiration and soil moisture dynamics with CLM3.5: Comparison with field data and crop model simulations. *Environmental Earth Sciences*, 69 (2), 415-427, doi: 10.1007/s12665-013-2309-z.
- [36] Grathwohl, P., Rügner, H., **Wöhling, Th.**, Osenbrück, K., Schwientek, M., Gayler, S., Wollschläger, U., Selle, B., Pause, M., Delfs, J.-O., Grzeschik, M., Weller, U., Ivanov, M., Cirpka, O.A., Maier, U., Kuch, B., Nowak, W., Wulfmeyer, V., Warrach-Sagi, K., Streck, T., Attinger, S., Bilke, L., Dietrich, P., Fleckenstein, J.H., Kalbacher, T., Kolditz, O., Rink, K., Samaniego, L., Vogel, H.-J., Werban, U., Teutsch, G. (2013): Catchments as Reactors: A comprehensive approach for water fluxes and solute turn-over. *Environ. Earth Sci.* 69 (2), 317-333, doi: 10.1007/s12665-013-2281-7.
- [37] Osenbrück, K, **Wöhling, Th.**, Lemke, D., Rohrbach, N., Schwientek, M., Leven, C., Castillo Alvarez, C., Taubald, H., Cirpka, O.A. (2013). Assessing hyporheic exchange and associated travel times by hydraulic, chemical, and isotopic monitoring at the Steinlach Test Site, Germany. *Environmental Earth Sciences*, 69 (2), 359-372, doi: 10.1007/s12665-012-2155-4.
- [38] Caldwell, T.J, **Wöhling, Th.**, Young, M.H., Boyle, D.P., McDonald, E.V. (2013). Characterizing disturbed desert soils using multi-objective inverse parameter optimization. *Vadose Zone Journal*, 12(1), 1-23, doi:10.2136/vzj2012.0083.
- [39] **Wöhling, Th.**, Bidwell, V.J., Barkle, G.F. (2012). Dual-tracer, non-equilibrium mixing cell modelling and uncertainty analysis for unsaturated bromide and chloride transport. *Journal of Contaminant Hydrology*. 140-141, 150-163, doi: 10.1016/j.jconhyd.2012.08.001.
- [40] Philipp, A., Liedl, R., **Wöhling, Th.** (2012) An analytical model of surface flow on hillslopes based on the zero inertia equations. *Journal of Hydraulic Engineering*, 138 (5), 391-399, doi: 10.1061/(ASCE)HY.1943-7900.0000519.
- [41] Barkle, G.F., **Wöhling, Th.**, Stenger, R., Mertens, J., Moorhead, B., Wall, A. and Claque, J. (2011). Automated equilibrium tension lysimeters for measuring water fluxes through a layered, volcanic vadose profile in New Zealand. *Vadose Zone Journal*, 10(2), 747-759, doi: 10.2136/vzj2010.0091.
- [42] Köhne, J.M., **Wöhling, Th.**, Pot, V., Benoit, P., Leguédois, S., Le Bissonnais, Y., Šimůnek, J. (2011) Coupled simulation of surface runoff and soil water flow using multi-objective parameter estimation. *Journal of Hydrology*, 403, 141-156.

- [43] **Wöhling, Th.**, Vrugt, J.A. (2011). Multi-response multi-layer vadose zone model calibration using Markov chain Monte Carlo simulation and field water retention data. *Water Resources Research*, 47, W04510, doi:10.1029/2010WR009265.
- [44] Dann, R., Bidwell, V., Thomas, S., **Wöhling, Th.**, Close, M. (2010). Modelling of Nonequilibrium Bromide Transport through Alluvial Gravel Vadose Zones. *Vadose Zone Journal*, 9, 731-746.
- [45] Moore, C., **Wöhling, Th.**, Doherty, J. (2010). Efficient regularization and uncertainty-analysis using global optimization methodology. *Water Resources Research*, 46, W08527, doi:10.1029/2009WR008627.
- [46] Janssen, M., Lennartz, B. and **Wöhling, Th.** (2010). Percolation losses in paddy fields with a dynamic soil structure: Model development and applications. *Hydrological Processes*, 24, 813-824.
- [47] **Wöhling, Th.**, Schütze, N., Heinrich, B., Šimůnek, J. and Barkle, G.F. (2009) Three-dimensional modeling of multiple Automated Equilibrium Tension Lysimeters to measure vadose zone fluxes. *Vadose Zone Journal*, 8(4), 1051–1063.
- [48] **Wöhling, Th.**, Vrugt, J.A. (2008). Combining multi-objective optimization and Bayesian model averaging to calibrate forecast ensembles of soil hydraulic models. *Water Resources Research*, 44, W12432, doi:10.1029/2008WR007154.
- [49] Vrugt, J.A., Stauffer, P.H., **Wöhling, Th.**, Robinson, B.A. and Vesselinov, V.V. (2008). Inverse modeling of subsurface flow and transport properties: A review with new developments. *Vadose Zone Journal*, 7(2), 843-864.
- [50] **Wöhling, Th.**, Barkle, G.F., Vrugt, J.A. (2008). Comparison of three multiobjective optimization algorithms for inverse modeling of vadose zone hydraulic properties. *Soil Science Society of America Journal*, 72(2), 305-319.
- [51] **Wöhling, Th.**, Schmitz, G.H. (2007). A Physically Based Coupled Model for Simulating 1D Surface - 2D Subsurface Flow and Plant Water Uptake in Irrigation Furrows. I: Model Development. *Journal of Irrigation and Drainage Engineering*. 133(6), 538-547.
- [52] **Wöhling, Th.**, Mailhol, J.C. (2007). A Physically Based Coupled Model for Simulating 1D Surface - 2D Subsurface Flow and Plant Water Uptake in Irrigation Furrows. II: Model Test and Evaluation. *Journal of Irrigation and Drainage Engineering*. 133(6), 548-558.
- [53] Stenger, R., **Wöhling, Th.**, Barkle, G. and Wall, A. (2007) Empirical and semi-empirical dielectric permittivity water content relationships for vadose zone materials of volcanic origin. *Australian Journal of Soil Research*. 45, 299-309.
- [54] Schmitz, G.H., **Wöhling, Th.**, de Paly, M., and Schütze, N. (2007). GAIN-P: A New Strategy to increase furrow irrigation efficiency. *The Arabian Journal for Science and Engineering*. 32 (1C), 103-114.
- [55] **Wöhling, Th.**, Fröhner, A., Schmitz, G.H. and Liedl, R. (2006). Efficient solution of interacting 1D surface - 2D subsurface flow during furrow irrigation advance. *Journal of Irrigation and Drainage Engineering*. 132(4), 380-388.
- [56] **Wöhling, Th.**, Lennartz, F. , Zappa, M. (2006). Real-Time Updating Procedure for Flood Forecasting with conceptual HBV-Type Models. Technical Note, *Hydrology and Earth System Sciences*, Vol. 10, 7-6-2006, pp 783–788.
- [57] **Wöhling, Th.**, Singh, R., & Schmitz, G.H. (2004). Physically based modeling of interacting surface-subsurface flow during furrow irrigation advance. *Journal of Irrigation and Drainage Engineering*, 130(5), 296-303.
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Theses and Book Chapters

- [1] Schütze, N., Müller, U., Schwarze, R., **Wöhling, T.**, Grundmann, J. (Herausgeber). (2018). M³ - Messen, Modellieren, Managen in Hydrologie und Wasserressourcenbewirtschaftung, Beiträge zum Tag der Hydrologie am 22./23. März 2018 an der Technischen Universität Dresden, Forum für Hydrologie und Wasserbewirtschaftung, Heft 39.18, ISBN: 978-3-88721-606-1, DOI: 10.14617/for.hydrol.wasbew.39.18.
- [2] Srinivasan, M.S., **Wöhling, T.**, Campbell, D., McMillan, H. (2016). Verical Hydrology. In: Advances in New Zealand Freshwater Science. New Zealand Hydrological Society & New Zealand Limonological Society, Ed. by Jellyman, P.G., Davie, T.J.A., Pearson, C.P., Harding, J.S., ISBN 978-0-473-37603-1.
- [3] Schmitz, G.H., Schütze, N. and **Wöhling, Th.** (2007). Irrigation control: towards a new solution of an old problem. Volume 5 of IHP/HWRP-Berichte, International Hydrological Programme (IHP) of UNESCO and The Hydrology and Water Resources Programme (HWRP) of WMO, Koblenz, Germany, 222 pp.
- [4] **Wöhling, Th.** (2005). Physically based modeling of furrow irrigation systems during a growing season. Volume 2 of Dresdner Schriften zur Hydrologie, ISBN: 3-86005-481-3, PhD thesis at the Institute of Hydrology and Meteorology, Dresden University of Technology, Dresden Germany.

Peer-reviewed Conference Proceedings

- [1] Chow, R., Bennet, J., Dugge, J., McLaughlin, E., **Wöhling, T.**, Nowak, W. (2017). Evaluating hyporheic exchange transit time through a river bend. 4th International HGS User Conference, Bayreuth, 6-8 March, 2017.
- [2] **Wöhling, Th.**, Geiges, A., Nowak, W., Gayler, S., Högy, P. and Wizemann, H.-D. (2013). Towards optimizing experiments for maximum-confidence model selection between different soil-plant models. Four decades of progress in monitoring and modelling of processes in the soil-plant-atmosphere system: Applications and challenges. 19-21 June 2013, Naples, Italy, Procedia Environmental Sciences, 19, 514-523, doi: 10.1016/j.proenv.2013.06.058.
- [3] **Wöhling, Th.**, Barkle, G.F., Bidwell, V.J., Dann, R., Wall, A., Moorhead, B., Clague, J., Vrugt, J.A. (2011). Dual-domain mixing cell modelling and uncertainty analysis for unsaturated bromide and chloride transport. Sustaining Our Future - Proceedings of the MODSIM11 International Congress on Modelling and Simulation, December 12 - 16 2011, Perth, Australia.
- [4] Moore, C.R., **Wöhling, Th.** and Wolf, L. (2011) Optimisation of monitoring data for increased predictive reliability of regional water allocation models. Sustaining Our Future - Proceedings of the MODSIM11 International Congress on Modelling and Simulation, December 12 - 16 2011, Perth, Australia.
- [5] **Wöhling, Th.**, Gayler, S., Ingwersen, J. Streck, T., Vrugt, J.A. & Priesack, E. (2011). Multi-objective calibration of coupled soil-vegetation-atmosphere models. Models - Repositories of Knowledge, Proceedings ModelCARE2011, September 19-22, 2011, Leipzig, Germany, IAHS Publ. 355, 2012, pp. 357-363.
- [6] **Wöhling, Th.** (2009). Does vadose zone forecasting depend on the type of calibration data? In Anderssen, R.S., R.D. Braddock and L.T.H. Newham (eds) 18th World IMACS Congress and MODSIM09 International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand and International Association for Mathematics and Computers in Simulation, July 2009, pp. 2377-2383. ISBN: 978-0-9758400-7-8.
- [7] **Wöhling, Th.**, Vrugt, J.A. (2008). Uncertainty of Vadose Zone Modelling using Model Ensembles and Bayesian Model Averaging. Proceedings of Water Down Under 2008 incorporating the 31st Hydrology and Water Resources Symposium and the 4th International Conference on Water Resources and Environmental Research. 14-17 April 2008, Adelaide, Australia.
- [8] Vrugt, J.A., **Wöhling, Th.** (2007). Upscaling Soil Hydraulic Properties Using Field-Scale Inverse Modeling and Bayesian Model Averaging. Invited presentation at the AGU Fall Meeting. 10-14 December 2007, San Francisco, CA, USA.

