

Veröffentlichungen – Publications

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2024

BESSER, L., OERTEL, M. (2024) *Tailwater Influence on Downstream Flow Conditions of Piano Key Weirs*, 10th IAHR International Symposium on Hydraulic Structures, ISHS2024, Zurich, Switzerland, ISSN 0374-0056, DOI: 10.3929/ethz-b-000675978, 336–345.

BELAY, B., OERTEL, M. (2024) *Air entrainment by plunging jets of piano key weirs: hybrid modeling at a laboratory scale*, 10th IAHR International Symposium on Hydraulic Structures, ISHS2024, Zurich, Switzerland, ISSN 0374-0056, DOI: 10.3929/ethz-b-000675961, 186–195.

KASISCHKE, K., OERTEL, M. (2024) *Hydrodynamic forces on boulders in block ramps during flow transitions via numerical CFD simulation*, 10th IAHR International Symposium on Hydraulic Structures, ISHS2024, Zurich, Switzerland, ISSN 0374-0056, DOI: 10.3929/ethz-b-000676017, 710–719.

BELZNER, F., THORENZ, C., OERTEL, M. (2024) *Monte-Carlo mooring simulations for inland navigation locks*, Proceedings 35th PIANC World Congress, Cape Town, South Africa.

BELAY, B., OERTEL, M. (2024) *Modeling Air-water flows downstream of non-linear weirs*, FLOW-3D World Users Conference, Hamburg, Germany.

2023

SHEN, X. , OERTEL, M. (2023) *Influence of Piano Key Weir Crest Shapes on Flow Characteristics, Scale Effects, and Energy Dissipation for In-Channel Application*, Journal of Hydraulic Engineering, 149(6), DOI: 10.1061/JHEND8.HYENG-13322.

KASISCHKE, K. , OERTEL, M. (2023) *Discharge Coefficients of a Specific Vertical Slot Fishway Geometry – New Fitting Parameters*, Water 2023, 15(6),1193, <https://doi.org/10.3390/w15061193>.

MULLIGAN, S., FELDER, S., PUMMER, E., VALERO, D., HELLER, V., ERPICUM, S. , OERTEL, M., BOMBARDELLI, F., CROOKSTON, B. (2023) *Hydraulic Structures At the Heart of 21st Century Global Sustainable Development*, hydrolink 1/2023, IAHR and the Water-related Sustainable Developmet Goals, 5–9.

OERTEL, M., BELAY, B., SHEN, X. (2023) *Free-surface fluctuations downstream of an A-type trapezoidal piano key weir*, 40th IAHR World Congress, Vienna, Austria.

KASISCHKE, K., OERTEL, M., (2023) *Fluctuation Analysis for Vertical Slot Passes using CFD-simulations and Hilbert-Huang-Transformation*, 40th IAHR World Congress, Vienna, Austria.

BESSER, L., OERTEL, M., (2023) *Influence of Non-Linear-Weir Installation on upstream Floodplains via Numerical Simulations*, 40th IAHR World Congress, Vienna, Austria.

SHEN, X., OERTEL, M. (2023) *Influence of local Submergence on Piano Key Weir Discharge Efficiency*, 40th IAHR World Congress, Vienna, Austria.

2022

OERTEL, M., SHEN, X. (2022) *3D printing technique for experimental modeling of hydraulic structures: exemplary scaled weir models*, Water 2022, 14(4), 2153, <https://doi.org/10.3390/w14142153>.

BELZNER, F., THORENZ, C., OERTEL, M. (2022) *A modernized safety concept for ship force evaluations during lock filling processes*, Proceedings PIANC Smart Rivers, Nanjing, China.

OERTEL, M., BELAY, B., SHEN, X., WILLEMS, H. (2022) *Introduction and investigation of a large-scale piano key weir fabricated via rapid prototyping*, 8th IAHR International Symposium on Hydraulic Structures, ISHS2022, Roorkee, India.

SHEN, X., OERTEL, M. (2022) *Energy dissipation and flow regime downstream of trapezoidal piano key weirs*, 8th IAHR International Symposium on Hydraulic Structures, ISHS2022, Roorkee, India.

