

Curriculum Vitae

Markus H. Huettel

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General Information

University address: Earth, Ocean, and Atmospheric Science
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Professional Preparation

1988 Doctor of Philosophy, University of Kiel, Germany. Major: Biological Sciences. Marine Biology. Supervisor: Prof. Wolfram Noodt. Summa Cum Laude.

Huettel, M. (1988). *On the impact of macrofauna on the nutrient profiles in Wadden Sea sediments*. (Doctoral dissertation, University of Kiel, Germany). Retrieved from Report of the Institute of Marine Research in Kiel, 182: 1-203.

1984 M.S., University of Kiel, Germany. Major: Biology. Zoology, Biological Oceanography, Biochemistry. Supervisor: Prof. Wolfram Noodt. Summa Cum Laude.

Huettel, M. (1984). *On the ecology of intertidal flat scavengers: Investigations of Carcinus maenas and Anaitides maculata*. Unpublished master's thesis, University of Kiel, Germany.

Nondegree Education and Training

1989–1990 Boundary layer hydrodynamics at the sandy seafloor.

Professional Experience

2005–present	Associate Geophysical Fluid Dynamics Institute, Geophysical Fluid Dynamics Institute, Florida State University.
2003–present	Professor of Oceanography, Earth, Ocean & Atmospheric Science, Florida State University.
2000–2002	Research Group Leader, Fluid Dynamics Lab, Max Plack Institute for Marine Microbiology, Bremen, Germany.
1992–1999	Permanent Research Scientist, Fluid Dynamics Lab, Max Planck Institute for Marine Microbiology, Bremen, Germany.
1997	Visiting Scientist, University of Hawaii. Research group, Dr. F. Sansone.
1991	Lecturer in Biology, Biology, University of Kiel, Germany.
1989–1990	Postdoctoral Fellow, Marine Science, University of South Florida. Research in hydrodynamics.
1988	Lecturer, Biology, University of Kiel, Germany.

Visiting Professorship(s)

2017	Mercator Fellowship at the University of Rostock/Germany.
2016	University of Hawaii.
1997	University of Hawaii.

Honors, Awards, and Prizes

Moore Lecture, University of Virginia (2017).
Teaching Award Nominee (graduate and undergraduate), FSU (2016).
Excellence in Online Course Design award with distinction, FSU (2015).
Excellence in Online Teaching, FSU (2015).
Teaching Award Nominee (graduate and undergraduate), FSU (2015).

Elected Fellow Status

Elected as a Fellow of Mercator Fellow, German Science Foundation (2017).
Elected as a Fellow of Association for the Sciences of Limnology and Oceanography (2015).

Current Membership in Professional Organizations

American Association for the Advancement of Science (AAAS)
American Geophysical Union (AGU)
Association for the Sciences of Limnology and Oceanography, (ASLO)
Coastal and Estuarine Research Federation (CERF)
Geochemical Society (GCA)

Teaching

Biological/biogeochemical Oceanography with focus on coastal and estuarine systems.

Courses Taught

Coral Reef Ecology Online (OCE4265)
Marine Environment Pollution (OCE5077)
Marine Pollution (EOC4631)
Estuarine and Coastal Ecology (OCB5635)
Reef Ecology Field course (OCB5264)
Biology and Chemistry of Marine Sediments (OCB5930)
Undergraduate Research (GLY4915)
Ecology of Marine Sediments (OCB5067C)
Seminar (GFD6935)
Capstone Experience (OCE5934)
Biological Oceanography Seminar (OCB5939)
Elementary Oceanography (OCE1001)

Research and Original Creative Work

Publications

Refereed Journal Articles

- Chua, E. J., Huettel, M., Fennel, K., & Fulweiler, R. W. (2022). A case for addressing the unresolved role of permeable shelf sediments in ocean denitrification. *Limnology and Oceanography Letters*, 7(1), 11-25. Retrieved from [Go to ISI>://WOS:000709817700001 doi:10.1002/lo12.10218
- Karthikeyan, S., Hatt, J. K., Kim, M., Spain, J. C., Huettel, M., Kostka, J. E., & Konstantinidis, K. T. (2021). A novel, divergent alkane monooxygenase (alkB) clade involved in crude oil biodegradation. *Environmental Microbiology Reports*, 13(6), 830-840. Retrieved from [Go to ISI>://WOS:000709065600001 doi:10.1111/1758-2229.13018
- Heritier-Robbins, P., Karthikeyan, S., Hatt, J. K., Kim, M., Huettel, M., Kostka, J. E., Konstantinidis, K. T., & Rodriguez, L. M. (2021). Beach sand oil spills select for generalist microbial populations. *ISME Journal*, 15(11), 3418-3422. Retrieved from [Go to ISI>://WOS:000658062500002 doi:10.1038/s41396-021-01017-6
- Halanych, K. M., Ainsworth, C. H., Cordes, E. E., Dodge, R. E., Huettel, M., Mendelssohn, I. A., Murawski, S. A., Paris-Limouzy, C. B., Schwing, P. T., Shaw, R. F., & Sutton, T. (2021). Effects of petroleum by-products and dispersants on ecosystems. *Oceanography*, 34(1), 152-163. Retrieved from [Go to ISI>://WOS:000691478200015 doi:10.5670/oceanog.2021.123

- