Nils Goseberg



Prof. Dr.-Ing.

Personal Information

Name Nils René Goseberg

Date of Birth 12.10.1978

Place of Birth Iserlohn, Germany

Nationality German

Marital Status Married, 3 children

Professional Experience

2018/07 – present **Managing Director**, Coastal Research Center (Forschungszentrum Küste), Joint Research Center of Technische Universität Braunschweig and Leibniz Universität

Hannover Germany

Hannover, Germany.

Heading CRC'S team of staff, science communication, funding applications, management

2018/01 – present **Professor (W3) Hydromechanics, Coastal and Ocean Engineering**, *Leichtweiß-Institute for Hydraulic Engineering and Water Resources*, Technische Universität

Braunschweig, Germany.

Responsibility to teach and conduct research, building multidisciplinary collaboration

2011/05 – 2017/12 **Senior Research Associate**, Franzius-Institute for Hydraulic, Estuarine and Coastal

Engineering; since 16.11.2016 Ludwig-Franzius-Institute for Hydraulic, Estuarine and

Coastal Engineering, Leibniz University Hannover, Germany.

Post-doctoral researcher responsible for teaching, project acquisition and leadership, finances

 $2014/07-2017/06 \quad \textbf{Marie Curie International Outgoing Fellow and Visiting Professor}, \ \textit{Department}$

of Civil Engineering, University of Ottawa, Canada, Project: "Spatiotemporal Distribution and Structural impact LOading due to Artificial Debris Objects in Violent

Flows (impLOADis)".

2007/05 - 2011/04 Research Assistant, Franzius-Institute for Hydraulic, Estuarine and Coastal Engi-

neering, Leibniz University Hannover, Germany.

Conducting various research projects and PhD thesis completion

2001/01 – 2001/10 Carpenter, Carpentry Ross, Neuenrade, Germany.

06/1998 – 04/1999 Military Service, Schweres Pionierbataillon 330, Speyer, Deutschland.

Education

Higher Education

2014/07 – 2017/08 **Habilitation (habil.)**, *Leibniz Universität Hannover*, Hannover, Germany, Habilitation, Thesis title: "'Advances in Laboratory Measurements for Hydraulic and Coastal

Engineering"', Oral Defense: 01.08.2017.

2007/05 – 2011/03 Research Assistant and Part-time PhD student, Leibniz University Hannover, Hannover, Germany, Dr.-Ing., PhD, Thesis title: "'The Run-up of Long Waves – Laboratory-scaled geophysical Reproduction and Onshore Interaction with Macroroughness Elements", Oral Defense: 11.03.2011 with honors ("'summa cum laude"').

2001/10 – 2007/04 **Study of Civil Engineering**, *Technical University of Dresden (German grade 1.5 "'excellent"')*, Dresden, Germany, Dipl.-Ing..

Field of Study: Hydraulic Engineering, Specialization: Geotechnics, Thesis title: "'Influence of control structures to water level and discharge for extreme floods in the Mississippi delta region"'

School and Training-on-the-job

1999/08 – 2001/01 **Job training, Apprenticeship**, *Carpentry Ross GmbH*, Neuenrade, Germany.

1989/08 – 1998/06 **Abitur**, *Burggymnasium Altena*, Altena, Germany. (German A-levels)

Awards and Recognitions

- Outstanding Reviewer 2015 Journal of Waterway, Port, Coastal and Ocean Engineering, Awarded by the American Society of Civil Engineering ASCE, Reston.

 In recognition of outstanding service to the journal
- 2011 **Erich-Lackner-Award**, Awarded by German Port Technology Association HTG (professional association in hydraulic, port and coastal engineering), Würzburg. In recognition of an outstanding PhD thesis
- 2007 **Hubert-Engels-Medal**, Awarded by Gesellschaft der Förderer des Hubert-Engels-Institutes für Wasserbau und Technische Hydromechanik, TU Dresden e. V., Dresden. In recognition of an outstanding diploma thesis

Awards of supervised students

- Niklas Freund, Award of the Engineering chamber of Lower Saxony.

 Recognition of an outstanding Master thesis: "'Morphodynamic effects of offshore breakwaters at Hörnum-Odde/Sylt"'
- 2018 **Pauline Falkenrich**, *Braunschweiger Bürgerpreis*.

 In recognition of outstanding academic performance and social engagement
- 2018 **Jacob Stolle**, Canadian Society of Civil Engineers Conf.: Best Student Paper Award. Award in a competition of 30+ conference papers

Teaching

Lectures and Courses (selection)

Since 2018/10 **Hydromechanics (6 ECTS)**, *Technische Universität Braunschweig, Germany*, Responsible Lecturer (100%).

Participants: 330

Since 2018/10 **Coastal Engineering I (6 ECTS)**, *Technische Universität Braunschweig, Germany*, Responsible Lecturer (100%).

Participants: 35

Since 2018/01 **Coastal Engineering II (6 ECTS)**, *Technische Universität Braunschweig, Germany*, Responsible Lecturer (100%).

Participants: 42

Environmental Data Analysis (6 ECTS), Leibniz Universität Hannover, Germany, Lectures and Laboratory Exercises (25%). Participants: 30 Hydro-power engineering (3 ECTS), Leibniz Universität Hannover, Germany, 2017 Lectures (100%). Participants: 40 2010 - 2014Flows in Hydrosystems: River Engineering (3 ECTS), Leibniz Universität Hannover, Germany, Lectures (100%). Participants: 280, in SS11, SS12, SS13 2012 - 2014River Hydraulics in Master programme "Water Resources and Environmental Management" (3 ECTS), Leibniz Universität Hannover, Germany, Lectures (100%).Participants: 30 Studierende, in WS12/13, WS13/14 2013 - 2014Waterway Engineering (5 ECTS), Leibniz Universität Hannover, Germany, Lectures (100%).Participants: 50, WS13/14 Supervision of Post-doctoral Fellows Lifetime Summary: Supervision of Post-docs (2) 2019 - current Saber Elsayed, Project: "ReFresh - Response of Coastal Barriers and Freshwater Aquifers to Extreme Storm Surges and Flooding", DFG-funding. 2018 - 2019 Hisham Elsafti, Project: "Wasfi - Modelling wave-structure-foundation interaction for marine gravity structures", DFG-funding. Supervision or Co-supervision of PhD Thesis Lifetime Summary: Supervision of PhD Thesis (5) Jacob Stolle, Title: "'Debris Hazard Assessment In Extreme Flooding Events", PhD, 2016 - 2019TU Braunschweig, in Cotutelle with University of Ottawa, Canada, Prof. Nistor. TU Braunsschweig, Germany and University of Ottawa, Canada 2013 – present Gabriel David, Draft title: "Numerical Simulation of Generation and Propagation of Ship Waves in the far Field and Interaction with Protected Embankments", PhD, Co-supervision (dependent) with Prof. Schlurmann. Franzius-Institute for Hydraulic, Estuarine and Coastal Engineering, LUH Alexander Schendel, "Erosion stability of wide-graded sediment mixtures", PhD, 2012 - 2018 Co-supervision (dependent) with Prof. Schlurmann. Franzius-Institute for Hydraulic, Estuarine and Coastal Engineering, LUH 2010 - 2014Anna Zorndt, Impacts of Climate Change on Hydrodynamic Conditions and Salinity of the Weser Estuary, PhD, Co-supervision (dependent) with Prof. Schlurmann. Franzius-Institute for Hydraulic, Estuarine and Coastal Engineering, LUH 2009 – 2012 Widjo Kongko, South Java Tsunami Model Using Highly Resolved Data and Probable Tsunamigenic Sources, PhD, Co-supervision (dependent) with Prof. Schlurmann. Franzius-Institute for Hydraulic and Coastal Engineering, LUH Academic and Administrative Experience Editorial Board Membership and Special Issue Guest Editorships

Virtual Special Issue: Open Ocean Aquac. Techn., Applied Ocean Research,

Since 2020/01

Elsevier, The Netherlands.

Since 2018/03 Applied Ocean Research, Elsevier, The Netherlands.

Reviewer Activity

A summary of journal-related activities can be found through Publons

2019/11 National Research Center, Ocean, Coastal and River Engineering Facilities, Ottawa, Canada.

International External Reviewer

2016/03 – 2018/09 **Member of User Selection Committee**, European Union funding "Hydralab+ Adaptation for Climate Change".

Since 2011/05 Reviewer - Funding Agencies, German Research Foundation (DFG) Alexander von Humboldt Foundation (AvH) Nantes Excellence Trajectory (NEXT) — Integrative Research Clusters, France Natural Sciences and Engineering Research Council of Canada National Commission for Scientific and Technological Research (CONICYT), Chile Oregon Sea Grant - NOAA Sea Grant College Program, USA.

Reviewer, Journal of Geophysical Research: Oceans, Wiley • Hydrologie und Wasser-Since 2010/04 wirtschaft, Springer • Mathematical Problems in Engineering, Hindawi • Estuarine, Coastal and Shelf Science, Elsevier • Water, MDPI • Progress in Oceanography, Elsevier International Journal of Disaster Risk Reduction, Elsevier Coastal Engineering Journal, World Scientific • Water Resources Research, American Geophysical Union Journal of Hydraulic Research, Taylor & Francis International Journal of Environmental Research and Public Health, MDPI • Journal Hydrol. Earth Syst. Sci., Copernicus • Coastal Engineering, Elsevier • Journal of Fluids and Structures, Elsevier - Safety, MDPI - Continental Shelf Research, Elsevier - Journal of Waterway, Port, Coastal, and Ocean Engineering, ASCE Computations, MDPI Maritime Engineering, Telford Natural Hazards, Springer Pacific-Asia Offshore Mechanics Symposium - PACOMS Algorithms, MDPI Ocean Engineering, Elsevier Natural Hazards and Earth System Sciences - NHESS, Copernicus International Journal of Offshore and Polar Engineering, ISOPE • Journal of Hydroinformatics, IAHR-IWA-IAHS International Conference on Offshore and Polar Engineering, ISOPE.

PhD Thesis External Examiner

Lifetime Summary: (5)

- 2019/05 **Maximilian Streicher**, Thesis title: Loads induced by overtopping bores on vertical walls at the end of sea facing promenades A laboratory study, Ghent University, Belgium, Supervisor: Andreas Kortenhaus.
- 2019/01 Ankit Aggarwal, Thesis title: 3D Numerical Modelling of Non-Linear And Breaking Wave Forces On Offshore Wind Turbine Substructures, Norwegian University of Science and Technology, Norway, Supervisor: Hans Bihs.
- 2018/06 **Alexander Schendel**, *Thesis title: "'Wave-current-induced scouring processes and protection at offshore structures"*, Leibniz Universität Hannover, Germany, Supervisor: Prof. Torsten Schlurmann.
- 2017/03 **Heng Lu**, *Thesis title: Generation of Very Long Waves in Laboratory for Tsunamis Research*, University of Dundee, Scotland, Supervisor: Prof. Yong Sung Park.
- 2017/12 **Juan David Osorio Cano**, Thesis title: Quantication and modelling of wave energy dissipation over submerged reefs, Universidad Nacional de Colombia, Colombia, Supervisor: Prof. Andres Osorio.

Administrative Experience

2020/01 – current	Council Member , <i>University Council for International Affairs</i> . Technische Universität Braunschweig, Germany
2019/02 – current	Committee Member, Faculty Committee for Structural Development. Technische Universität Braunschweig, Germany
2013/06 - 2014/06	Committee Member, Appointment Committee for Professorship "Sanitary Engineering". Leibniz Universität Hannover, Germany
2013/06 - 2014/06	Committee Member , Appointment Committee for Professorship "Safety and Risk Assessment". Leibniz Universität Hannover, Germany
2012/05 - 2013/12	Member , Structural and Organizational Committee of Faculty of Civil Engineering and Geodetic Science.
2011/05 - 2014/06	IT Committee, Civil Engineering and Geodetic Science Faculty. Leibniz Universität Hannover, Germany
	Conference Organization
2019	Chair, Coastal Structures 2019, Coastal Structures conference, COPRI/ASCE, Hannover, Germany, Sept. 30–Oct. 2, 2019.
2018	Member of Scientific Committee , <i>CoastLab18</i> , 7 th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science IAHR, Santander, Spain, May 22-26, 2018.
2018	Member of Scientific Committee , <i>ISHS2018</i> , 7 th International Symposium on Hydraulic Structures, IAHR, Aachen, Germany, May 15-18, 2018.
2017	Member of Scientific Committee , <i>SCACR2017</i> , <i>International Short Course and Conference on Applied Coastal Research 2017</i> , <i>Santander, Spain, September 3-6 2017</i> .
2016	Member of Local Organizing Committee, CoastLab16, 6 th International Conference on Physical Modelling in Coastal Engineering, IAHR, Ottawa, Canada, May 10-13, 2016.
2014	Member of Local Organizing Committee , 7 th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering, Hannover, Germany, Sept. 8-12, 2014.
2014	Session Organizer and Member Technical Programme Committee , 24 th International Ocean and Polar (Arctic) Engineering Conference, Busan, Korea, June 15-20 2014.
2013	Session Organizer and Member Technical Programme Committee, 23 rd International Ocean and Polar (Arctic) Engineering Conference, Anchorage, USA, June 30-July 5, 2013.
	Association Memberships
Since 2017	American Society of Civil Engineers (ASCE)
Since 2016	International Association for Hydro-Environment Engineering and Research (IAHR)
2013 – 2016	European Geoscience Union (EGU)
Since 2011	World Association for Waterborne Transport Infrastructure (PIANC)
Since 2007	German Port Technology Association (HTG)
Since 2007	Gesellschaft der Förderer des Hubert-Engels-Instituts an der TU Dresden e.V.

Since 2007 Gesellschaft der Förderer des Franzius-Instituts e.V.

International Experience and Scholarships

2014/07 – 2017/06 **Fellowship**, Marie Curie International Outgoing Fellowship, Research Executive Agency, EU.

2014/08 **Scholarship**, German Academic Exchange Service Conference Scholarship to International Conference on Coastal Engineering, Seoul, South Korea.

Skills and Qualifications

Languages

German Mother Tongue

English Fluent

French Basic Level

Computer Knowledge

Hydraulics DualSPHYSICS, Flow-3D, OpenFOAM, Anuga, HEC-RAS, SMS, Cormix

Computing MatLab, MathCad

E-Learning Integriertes Lern-, Informations- und Arbeitskooperations-System (ILIAS)

CAD/CAM AutoCAD, Nemetschek, Blender, Salome

GIS ArcGIS, GRASS

Typesetting LATEX

Office software MS Office (Word, Excel, etc.)

Publications

Life-time summary

H-index from Scopus (12) and Google Scholar (i10=26), Books or book chapters (7), Journal publications (37), Work in preparation (7), Peer-reviewed conferences (37), Other conference contributions (26)

Books or book chapters

- [B7] O. Lojek, L.-C. Dempwolff, and N. Goseberg. "Der Rhein als europäische Verkehrsachse III". In: ed. by M. Mirschenz and S. Zinn. Bonner Beiträge zur vor- und frühgeschichtlichen Archäologie 22. Bonn: Jan Bemmann and Michael Schmauder, 2019. Chap. Hydrodynamische Simulation von Strömungsprozessen im Nahfeld des Römerhafens der Colonia Ulpia Traiana, pp. 109–120. ISBN: 3-936490-22-0.
- [B6] B. H. Buck, G. Krause, B. Pogoda, B. Grote, L. Wever, N. Goseberg, M. F. Schupp, A. Mochtak, and D. Czybulka. "The German Case Study: Pioneer Projects of Aquaculture-Wind Farm Multi-uses". In: ed. by B. Buck and R. Langan. Springer International Publishing, Mar. 2017. Chap. Aquaculture Perspective of Multi-Use Sites in the Open Ocean: The Untapped Potential for Marine Resources in the Anthropocene, pp. 253–354.
- [B5] N. Goseberg, M. Chambers, K. Haesmann, D. Fredriksson, A. Fredheim, and T. Schlurmann. "Technological Approaches to Longline- and Cage-Based Aquaculture in Open Ocean Environments". In: ed. by B. Buck and R. Langan. Springer, Mar. 2017.

- Chap. Aquaculture Perspective of Multi-Use Sites in the Open Ocean: The Untapped Potential for Marine Resources in the Anthropocene, pp. 71–95.
- [B4] N. Goseberg. Advances in Laboratory Measurements for Hydraulic and Coastal Engineering. Habilitation Thesis. Hannover, Germany: Ludwig-Franzius-Institute for Hydraulic, Estuarine and Coastal Engineering, Leibniz Universität Hannover, Aug. 2017.
- [B3] J. Stolle, N. Goseberg, I. Nistor, and T. Shibayama. "Debris Impacts and Effects on Structures". In: ed. by Y. C. Kim. Expanded. World Scientific, 2017. Chap. Handbook of Coastal and Ocean Engineering, pp. 457–479.
- [B2] N. Goseberg, G. Lämmel, H. Taubenböck, N. Setiadi, J. Birkmann, and T. Schlurmann. "The Last-Mile Evacuation project: A multi-disciplinary approach to evacuation planning and risk reduction in tsunami-threatened coastal areas". In: ed. by F. Wenzel and J. Zschau. Advanced Technologies in Earth Sciences. ISBN: 3642122329. Springer, 2013. Chap. Early Warning for Geological Disasters: Scientific Methods and Current Practice.
- [B1] N. Goseberg. The Run-up of Long Wave Laboratory-scaled Geophysical Reproduction and Onshore Interaction with Macro-Roughness Elements. 97. Hannover, Germany: Leibniz University Hannover, Report of Franzius-Institute for Hydraulics, Waterways and Coastal Engineering, 2011.

Journal publications: all

- [J37] J. Stolle, C. Krautwald, I. Robertson, H. Achiari, T. Mikami, R. Nakamura, T. Takabatake, Y. Nishida, T. Shibayama, M. Esteban, I. Nistor, and N. Goseberg. "Engineering lessons from the 28 September 2018 Indonesian tsunami: Debris loading". In: Canadian Journal of Civil Engineering (Nov. 2020), pp. 1–12. ISSN: 0315-1468. URL: https://doi.org/10.1139/cjce-2019-0049.
- [J36] J. Stolle, I. Nistor, N. Goseberg, and E. Petriu. "Multiple Debris Impact Loads in Extreme Hydrodynamic Conditions". In: Journal of Waterway, Port, Coastal and Ocean Engineering 146.04019038 (2020).
- [J35] J. Stolle, I. Nistor, N. Goseberg, and E. Petriu. "Development of a probabilistic framework for debris transport and hazard assessment in tsunami-like flow conditions". In: Journal of Waterway, Port, Coastal, and Ocean Engineering forthcoming (2020).
- [J34] B. Ghodoosipour, J. Stolle, I. Nistor, A. Mohammadian, and N. Goseberg. "Experimental Study on Extreme Hydrodynamic Loading on Pipelines Part 2: Induced Force Analysis". In: *Journal of Marine Science and Engineering* 7.8 (2019). ISSN: 2077-1312.
- [J33] B. Ghodoosipour, J. Stolle, I. Nistor, A. Mohammadian, and N. Goseberg. "Experimental Study on Extreme Hydrodynamic Loading on Pipelines. Part 1: Flow Hydrodynamics". In: *Journal of Marine Science and Engineering* 7.8 (2019). ISSN: 2077-1312.
- [J32] von Häfen H., N. Goseberg, J. Stolle, and I. Nistor. "Gate-Opening Criteria for Generating Dam-Break Waves". In: *Journal of Hydraulic Engineering* 145.3 (Jan. 2019), p. 04019002.

[J31] J. Landmann, T. Ongsiek, N. Goseberg, K. Heasman, B. H. Buck, J.-A. Paffenholz, and A. Hildebrandt. "Physical Modelling of Blue Mussel Dropper Lines for the Development of Surrogates and Hydrodynamic Coefficients". In: *Journal of Marine Science and Engineering* 7.3 (2019). ISSN: 2077-1312.

- [J30] J. Lang, P. Alho, E. Kasvi, N. Goseberg, and J. Winsemann. "Impact of Middle Pleistocene (Saalian) glacial lake-outburst floods on the meltwater-drainage pathways in northern central Europe: Insights from 2D numerical flood simulation". In: Quaternary Science Reviews 209 (2019), pp. 82—99. ISSN: 0277-3791. URL: http://www.sciencedirect.com/science/article/pii/S027737911830800X.
- [J29] J. Stolle, N. Goseberg, I. Nistor, and E. Petriu. "Debris impact forces on flexible structures in extreme hydrodynamic conditions". In: *Journal of Fluids and Structures* 84 (Jan. 2019), pp. 391–407. ISSN: 0889-9746.
- [J28] J. Stolle, T. Takabatake, G. Hamano, H. Ishii, K. Iimura, T. Shibayama, I. Nistor, N. Goseberg, and E. Petriu. "Debris transport over a sloped surface in tsunami-like flow conditions". In: *Coastal Engineering Journal* 61.2 (2019), pp. 241–255.
- [J27] C. Derschum, I. Nistor, J. Stolle, and N. Goseberg. "Debris impact under extreme hydrodynamic conditions part 1: Hydrodynamics and impact geometry". In: *Coastal Engineering* 141 (2018), pp. 24–35.
- [J26] A. Schendel, N. Goseberg, and T. Schlurmann. "Influence of reversing currents on the erosion stability and scour protection potential of wide-graded grain material". In: *International Journal of Sediment Research* 33.1 (Mar. 2018), pp. 68–83.
- [J25] A. Schendel, A. Hildebrandt, N. Goseberg, and T. Schlurmann. "Processes and evolution of scour around a monopile induced by tidal currents". In: Coastal Engineering 139 (Sept. 2018), pp. 65–84.
- [J24] J. Stolle, C. Derschum, N. Goseberg, I. Nistor, and E. Petriu. "Debris impact under extreme hydrodynamic conditions part 2: Impact force responses for non-rigid debris collisions". In: *Coastal Engineering* 141 (2018), pp. 107–118. ISSN: 0378-3839.
- [J23] J. Stolle, B. Ghodoosipour, C. Derschum, I. Nistor, E. Petriu, and N. Goseberg. "Swing Gate Generated Dam-break Waves". In: *Journal of Hydraulic Research* (2018).
- [J22] J. Stolle, N. Goseberg, E. Petriu, and I. Nistor. "Probabilistic Investigation and Risk Assessment of Debris Transport in Extreme Hydrodynamic Conditions". In: *Journal of Waterways, Port, Coastal, and Ocean Engineering* 144.1 (2018), pp. 04017039–1.
- [J21] J. Stolle, T. Takabatake, I. Nistor, T. Mikami, S. Nishizaki, G. Hamano, H. Ishii, T. Shibayama, N. Goseberg, and E. Petriu. "Experimental investigation of debris damming loads under transient supercritical flow conditions". In: *Coastal Engineering* 139 (Sept. 2018), pp. 16–31.
- [J20] G. David, V. Röber, N. Goseberg, and T. Schlurmann. "Generation and Propagation of Ship-borne Waves - Solutions from a Boussinesq-type Model". In: Coastal Engineering 127 (Sept. 2017), pp. 170–187.
- [J19] I. Nistor, N. Goseberg, and J. StolleF. "Tsunami-Driven Debris Motion and Loads: A Critical Review". In: *Frontiers in Build Environment* 3.2 (2017). Earthquake Engineering.

[J18] J. Stolle, I. Nistor, N. Goseberg, T. Mikami, and T. Shibayama. "Entrainment and Transport Dynamics of Debris in Extreme Hydrodynamic Conditions". In: Coastal Engineering Journal 59.3 (2017), p. 1750011.

- [J17] J. Stolle, T. Takabatake, T. Mikami, T. Shibayama, N. Goseberg, I. Nistor, and E. Petriu. "Experimental Investigation of Debris-Induced Loading in Tsunami-Like Flood Events". In: *geosciences* 7.3 (2017), p. 74. ISSN: 2076-3263.
- [J16] U. Drähne, N. Goseberg, S. Vater, U. Beisiegel, and J. Behrens. "An Experimental and Numerical Study of Analytical Solutions for Tsunami Run-Up on a Plane Beach". In: Journal of Marine Science and Engineering 4.1 (2016).
- [J15] N. Goseberg, I. Nistor, T. Mikami, T. Shibayama, and J. Stolle. "Nonintrusive Spatiotemporal Smart debris Tracking in Turbulent Flows with Application to Debris-Laden Tsunami Inundation". In: *Journal of Hydraulic Engineering* (2016).
- [J14] N. Goseberg, J. Stolle, I. Nistor, and T. Shibayama. "Experimental analysis of debris motion due the obstruction from fixed obstacles in tsunami-like flow conditions". In: Coast Eng 118 (2016), pp. 35–49.
- [J13] I. Nistor, N. Goseberg, T. Mikami, T. Shibayama, J. Stolle, R. Nakamura, and S. Matsuba. "Experimental Investigations of Debris Dynamics over a Horizontal Plane". In: Journal of Waterway, Port, Coastal, and Ocean Engineering 04016022 (2016).
- [J12] J. Stolle, I. Nistor, and N. Goseberg. "Optical Tracking of Floating Shipping Containers in High-Velocity Flow". In: *Coastal Engineering Journal* 58.1650005 (2016).
- [J11] S. Wöbse, N. Kerpen, T. Schlurmann, and N. Goseberg. "Stabilität von modularen Deckwerksmatten aus Normal- und Schwerbeton unter Wellenlasten". In: Wasserwirtschaft 106.10 (2016), pp. 43–49. ISSN: 00430978.
- [J10] G. C. Bremm, N. Goseberg, T. Schlurmann, and I. Nistor. "Long Wave Flow Interaction with a Single Square Structure on a Sloping Beach". In: *Journal of Marine Science and Engineering* 3.3 (2015), p. 821. ISSN: 2077-1312.
- [J9] A. Schendel, N. Goseberg, and T. Schlurmann. "Erosion Stability of Wide-Graded Quarry-Stone Material under Unidirectional Current". In: *Journal of Waterways, Port, Coastal, and Ocean Engineering* 04015023 (2015).
- [J8] A. Schendel, N. Goseberg, and T. Schlurmann. "Experimental Study on the Erosion Stability of Coarse Grain Materials under Waves". In: *Journal of Marine Science and Technology* 23.6 (2015), pp. 937–942.
- [J7] J. Winsemann, P. Alho, L. Laamanen, N. Goseberg, J. Lang, and J. Klostermann. "Flow dynamics, sedimentation and erosion of glacial lake outburst floods along the Middle Pleistocene Scandinavian ice sheet (northern Central Europe)". In: *Boreas* 45.2 (2015), pp. 260–283.
- [J6] O. Lojek, K. Krämer, A. Zorndt, N. Goseberg, and T. Schlurmann. "Velocity and Turbulence Measurements at the Ems Barrage". In: *Die Küste* 81 (2014), pp. 55–68.
- [J5] N. Goseberg. "Reduction of maximum tsunami run-up due to the interaction with beachfront development application of single sinusoidal waves". In: *Natural Hazards and Earth System Science* 13.11 (2013), pp. 2991–3010.

[J4] N. Goseberg, A. Wurpts, and T. Schlurmann. "Laboratory-scale generation of tsunami and long waves". In: *Coastal Engineering* 79 (2013), pp. 57–74.