OERTEL, M., WILLEMS, H., BELAY, B. (2022) *Experimental Model Fabrication via 3D Print Technique in Hydraulic Laboratories*, Proceedings of the 39th IAHR World Congress, Granada, Spain, doi://10.3850/IAHR-39WC2521716X2022723.

TILLMANN-MUMM, J., OERTEL, M. (2022) *Flow Optimization of a Small Lake System in the City of Lübeck via 2D and 3D Numerical Simulation*, Proceedings of the 39th IAHR World Congress, Granada, Spain, doi://10.3850/IAHR-39WC2521716X2022972.

BESSER, L., SHEN, X., OERTEL, M. (2022) *Preliminary Study on an Integrated Vertical Slot Fish Pass in a Piano Key Weir Structure*, Proceedings of the 39th IAHR World Congress, Granada, Spain, doi://10.3850/IAHR-39WC2521716X2022888.

KASISCHKE, K., OERTEL, M. (2022) *Flow Transitions on Block Ramps*, Proceedings of the 39th IAHR World Congress, Granada, Spain, doi://10.3850/IAHR-39WC2521716X2022725.

2021

SHEN, X., OERTEL, M. (2021) *Comparative study of non-symmetrical trapezoidal and rectangular Piano Key Weirs with varying key width ratios*, Journal of Hydraulic Engineering, 147(11), [https://doi.org/10.1061/\(ASCE\)HY.1943-7900.0001942](https://doi.org/10.1061/(ASCE)HY.1943-7900.0001942).

OERTEL, M.; BUNG, D.B. (2021) *Hochwasserschutz – Eine Aufgabe für eine nachhaltige Wasserwirtschaft*, WasserWirtschaft, Kommentar, 9-10/2021, Springer.

SHEN, X.; OERTEL, M. (2021) *Influence of crest shapes on trapezoidal piano key weir hydraulic performance*, Extended Abstract, Proceedings of the 2nd IAHR Young Professionals Congress, 143-144, ISBN: 978-90-824846-7-0.

MOHLFELD, J., OERTEL, M. (2021) *Ermittlung von Abflussbeiwerten zur hydraulischen Bemessung von Fischaufstiegsanlagen in Schlitzpassbauweise*, WasserWirtschaft, 2-3/2021, 27–32.

2020

ERPICUM, S., CROOKSTON, B.M., BOMBARDELLI, F., BUNG, D.B., FELDER, S., MULLIGAN, S., OERTEL, M., PALERMO, M. (2020) *Hydraulic structures engineering: An evolving science in a changing world*, WIREs Water, 8(2), <https://doi.org/10.1002/wat2.1505>.

OERTEL, M., SÜFKE, F. (2020) *Two-dimensional dam-break wave analysis: PIV vs. Optical Flow*, J. Hydr. Res., 58(2), 326-334, DOI 10.1080/00221686.2019.1579114.

2019

OERTEL, M. (2019) *Size-scale Effects of an A-type Piano Key Weir*, Proc. 38th IAHR World Congress, Panama City, Panama, doi:10.3850/38WC092019-0954.

BUNG, D. B., OERTEL, M. (2019) *LES and RANS simulations of wave breaking over a submerged horizontal plate*, Proc. 38th IAHR World Congress, Panama City, Panama, doi:10.3850/38WC092019-0509.

OERTEL, M., MOHLFELD, J. (2019) *Analysis of ADV velocity measurements in a vertical slot fishway model*, Proc. 38th IAHR World Congress, Panama City, Panama, doi:10.3850/38WC092019-0945.

2018

OERTEL, M., KLEIN, J. (2018) *Hydraulische Optimierung einer Fischabstiegsanlage mittels wasserbaulicher Modellversuche*, WasserWirtschaft, 9/2018, 28–35.

OERTEL, M. (2018) *Piano Key Weir research: state-of-the-art and future challenges*, 7th IAHR International Symposium on Hydraulic Structures, ISHS2018, Aachen, Germany.