- [9] **Wöhling, Th.**, Vrugt, J.A. (2007). Multiobjective inverse parameter estimation for modelling vadose zone water movement. MODSIM07 - International Congress on Modelling and Simulation. Land, Water & Environmental Management: Integrated Systems for Sustainability. 10-13 December 2007, Christchurch, New Zealand.
- [10] Schütze, N., **Wöhling, Th.**, de Paly, M., Schmitz, G.H. (2006). Global optimization of deficit irrigation systems using evolutionary algorithms. CMWR XVI - Computational Methods in Water Resources, International Conference, Copenhagen, Denmark, June 19-22, 2006, URL .
- [11] **Wöhling, Th.**, Schütze, N., Schmitz, G.H. (2005). Development and application of a physically-based seasonal furrow irrigation model. Proceedings of the ICID 21st European Regional Conference 2005, Integrated Land and Water Resources Management Towards Sustainable Rural Development. 15 - 19 May 2005, Frankfurt (Oder), Germany and Slubice, Poland.
- [12] Schütze, N., de Paly, M., **Wöhling, Th.**, Schmitz, G.H. (2005). Global optimization of deficit irrigation systems using evolutionary algorithms and neural networks. Proceedings of the ICID 21st European Regional Conference 2005, Integrated Land and Water Resources Management Towards Sustainable Rural Development. 15 - 19 May 2005, Frankfurt (Oder), Germany and Slubice, Poland.
- [13] Schmitz, G.H., Schütze, N., **Wöhling, Th.** (presenter) (2004). A new strategy to increase furrow irrigation efficiency, Proceedings of the International Conference on Emerging Technologies in Agricultural & Food Engineering (etae), Kharagpur, India, December 14-17, 2004.
- [14] Bandyopadhyay, A., **Wöhling, Th.**, Singh, R., Schmitz, G.H. (2004). Inverse soil hydraulic parameter estimation from laboratory experiments, Proceedings of the International Conference on Emerging Technologies in Agricultural & Food Engineering (etae), Kharagpur, India, December 14-17, 2004.
- [15] Schütze, Niels, **Wöhling, Th.**, Paly, M. de, Schmitz, G.H. (2004). Optimization of Furrow Irrigation using Evolutionary Algorithms. In: Fischer, A. (Hrsg.); Fliege, J. (Hrsg.): Workshop on Applied Optimization, 2004.

Other Conference Presentations

- [1] **Wöhling T** (2021). Operational prediction of river-groundwater exchange, groundwater levels and aquifer storage: The Wairau Plain Aquifer , EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-9700, <https://doi.org/10.5194/egusphere-egu21-9700>.
- [2] Mietrach R, **Wöhling T** and Schütze N (2021). Modelling non-equilibrium unsaturated flow in soils during sudden pressure head changes by solving Richards' equation with a Method of lines approach, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-15546, <https://doi.org/10.5194/egusphere-egu21-15546>.
- [3] Rommel L. and **Wöhling T** (2021). Hydrological analysis of runoff generation in a forested mountain catchment using a nested multi-tracer approach, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-11112, <https://doi.org/10.5194/egusphere-egu21-11112>.
- [4] Peesel A and **Wöhling T** (2021). Evaluation of 42 lumped rainfall-runoff models for the Wairau River catchment, New Zealand, using the MARRMoT toolbox, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-6977, <https://doi.org/10.5194/egusphere-egu21-6977>.
- [5] Reumann GM, **Wöhling T**, Burkhardt D (2021). ISOSIM Entwicklung eines Isotopen-basierten Simulationsprogrammes für die Analyse und Prognose hydro(geo)logischer Prozesse. Workshop: Isotopenmethoden zur Grundwasseranalyse. FH-DGGV Online Kurs, 25. - 26. März 2021.
- [6] **Wöhling T** (2020). AquiferWatch 2.0: Operational prediction of Wairau Aquifer groundwater storage using a rainfall-runoff model and Eigenmodels. New Zealand Hydrological Society, NZ Rivers Group & NZFSS Joint Conference, 1 - 4 December 2020, Invercargill, New Zealand.
- [7] Rommel L, Blaurock K, da Silva MP, Baker N, Beudert B, Fleckenstein J, Gilfedder B, Haase P, Hopp L, Lechtenfeld O, Peiffer S, Reetsma T, Schütze N, Schwarze R, **Wöhling T** (2020). Einfluss natürräumlicher Faktoren auf Konzentration, Qualität und Auswirkung des gelösten organischen Kohlenstoffs im Nationalpark Bayerischer Wald. Workshop DOC Einträge in Oberflächengewässer, 3 March, 2020, Technische Universität Dresden, Tharandt, Germany.

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Conference Posters

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