- [J3] H. Taubenböck, N. Goseberg, G. Lämmel, N. Setiadi, T. Schlurmann, K. Nagel, F. Siegert, J. Birkmann, K.-P. Traub, S. Dech, V. Keuck, F. Lehmann, G. Strunz, and H. Klüpfel. "Risk reduction at the "Last-Mile": An attempt to turn science into action by the example of Padang, Indonesia". In: *Natural Hazards* 65.1 (2013), pp. 915–945.
- [J2] T. Schlurmann and N. Goseberg. "Enhanced hazard mapping on a medium-resolved numerical grid for the city of Padang, West Sumatra". In: *J. of Ship Tech.* 5.2 (July 2009), pp. 13–21.
- [J1] H. Taubenböck, N. Goseberg, N. Setiadi, G. Lämmel, F. Moder, M. Oczipka, H. Klüpfel, R. Wahl, T. Schlurmann, G. Strunz, J. Birkmann, K. Nagel, F. Siegert, F. Lehmann, S. Dech, A. Gress, and R. Klein. "Last-Mile preparation to a potential disaster Interdisciplinary approach towards tsunami early warning and an evacuation information system for the coastal city of Padang, Indonesia". In: Nat Hazard Earth Sys Sci 9.4 (2009), pp. 1509–1528.

Peer-reviewed conferences

- [C37] H. Elsafti, M. Almaghraby, M. Iskander, and N. Goseberg. "Hydraulic performance of innovative seashell-shaped artificial armor units for coastal protections (Seashellbreakwater)". In: Proceedings of the Coastal Structures Conference 2019. Hannover, Germany, Oct. 2019.
- [C36] J. Landmann, R. Santjer, R. Gieschen, N. Goseberg, and A. Hildebrandt. "Laboratory tests on wave forces and accelerations of a three-bay long-line aquaculture systems in offshore conditions". In: International Society of Offshore and Polar Engineers: The 29th International Ocean and Poloar Engineering Conference. Honolulu, Hawaii, USA, 2019.
- [C35] J. Stolle, I. Nistor, N. Goseberg, and E. Petriu. "Probabilistic analysis of debris transport in tsunami-like events". In: Proceedings of the Coastal Structures Conference 2019. Ed. by N. Goseberg and T. Schlurmann. 2019.
- [C34] J. Stolle, I. Nistor, N. Goseberg, and E. Petriu. "Probabilistic investigation of debris impact forces during extreme hydraulic events". In: E-proceedings of the 38th IAHR World Congress. Panama City, Panama, Sept. 2019.
- [C33] S. M. Elsayed, H. Oumeraci, and N. Goseberg. "Erosion And Breaching Of Coastal Barriers In A Changing Climate: Associated Processes And Implication For Contamination Of Coastal Aquifers". In: Coastal Engineering Proceedings. 2018.
- [C32] H. von Häfen, J. Stolle, N. Goseberg, and I. Nistor. "Lift and Swing Gate Modelling for Dam-break Generation with a Particle-Based Method". In: *Proceedings of 7th International Symposium on Hydraulic Structures*. Aachen, Germany, May 2018.
- [C31] A. Hildebrandt, J. Landmann, T. Ongsiek, and N. Goseberg. "Drag Coefficients of Vertically-mounted Full-scale Blue Mussel Dropper Lines". In: Proceedings of the 37th International Conference on Ocean, Offshore & Arctic Engineering. American Society of Mechnical Engineering (ASME). Madrid, Spain, 2018.

[C30] C. G. David, N. Goseberg, V. Roeber, A. Hildebrandt, and T. Schlurmann. "Extension and application of a boussinesq-type model for ship-wake waves". In: Proceedings of SCACR2017 - International Short Course/Conference on Applied Coastal Research. Abstract accepted. Santander, Spain, Sept. 2017.

- [C29] C. Derschum, J. Stolle, I. Nistor, and N. Goseberg. "The influence of wave-structure-interaction on debris impact in extreme hydrodynamic conditions". In: Proceedings of SCACR2017 International Short Course/Conference on Applied Coastal Research. Abstract accepted. Santander, Spain, Sept. 2017.
- [C28] N. Goseberg, M. Heunecke, J. Stolle, and I. Nistor. "Numerical modelling of shipping container transport over horizontal bottom". In: Proceedings of SCACR2017 - International Short Course/Conference on Applied Coastal Research. Abstract accepted. Santander, Spain, Sept. 2017.
- [C27] N. Goseberg, J. Stolle, C. Derschum, and I. Nistor. "Swing Gate Generated Dam Break Waves". In: *E-proceedings of the 37th IAHR World Congress.* Submitted. 2017.
- [C26] I. Nistor, N. Goseberg, and J. Stolle. "Flood-induced Debris Motion In A Built-in Environment". In: *E-proceedings of the 37th IAHR World Congress*. Submitted. 2017.
- [C25] J. Stolle, N. Goseberg, C. Derschum, and I. Nistor. "Debris Dynamics And Associated Loads In Extreme Hydrodynamic Conditions". In: E-proceedings of the 37th IAHR World Congress. Submitted. 2017.
- [C24] N. Goseberg, J. Stolle, and I. Nistor. "Inertial Forces On Shipping Containers From A Broken Tsunami Bore". In: Proceedings of the 6th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science. Ed. by I. Nistor and A. Cornett. Ottawa, Canada, May 2016.
- [C23] O. Lojek and N. Goseberg. "Numerical And In-situ Investigations Of Feasability Studies Of Reinstatement Work For The Port Of Dagebüll". In: *ECSA 56 Coastal systems in transition: From a 'natural' to an 'anthropogenically-modified' state*. Bremen, Germany, Sept. 2016.
- [C22] I. Nistor, N. Goseberg, J. Stolle, S. Matsuba, R. Nakamura, T. Mikami, and T. Shibayama. "Flood-induced Debris Motion Within A Built-in Environment". In: Coastal Engineering Proceedings. Ed. by P. Lynett. Accepted. Istanbul, Turkey, July 2016.
- [C21] A. Schendel, N. Goseberg, and T. Schlurmann. "Processes and effects of reversing currents on the erosion stability of wide-graded grain material". In: River Sedimentation: Proceedings of the 13th International Symposium on River Sedimentation Stuttgart. Ed. by S. W. et al. Stuttgart, Germany: Taylor & Francis Group, London, CRC Press, Sept. 2016, pp. 402–410.
- [C20] J. Stolle, I. Nistor, and N. Goseberg. "Optical Tracking Of Debris In Extreme Hydrodynamic Conditions". In: Canadian Society for Civil Engineering (CSCE) Annual Conference. London, Canada, June 2016.
- [C19] J. Stolle, I. Nistor, and N. Goseberg. "Optical Tracking Of Water-borne Debris In Laboratory Conditions". In: Proceedings of the 6th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science. Ed. by I. Nistor and A. Cornett. Ottawa, Canada, May 2016.

[C18] N. Goseberg, G. Bremm, T. Schlurmann, and I. Nistor. "A transient approach flow acting on a square cylinder - flow pattern and horizontal forces". In: *E-proceedings of the 36th IAHR World Congress*. The Hague, The Netherlands, July 2015, pp. 1–12.

- [C17] N. Goseberg, I. Nistor, and J. Stolle. "Tracking of "'Smart"' debris location based on RFID technique". In: Coastal Structures and Solutions to Coastal Disasters 2015: Tsunamis. Ed. by L. Wallendorf and D. T. Cox. American Society of Civil Engineering. Boston, USA, 2015, pp. 43–53.
- [C16] J. Stolle, I. Nistor, N. Goseberg, S. Matsuba, R. Nakamura, T. Mikami, and T. Shibayama. "Flood-Induced Debris Dynamics over a Horizontal Surface". In: Coastal Structures and Solutions to Coastal Disasters 2015: Tsunamis. Ed. by L. Wallendorf and D. T. Cox. American Society of Civil Engineering. Boston, USA, 2015, pp. 54–64.
- [C15] N. Goseberg and T. Schlurmann. "Non-stationary flow around buildings during run-up of tsunami waves on a plain beach". In: *Coastal Engineering Proceedings*. Ed. by P. Lynett. Vol. 1. 34. 2014.
- [C14] N. Horstmann, N. Kerpen, N. Goseberg, and T. Schlurmann. "Investigation on the evolution and propagation of waves in highly concentrated fluid". In: Coastal Engineering Proceedings. Ed. by P. Lynett. Vol. 1. 34. 2014.
- [C13] N. Kerpen, N. Goseberg, and T. Schlurmann. "Experimental Investigations on Wave Overtopping on Stepped Embankments". In: Application of Physical Modelling to Port and Coastal Protection. Ed. by V. Penchev and F. Taverira-Pinto. Vol. 1. Proceedings of the 5th International Conference - Coastlab. Varna, Bulgaria, 2014, pp. 262–269.
- [C12] O. Lojek, N. Goseberg, A. Stahlmann, K. Krämer, and T. Schlurmann. "Unsicherheiten bei der Bestimmung von Bemessungswasserständen und Konzeptionierung eines objektspezifischen Hochwasserschutzmanagements mit standardisiertem Betriebsablauf für das Whitney Museum of American Art in NYC". In: Dresdener Wasserbaukolloquium 2014 Simulationsverfahren und Modelle für Wasserbau und Wasserwirtschaft. Ed. by J. Stamm. Vol. 50. Dresdner Wasserbauliche Mitteilungen. Technische Universität Dresden, 2014, pp. 175–185.
- [C11] A. Schendel, N. Goseberg, and T. Schlurmann. "Experimental study on the performance of coarse grain materials as scour protection". In: *Coastal Engineering Proceedings*. Ed. by P. Lynett. Vol. 1. 34. 2014.
- [C10] V. Sriram, I. Didenkulova, S. Schimmels, A. Sergeeva, and N. Goseberg. "Long wave propagation, shoaling and run-up in nearshore areas". In: *Coastal Engineering Proceedings*. Ed. by P. Lynett. Vol. 1. 34. 2014.
 - [C9] A. Zorndt, N. Goseberg, and T. Schlurmann. "Influence of retention areas on the propagation of storm surges in the weser estuary". In: Coastal Engineering Proceedings. Ed. by P. Lynett. Vol. 1. 34. 2014.
- [C8] N. Goseberg. "Experimental run-up determination of single sinusoidal, solitary and N-waves". In: *Proceedings of the International Offshore and Polar Engineering Conference*. 2013.
- [C7] N. Goseberg. "A laboratory perspective of long wave generation". In: *Proceedings of the International Offshore and Polar Engineering Conference*. 2012, pp. 54–60.

[C6] N. Goseberg and T. Schlurmann. "Interaction of idealized urban infrastructure and long waves during run-up and on-land flow process in coastal regions". In: *Proceedings* of the International Conference on Coastal Engineering. Ed. by P. Lynett and J. M. Smith. Santander, Spain, 2012.

- [C5] M. Vennebusch, N. Goseberg, L. Albert, S. Schön, F. Kube, A. Zorndt, T. Schlurmann, and A. Wurpts. "Precise Determination of Sediment Dynamics Using Low-cost GPSfloaters". In: IEEE/ION PLANS 2012 Proceedings. 2012.
- [C4] M. Wilms, N. Goseberg, and T. Schlurmann. "Hydraulic Performance of Breakwater Heads Armored with Elements with High-Density Iron-Silicate as Concrete Aggregate". In: Proceedings of the Eight International Conference on Coastal and Port Engineering in Developing Countries. Chennai, India, 2012, pp. 925–931.
- [C3] P. Lynett and J. M. Smith, eds. *Numerical and experimental study on tsunami run-up and inundation influenced by macro roughness elements*. 2010.
- [C2] G. Lämmel, M. Rieser, K. Nagel, H. Taubenböck, G. Strunz, N. Goseberg, T. Schlurmann, H. Klüpfel, N. Setiadi, and J. Birkmann. "Emergency Preparedness in the Case of a Tsunami—Evacuation Analysis and Traffic Optimization for the Indonesian City of Padang". In: Pedestrian and Evacuation Dynamics 2008. Springer Berlin Heidelberg, 2010.
- [C1] T. Schlurmann, W. Kongko, N. Goseberg, D. H. Natawidjaja, and K. Sieh. "Near-field tsunami hazard map Padang, West Sumatra: utilizing high resolution geospatial data and reseasonable source scenarios". In: *Proceedings of the International Conference* on Coastal Engineering. Ed. by P. Lynett and J. M. Smith. 2010.

Other conference contributions

- [O26] K. Tegethoff, T. Ring, N. Goseberg, and S. C. Langer. "Online-Lernplattformen zur Unterstützung der Lehre im Küsteningenieurwesen und der Akustik: Entwicklung und Implementierung einer wikibasierten Online-Lernplattform und deren Integration in ein Lehrkonzept". In: *Teaching Trends 18 Die Präsenzhochschule und die digitale Transformation*. Ed. by S. Robra-Bissantz, O. J. Bott, N. Kleinefeld, K. Neu, and K. Zickwolf. ELAN e.V. Kongress Braunschweig 7. Waxmann, 2019.
- [O25] M. Brühl, N. Goseberg, L.-B. Jordan, M. Kudella, J. Mennenga, M. Miranda-Lange, J. Müller, A. Schendel, S. Schimmels, T. Schlurmann, and J. Weisheit. "Design and operation of a new small-scale wave-current flume". In: Proceedings of 9th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2018). National Cheng Kung University. Tainan, ROC, 2018.
- [O24] S. M. Elsayed, H. Oumeraci, and N. Goseberg. "Longshore variability of diverse loading and resistance of coastal barriers & implications for breaching under extreme storm surges". In: *Proc. of the 5th IAHR Europe Congress New Challenges in Hydraulic Research and Engineering*. Ed. by A. Armanini and E. Nucci. 2018.
- [O23] N. Goseberg, R. Gischen, J. Landmann, T. Ongsiek, and A. Hildebrandt. "Drag and Inertia Coefficients of Live and Surrogate Shellfish Dropper Lines for Aquaculture".
 In: Proceedings of 9th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2018). National Cheng Kung University. Tainan, ROC, 2018.

[O22] M. Kreyenschulte, H. Schüttrumpf, and N. Goseberg. "Wave Loading on Mortar-Grouted Riprap Revetments: Full-Scale Model Tests". In: Proceedings of 9th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2018). National Cheng Kung University. Tainan, ROC, 2018.

- [O21] V. Kühling, M. Kreyenschulte, N. Goseberg, and H. Schüttrumpf. "Wave Run-Up/Run-Down and Wave Set-Up on Mortar-Grouted Riprap Revetments: Full-Scale Laboratory Tests". In: *Proceedings of the 7th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science (Coastlab18)*. Santander, Spain, May 2018.
- [O20] J. Landmann, T. Ongsiek, N. Goseberg, and A. Hildebrandt. "Investigating Drag and Inertia Characteristics of Full-scale Blue Mussel Dropper Lines". In: Proceedings of the 7th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science (Coastlab18). Santander, Spain, May 2018.
- [O19] S. Schimmels, T. Schlurmann, M. Brühl, and N. Goseberg. "Large scale experiments in coastal and Ocean engineering A Review of 35 years of physical model tests in the Large Wave Flume (Grosser Wellenkanal, GWK)". In: *Proceedings of 9th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2018)*. National Cheng Kung University. Tainan, ROC, 2018.
- [O18] T. Schlurmann, M. Brühl, N. Goseberg, A. Schendel, and S. Schimmels. "marTech Development of Renewable Maritime Technologies for Reliable and Sustainable Energy Supply". In: Proceedings of 9th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2018). National Cheng Kung University. Tainan, ROC, 2018.
- [O17] J. Stolle, T. Takabatake, G. Hamano, H. Ishii, K. Iimura, T. Shibayama, N. Goseberg, I. Nistor, and E. Petriu. "Debris Transport Over A Sloped Surface In Tsunami-like Flow Conditions". In: Proceedings of the 7th International Conference on the Application of Physical Modelling in Coastal and Port Engineering and Science (Coastlab18). Santander, Spain, May 2018.
- [O16] J. Stolle, I. Nistor, and N. Goseberg. "Debris Dynamics And Impact Forces In Extreme Hydrodynamic Conditions". In: Proceedings of the 7th International Tsunami Symposium. Ed. by G. Pararas-Carayannis. Ispra, Italy: The International Tsunami Society, Sept. 2016.
- [O15] S. Vater, U. Drähne, N. Goseberg, N. Beisiegel, and J. Behrens. "Long-wave Runup On A Plane Beach: An Experimental And Numerical Investigation". In: Geophysical Research Abstracts. Vol. 18. EGU2016-6577, EGU General Assembly 2016. Vienna, Austria, Apr. 2016.
- [O14] S. Wöbse, N. Kerpen, N. Goseberg, and T. Schlurmann. "Stabilitätsuntersuchungen von modularen Deckwerksmatten aus ESG-Beton". In: *Kongress der Hafentechnischen Gesellschaft*. German Port Technology Association. Bremen, Sept. 2015.
- [O13] G. David, V. Röber, and N. Goseberg. "Introducing a pressure term for ship-induced waves into a Boussinesq-type model". In: *Proceedings of the 7th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2014)*. Leibniz Universität Hannover, Germany, Sept. 2014.

[O12] O. Lojek, N. Goseberg, and T. Schlurmann. "Numerical and in-situ Investigation of Feasability Studies of Reinstatement work for the port of Dagebüll". In: Proceedings of the 7th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2014). Leibniz Universität Hannover, Germany, Sept. 2014.

- [O11] A. Schendel, N. Goseberg, and T. Schlurmann. "Experimental study on the erosion stability of coarse grain materials under waves". In: *Proceedings of the 7th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2014)*. Leibniz Universität Hannover, Germany, Sept. 2014.
- [O10] T. Schlurmann, N. Goseberg, and D. Bung. "Hydropower development, its implications and changes in hydrology,morphodynamics and ecology: Review and impact assessment from Germany". In: *Mekong Environmental Symposium*. Ho Chi Minh City, Vietnam, Mar. 2013.
- [O9] N. Goseberg, B. Franz, and T. Schlurmann. "The potential co-use of aquaculture and offshore wind energy structures". In: Proceedings of the 6th Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2012). Vol. 6. National Taiwan Ocean University, Keelung, Taiwan, ROC, Sept. 2012, pp. 597–603.
- [O8] A. Schendel, N. Goseberg, and T. Schlurmann. "Experimental study on erosion potentials and nearbed transport processes of coarse grain materials". In: Proceedings of the 6h Chinese-German Joint Symposium on Hydraulic and Ocean Engineering (CGJOINT 2012). Vol. JOINT 2012. National Taiwan Ocean University, Keelung, Taiwan, ROC, 2012.
- [O7] N. Goseberg. "Long wave generation in physical modelling". In: hydralab III Young Researchers Workshop. Hannover, Germany, 2010.
- [O6] N. Goseberg and T. Schlurmann. "Highly resolved tsunami inundation study for Padang, Western Sumatra using a multi-scenario approach". In: Meeting of the Asia Oceania Geosciences Society (AOGS). Singapore, 2009.
- [O5] N. Goseberg, F. Verworn, and T. Schlurmann. "Highly resolved tsunami inundation study for Padang, Western Sumatra using a multi-scenario approach". In: 161. Annual meeting of the German Society for Geo Sciences. Dresden, Germany, 2009.
- [O4] J. Birkmann, S. Dech, N. Goseberg, H. Klüpfel, G. Lämmel, F. Moder, K. Nagel, M. Oczipka, T. Schlurmann, N. Setiadi, F. Siegert, G. Strunz, and H. Taubenböck. "Numerical Last-mile Tsunami Early Warning And Evacuation Information System ("last-mile Evacuation")". In: Proceedings of the International Conference on Tsunami Warning (ICTW) Towards Safer Coastal Communities. Nusa Dua, Bali, Indonesia, 2008, pp. 1–12.
- [O3] N. Goseberg and T. Schlurmann. "Relevant factors on the extent of inundation based on tsunami scenarios for the city of Padang, West Sumatra". In: Proceedings of the International Conference on Tsunami Warning (ICTW) - Towards Safer Coastal Communities. Nusa Dua, Bali, Indonesia, 2008, pp. 1–8.
- [O2] N. Goseberg, A. Stahlmann, S. Schimmels, and T. Schlurmann. "Highly resolved numerical modelling of tsunami run-up and inundation scenarios in the city of Padang, West Sumatra". In: Poster proceedings of the International Conference on Coastal Engineering. Hamburg, Germany, 2008.

 [O1] H. Spekker, N. Goseberg, and C. Zimmermann. "Control Structures For Flood And Risk Management - Case Studies Of Mississippi River Delta And Weser River Estuary".
 In: Proceedings of Port Development and Coastal Environment. 2007.