KLEIN, J., OERTEL, M. (2018) *Influence of inflow and outflow boundary conditions on flow situation in vertical slot fishways*, 7th IAHR International Symposium on Hydraulic Structures, ISHS2018, Aachen, Germany.

BREMER, F.L., OERTEL, M. (2018) *Numerical uncertainty of Piano Key Weir discharge coefficients estimations by means of 3D CFD modelling*, 7th IAHR International Symposium on Hydraulic Structures, ISHS2018, Aachen, Germany.

2017

BREMER, F. L.; OERTEL, M. (2017) *Numerical investigation of wall thickness influence on Piano Key Weir Discharge coefficients: a preliminary study*, Labyrinth and Piano Key Weirs III PKW 2017 (Vietnam), S. Erpicum, F. Laugier, M. Ho Ta Khanh and M. Pfister (Eds.), Taylor & Francis Group, 101-108, ISBN: 978-1-138-05010-5

KLEIN, J.; OERTEL, M. (2017) *Untersuchung von Einflussparametern auf die Abflussbemessung von Fischaufstiegsanlagen in Schlitzbauweise*, Wasserbauliche Mitteilungen, Heft 58, Institut für Wasserbau und Technische Strömungsmechanik, TU Dresden, 291-300.

2016

OERTEL, M. (2016) *Full Proceedings: IJREWHS2016*, 6th IAHR International Junior and Engineer Workshop on Hydraulic Structures, Editor, Lübeck, Germany.

BREMER, F. L.; OERTEL, M. (2016) *Increasing Piano Key Weir Efficiency by Fractal Elements*, 6th International Junior and Engineer Workshop on Hydraulic Structures – IJREWHS 2016, Lübeck, Germany, doi: 10.15142/T34G6P.

KLEIN, J.; OERTEL, M. (2016) *Vertical Slot Fishway: Evaluation of numerical model quality*, 6th International Junior and Engineer Workshop on Hydraulic Structures – IJREWHS 2016, Lübeck, Germany, doi: 10.15142/T3R599.

OERTEL, M. (2016) *Sensitivity analysis for discharge coefficients of Piano Key Weirs*, In: B. Crookston & B. Tullis (Eds.), *Hydraulic Structures and Water System Management. Proc. 6th IAHR International Symposium on Hydraulic Structures*, Portland, OR, USA, doi: 10.15142/T3330628160853, ISBN: 978-1-884575-75-4, 557-565.

OERTEL, M.; BUNG, D. B. (2016) *Scouring processes downstream a crossbar block ramp*, In: B. Crookston & B. Tullis (Eds.), Hydraulic Structures and Water System Management. Proc. 6th IAHR International Symposium on Hydraulic Structures, Portland, OR, USA, doi: 10.15142/T3330628160853, ISBN: 978-1-884575-75-4, 566-576.

OERTEL, M. (2016) *Planning a small hydro-power plant in Lübeck (Germany) - Who „owns“ the water?*, In: Erpicum et al. (Eds.), Sustainable Hydraulics in the Era of Global Change, Proc. 4th IAHR Europe Congress, Liege, Belgium, ISBN: 978-1-138-02977-4, 221-226.

OERTEL, M.; BREMER, F. L. (2016) *Analysis of various Piano Key Weir geometries concerning discharge coefficient development*, In: Erpicum et al. (Eds.), Sustainable Hydraulics in the Era of Global Change, Proc. 4th IAHR Europe Congress, Liege, Belgium, ISBN: 978-1-138-02977-4, 644-652.

KLEIN, J.; OERTEL, M. (2016) *Analysis of dotation discharge impact at a fishway entrance via numerical 3D CFD simulation*, In: Erpicum et al. (Eds.), Sustainable Hydraulics in the Era of Global Change, Proc. 4th IAHR Europe Congress, Liege, Belgium, ISBN: 978-1-138-02977-4, 38-44.

VALERO, D.; BUNG, D. B.; OERTEL, M. (2016) *Turbulent dispersion in bounded horizontal Jets. RANS capabilities and physical modeling comparison*, In: Erpicum et al. (Eds.), Sustainable Hydraulics in the Era of Global Change, Proc. 4th IAHR Europe Congress, Liege, Belgium, ISBN: 978-1-138-02977-4, 49-55.

KLEIN, J.; OERTEL, M. (2016) *Fischaufstiegsanlagen in Schlitzbauweise: Ein Überblick über den aktuellen Stand der Forschung*, 18. Treffen junger WissenschaftlerInnen wasserbaulicher Institute, Versuchsanstalt für Wasserbau, Hydrologie und Glaziologie, ETH Zürich.

2015

OERTEL, M. ; BUNG, D. B. (2015) *Stability and scour development of bed material on crossbar block ramps*, Intern. J. Sed. Res., 30(4), 344-350.

OERTEL, M. (2015) *Numerical Modeling of Free-Surface Flows in Practical Applications*, in: Rivers – Physical, Fluvial and Environmental Processes, Rowinski and A. Radecki-Pawlik (eds.), GeoPlanet: Earth and Planetary Sciences, Springer, 193-211.

OERTEL, M. (2015) *Bemessung von Blocksteinrampen in Riegelbauweise – Hydraulik und Stabilität*, WasserWirtschaft, 7/8 2015, 51-56.

KLEIN, J.; OERTEL, M. (2015) *Comparison between Crossbar Block Ramp and Vertical Slot Fish Pass via Numerical 3D CFD Simulation*, 36th IAHR World Congress, Delft - The Hague, the Netherlands.

OERTEL, M.; BALMES, J.; BUNG, D. B. (2015) *Numerical Simulation of Erosion Processes in Crossbar Block Ramps*, 36th IAHR World Congress, Delft - The Hague, the Netherlands.

OERTEL, M. (2015) *Discharge Coefficients of Piano Key Weirs from Experimental and Numerical Model*, 36th IAHR World Congress, Delft - The Hague, the Netherlands.

2014

OERTEL, M. (2014) *Numerische Strömungssimulationen von Fließgewässern – Praxisanwendungen und zukünftige Entwicklungen*, Korrespondenz Wasserwirtschaft, 8(3), 177-182.

OERTEL, M.; TULLIS, B. P. (2014) *Comparison of Piano Key Weir Discharge Coefficients from Experimental and Numerical Models*, 3rd IAHR European Congress, Porto, Portugal.

BALMES, J.; OERTEL, M. (2014) *Numerical 3D Simulation for Groin Flow Characteristics Upstream the Gauge Hattingen at River Ruhr*, 3rd IAHR European Congress, Porto, Portugal.

BUNG, D. B.; OERTEL, M. (2014) *Manipulation of Non-aerated Cavity Flow on a Stepped Spillway Model*, 3rd IAHR European Congress, Porto, Portugal.

OERTEL, M.; BUNG, D. B. (2014) *Numerische Strömungssimulation von Fließgewässern – Wo stehen wir und was werden wir im Laufe der nächsten Jahre erreichen?*, Wasserbauliche Mitteilungen, Heft 50, Institut für Wasserbau und Technische Strömungsmechanik, TU Dresden, 19-30.

OERTEL, M. (2014) *Wiederaufbau des Wasserbaulabors*, Impuls(e) Aus Forschung und Lehre, Fachhochschule Lübeck, 17. Jhrg., 23-27.

2013

PETERSEIM, S.; SCHLENKHOFF, A.; OERTEL, M. (2013) *Hydrodynamische Simulation von Sturzflutereignissen im urbanen Raum*, 36. Dresdner Wasserbaukolloquium, Institut für Wasserbau und Technische Hydromechanik, Heft xx, TU Dresden.

OERTEL, M. (2013) *In-Situ Measurements on Cross-Bar Block Ramps*, International Workshop on Hydraulic Design of Low-Head Structures (IWLHS), IAHR, FH Aachen University of Applied Sciences.

OERTEL, M. (2013) *Stability of bed material on cross-bar block ramps*, 35th IAHR World Congress, Chengdu, China.