Technical Reports (Selection)

- [R4] A. Schendel, N. Goseberg, and T. Schlurmann. Wide-graded material as offshore shore protection - Experiments for wave loading. Tech. rep. 734. Industry funding by Mibau GmbH. Franzius-Institute for Hydraulics, Waterways and Coastal Engineering, 2013.
- [R3] B. Buck, J. Dubois, M. Ebeling, B. Franz, N. Goseberg, G. Krause, P. Schaumann, T. Schlurmann, J. Schmidt, and L. Wefer. Multiple Usage and Co-Management of offshore wind energy structures: Marine aquaculture and offshore wind parks Open Ocean Multi-Use (OOMU). Tech. rep. Funding by German Ministry for Environment (BMU) Ref. 325206. IMAGE GmbH, Germany, 2012, p. 255.
- [R2] N. Kerpen, N. Horstmann, N. Goseberg, and T. Schlurmann. Freeboard design at the western shore of Pan No. 5 – Phase 2b - Freeboard assessment study. Progress report 727. Industry funding by Dead Sea Works Ltd. Franzius-Institute for Hydraulics, Waterways and Coastal Engineering, 2012.
- [R1] N. Goseberg, T. Schlurmann, J. Birkmann, N. Setiadi, H. Taubenböck, G. Strunz, S. Dech, G. Lämmel, H. Klüpfel, K. Nagel, F. Moder, M. Oczipka, and F. Siegert. Numerical Last-Mile Tsunami Early Warning and Evacuation Information System. Project report 714. Geotechnologien, German Federal Ministry of Education and Research BMBF, grant no. 03G0666A-H. Franzius-Institute, 2010.

Talks and invited talks (28 in total, 6 selected talks)

- 2019 The future of experiments in coastal engineering. Ocean Week 2019 Oceans in Change, Radisson Blue, Trondheim, Norway, Organizer NTNU, Norway, May 6-8
- 2019 Beyond rigidity Collapsing structures in experimental hydraulics. Forum Experiment! conference 2019, Herrenhausen Palace, Hannover, Germany, Organizer Volkswagen Stiftung, Nov. 26-27
- 2018 Large-scale physical model testing of coastal environments: past and future, International Conference on Celebration of HIGH-Center, Rural Research Institute, Korea Rural Community Corporation, Gyeonggi-do, Republic of South Korea
- 2017 Modelling onshore tsunami loads and effects, Long Waves and Tsunamis Workshop, Discovery Point, Dundee, Scotland
- 2015 "Smart" debris location tracking based on RFID technique, Coastal Structures and Solutions to Coastal Disasters conference, Boston, USA
- 2013 Untersuchung ästuardynamischer Prozesse mit Hilfe numerischer Modellierung, Einladung zum Dialog Küstenforschung, Küstennutzung und Küstenschutz, Hamburg, Germany
- 2012 The potential co-use of aquaculture and offshore wind energy structures: an engineering perspective, Aquaculture Forum Bremerhaven, Workshop I "Open Ocean Aquaculture Development", Bremerhaven, Germany

Outreach Activities - Selection

2018/08 Zeit-Wissen Podcast: "'Woher weißt Du das? / Nachhaltigkeit"', 30.08.2018, Zeit Verlag

2018/04 Radio feature, NDR Info - Logo - Das Wissenschaftsmagazin, Title "Orkane und Tornados im Klimawandel. Welche Auswirkungen hat dies für Norddeutschland?", 20.04.2018, NDF Info

2011/08 TV interview and contribution to science film on Aquaculture in Offshore Wind Parks 'First German Television' - W wie Wissen

Contribution to research projects (selection)

Life-time summary: 36 in total, 14 selected

- 2020/07 2022/06 **Nulimas Numerical Modelling of Liquefaction Around Marine Structures**, *Commissioned by: Federal Ministry of Economy and Energy Affairs*, Role: Acquisition, PI, Coordination.
- 2020/04 2023/03 Augmenting grid stability through Low-head Pumped Hydro Energy Utilization & Storage, Commissioned by: European Commissions Research Agency in H2020, Role: Acquisition, Co-PI.
- 2020/01 2024/12 Gute Küste Niedersachsen Real-world laboratories investigations towards ecosystem-wise coastal protection, Commissioned by: Lower Saxonian Ministry of Science and Culture, Role: Acquisition, Co-PI.
- 2019/12 2022/11 EnviSim4Mare Test bed development and investigation on the influence of marine growth on drag and inertia coefficients of offshore wind structures, Commissioned by: Federal Ministry of Economy and Energy Affairs, Role: Acquisition, PI, Coordination.
- 2019/09 2022/08 BIVA-WATT Roughness effects of Oyster reefs and blue mussel beds on waves and currents, Commissioned by: Federal Ministry of Science and Education, Role: Acquisition, PI, Coordination.
- 2018/04 2019/10 **Beyond rigidity Collapsing structures in experimental hydraulics**, *Commissioned by: Volkswagen Foundation through their highly-competitive "Experiment"-funds*, Role: Acquisition, PI, Coordination.
- 2018/01 2019/12 Large-scale research facility: Long-wave generation device, INST398192031, Commissioned by: German Research Foundation, DFG.
 Role: Acquisition, Project management, PI
- 2017/07 2018/06 Large Scale Testing a Solution for the Afsluitdijk, The Netherlands, Commissioned by: Consortium Corneel, Role: Acquisition, Project management, Pl.
- 2017/07 2017/12 **Stability Testing for Armor Layer at the Benin Coast**, *Commissioned by: Inros Lackner SE, Benin*.

 Role: Acquisition, Project management, PI
- 2017/01 2022/12 **Enabling Open Ocean Shellfish Aquaculture**, Commissioned by: Cawthron NZ, Ministry of Business Innovation & Employment, New Zealand, Role: Acquisition, Project management, Pl.
- 2014/07 2017/06 Spatiotemporal Distribution and Structural impact LOading due to Artificial Debris Objects in Violent Flows (impLOADis), Commissioned by: European Union, Research Executive Agency, Role: Acquisition, Project management, Execution.
- 2014/02 2014/07 Physical model tests of an innovative armor layer mattress made of iron-silicate concrete blocks, *Commissioned by: Peute GmbH*.

 Role: Acquisition, Project management

2013/09 - 2014/03	Adaptation of an existing Boussinesq wave model (Boussinesq Ocean Surf Zone model) to simulate ship-induced waves around a flow guide wall, Commissioned by: Hamburg Port Authority, Rolle: Einwerbung, Projektleitung.
2013/05 - 2013/06	In-situ current velocity measurements with Acoustic Doppler Current Profiler (ADCP), Jade estuary, Germany, Commissioned by: IMS Ingenieurgesellschaft mbH/Colcrete van Essen GmbH, Role: Acquisition, Project leader.
2013/05 - 2013/11	Hydro-morphodynamic simulation of sedimentation in a Northwestern German harbor, Dagebüll, Germany, Commissioned by: Ingenieurbüro Mohn GmbH, Role: Acquisition, Project leader.
2013/02 - 2013/07	Proposal to scientifically assess the flood risk profile and future design storm surge levels of Gansevoort project of Whitney Museum of American Art (WMAA), NYC, USA, Commissioned by: WTM Engineers GmbH, Role: Co-Investiator; Execution.

Braunschweig, February 28, 2020

(Nils Goseberg)

Juls Gorens