OERTEL, M.; BUNG, D.B. (2013) *Comparison of 2D dam-break waves with VOF and SPH method*, 35th IAHR World Congress, Chengdu, China.

2012

OERTEL, M.; MÖNKEMÖLLER, J.; SCHLENKHOFF, A. (2012) *Artificial stationary breaking surf waves in a physical and numerical model*, J. Hydr. Res., 50(3), 338-343.

OERTEL, M. (2012) *Influencing parameters for friction factors and energy dissipation on cross-bar block ramps*, 2nd European IAHR Congress, Munich, Germany.

OERTEL, M.; SCHLENKHOFF, A. (2012) *Scour development in basins of cross-bar block ramps*, 2nd European IAHR Congress, Munich, Germany.

OERTEL, M.; SCHLENKHOFF, A. (2012) *Cross-Bar Block Ramps: Flow Regimes, Energy Dissipation, Friction Factors, Drag Forces*, J. Hydr. Engng., 138(5), 440-448.

OERTEL, M. (2012) *Cross-Bar Block Ramps: Flow Regimes, Flow Resistance, Energy Dissipation, Stability*, Habilitationsschrift, Bergische Universität Wuppertal.

OERTEL, M.; BUNG, D.; SCHLENKHOFF, A. (2012) *Blocksteinrampen in Riegelbauweise – Neue Bemessungsansätze*, 35. Dresdner Wasserbaukolloquium, Institut für Wasserbau und Technische Hydromechanik, Heft 47, TU Dresden, 317-326.

OERTEL, M.; BUNG, D. (2012) *Characteristics of cross-bar block ramp flows*, 4th IAHR International Symposium on Hydraulic Structures, Porto.

SCHLENKHOFF, A.; OERTEL, M.; AHMED, H. (2012) *Numerical Simulation of Hydrodynamic Performance of a Permeable Breakwater*, 8th International Conference on Coastal and Port Engineering in Developing Countries, IIT Madras, Chennai, India.

OERTEL, M.; BUNG, D. (2012) *Initial stage of two-dimensional dam-break waves: Laboratory vs. VOF*, J. Hydr. Res., 50(1), 89-97.

HEINZ, G.; BECKER, M.; OERTEL, M.; PETERSEIM, S.; SCHLENKHOFF, A. (2012) *Erfassung von Bordsteinkanten aus Laserscandaten zur Entwicklung numerischer Simulationsmodelle für Starkregenabflüsse*, GIS und GDI in der Wasserwirtschaft, DWA Tagung Kassel.

2011

AHMED, H.G.; SCHLENKHOFF, A.; OERTEL, M. (2011) *Stokes second-order wave interaction with vertical slotted wall breakwater*, Coastal Structures Conference, Yokohama, Japan.

OERTEL, M. (2011) *Strömungsvisualisierung auf Blocksteinrampen in Riegelbauweise*, WasserWirtschaft, 9/2011, Organ der Deutschen Vereinigung für Wasserwirtschaft, Abwasser und Abfall e. V. (DWA), Hennef.

OERTEL, M.; PETERSEIM, S.; SCHLENKHOFF, A. (2011) *Drag coefficients of boulders on a block ramp due to interaction processes*, Journal of Hydraulic Research, 49(3), 372-377.

OERTEL, M.; PETERSEIM, S.; SCHLENKHOFF, A. (2011) *Drag coefficients and forces for boulders on block ramps*, 34th IAHR World Congress, Brisbane, Australia.

OERTEL, M.; CARVALHO, R.; JANSSEN, R. (2011) *Flow over a rectangular side weir in an open channel and resulting discharge coefficients*, 34th IAHR World Congress, Brisbane, Australia.

CARVALHO, R. F.; OERTEL, M.; MOTZ, T.; MARTINS, R.; LEANDRO, J. (2011) *Comparison of 3D Numerical modelling with an Experimental Scaled-model of urban flooding*, 34th IAHR World Congress, Brisbane, Australia.

BUNG, D.; OERTEL, M.; SCHLENKHOFF, A.; SCHLURMANN, T. (2011) *Flash Flood Awareness and Prevention in Germany*, Workshop on Early Warning for Flash Floods, Czech Hydrometeorological Institute, Prag, Czech Republic.

2010

OERTEL, M.; HEINZ, G.; SCHLENKHOFF, A. (2010) *Physical and numerical modeling of rough ramps and slides*, 1st European IAHR Congress, May 04.-06., Edinburgh, Scotland.

HEINZ, G.; OERTEL, M.; BUNG, D. (2010) *Investigation on a cooling water system for a gas turbine facility concerning air vortexes and sediment transport*, Third International Junior Researcher and Engineer Workshop on Hydraulic Structures (IJREWHS), May 02.-04., Edinburgh, Scotland.

2009

OERTEL, M.; SCHLENKHOFF, A. (2009) *Awareness and prevention concerning flash flood events*, Road Map Towards A Flood Resilient Urban Environment, 26.-27.11.2009, Poster, Cost Action 22, Paris.

SCHLENKHOFF, A.; OERTEL, M. (2009) *Über Starkregen und Sturzfluten*, BUW Output II/2009, Bergische Universität Wuppertal.

OERTEL, M.; SCHLENKHOFF, A.; MORGENSCHWEIS, G. (2009) *Überprüfung von Abflusskurven für die Pegel Wetter und Hattingen an der Ruhr nach den Hochwasserereignissen im August 2007 mit Hilfe von numerischen 2-D-Modellen*, Hydrologie und Wasserbewirtschaftung (HyWa), 53. Jahrgang, Heft 6, Bundesanstalt für Gewässerkunde, Koblenz.

OERTEL, M.; BUNG, D.; SCHLENKHOFF, A. (2009) *Flash Flood Awareness and Prevention*, 33rd IAHR congress, Water Engineering for a Sustainable Environment, 10.08.-14.08.2009, Vancouver, Canada.

BUNG, D.; OERTEL, M.; SCHLENKHOFF, A. (2009) *Self aerated skimming flow on embankment stepped spillways*, 33rd IAHR congress, Water Engineering for a Sustainable Environment, 09.08.-14.08.2009, Vancouver, Canada.

2008

BUNG, D.; HILDEBRANDT, A.; OERTEL, M.; SCHLENKHOFF, A.; SCHLURMANN, T.; (2008) *Bore propagation over a submerged horizontal plate by physical and numerical simulation*, International Conference on Coastal Engineering (ICCE), 31.08.-05.09.2008, Hamburg.

OERTEL, M.; SCHLENKHOFF, A. (2008) *Flood wave propagation and flooding of underground facilities*, River Flow 2008, International Conference on Fluvial Hydraulics, 03.09.-05.09.2008, Izmir, Turkey.

OERTEL, M.; SCHLENKHOFF, A. (2008) *Flooding of Underground Facilities in Urban Regions*, 4th International Conference on Flood Defence, 06.05.-08.05.2008, Toronto, Canada.

OERTEL, M.; SCHLENKHOFF, A. (2008) *Risiko der Flutung unterirdischer Bauwerke nach Versagen von Hochwasserschutzanlagen*, WasserWirtschaft, 3/2008, Organ der Deutschen Vereinigung für Wasserwirtschaft, Abwasser und Abfall e. V. (DWA), Hef. 3.

OERTEL, M. (2008) *Analyse der Flutung unterirdischer Bauwerke in flussnahen urbanen Regionen nach Versagen von Hochwasserschutzanlagen*, Dissertation, Abteilung Bauingenieurwesen, Bergische Universität Wuppertal.

2007

OERTEL, M.; BUNG, D.; SCHLENKHOFF, A. (2007) *Flächenhafte Flutwellenausbreitung und anschließende Flutung unterirdischer Bauwerke*, Wasserbauliche Mitteilungen, Heft 35, Fünf Jahre nach der Flut, Institut für Wasserbau und Technische Hydromechanik, Technische Universität Dresden.

OERTEL, M. (2007) *Speed-Up FLOW-3D*, Internetveröffentlichung mit Erläuterungen zu dreidimensionalen Vergleichsrechnungen mit FLOW-3D, Lehr- und Forschungsgebiet Wasserwirtschaft und Wasserbau, Bergische Universität Wuppertal.

OERTEL, M. (2007) *Particle Image Velocimetry (PIV) Methode*, Internetveröffentlichung mit Erläuterungen zu MatPIV, Lehr- und Forschungsgebiet Wasserwirtschaft und Wasserbau, Bergische Universität Wuppertal.

OERTEL, M. (2007) *Maßstabeffekte bei der physikalischen Modellierung flächenhafter Flutwellenausbreitungen*, Beiträge zum JuWi-Treffen, 01.08-04.08.2007, Universität Kassel.

OERTEL, M. (2007) *Analyse der Flutung unterirdischer Bauwerke in flussnahen urbanen Regionen nach Versagen von Hochwasserschutzanlagen*, Forschungsbeitrag, Vision – Beiträge aus Architektur und Bauingenieurwesen, Heft 7, Bergische Universität Wuppertal.

OERTEL, M. (2007) *The Combined Power of Tecplot 360 and FLOW-3D Help Engineers Improve Flow Energy Dissipation*, Tecplot U.S.A., Plot of the month (POM) and February 2007 Newsletter .

2006

OERTEL, M.; SCHLENKHOFF, A. (2006) *Risk Management of Polder Areas along Small Rivers*, Postersession, 3rd International Symposium on Integrated Water Resources Management, 26.09.-28.09.2006, Ruhr-Universität Bochum.

OERTEL, M. (2006) *Gefährdungsanalyse der Flutung unterirdischer Bauwerke in flussnahen urbanen Regionen nach Versagen von Hochwasserschutzanlagen – Forschungsmitteilung*, JuWi-Treffen, 02.08.-05.08.2006, Technische Universität Karlsruhe.

SCHLENKHOF, A.; OERTEL, M. (2005) *Optimierung großer Absturzbauwerke in Kanalhaltungen unter Verwendung numerischer Strömungssimulationsmodelle der freien Oberfläche*, Wasserbauliche Mitteilungen, Heft 32, Strömungssimulationen im Wasserbau, Institut für Wasserbau und Technische Hydromechanik, Technische Universität Dresden.

SCHLENKHOF, A.; OERTEL, M. (2005) *Optimization of an underground cascade waste water structure using numerical simulation of free surface flow*, Project References Water Research in Nordrhein-Westfalen, Germany, Projects, Technologies, Institutions, Water Management Initiative NRW (WWI).

SCHLENKHOF, A.; OERTEL, M. (2005) *Optimierung eines unterirdischen Abwasser-Kaskaden-Bauwerks unter Verwendung numerischer Strömungssimulationen der freien Oberfläche*, NRW Referenzen Wasserforschung, Projekte, Technologien, Institutionen, Wasserwirtschaftsinitiative NRW (WWI).

OERTEL, M. (2003) *Numerische zweidimensionale Strömungssimulation für Poldergebiete hinter Flussdeichen unter besonderer Berücksichtigung von Deichbrüchen*, Diplomarbeit, LuFG Wasserwirtschaft und Wasserbau, Bergische Universität Wuppertal.

OERTEL, M. (2002) *Coastline Processes and Manly's Seawalls*, Studienarbeit, Water Research Laboratory, University of New South Wales, Australien.

OERTEL, M.; MUNKO, S.; SCHLURMANN, S. (2002) *Calculations on the Amount of Drainage Water in a Dam from long-term Hydrological Databases*, 5th International Conference on Hydro-Science and -Engineering (ICHE 2002), 18.09-21.09.2002, Warsaw, Poland.

MUNKO, S.; OERTEL, M.; SCHLURMANN, T. (2002) *Seeping Flow in the Unsaturated Soil Zone to Adjust a Fibre Optic Temperature Measurment System in a Dam*, 5th International Conference on Hydro-Science and -Engineering (ICHE 2002), 18.09-21.09.2002, Warsaw, Poland.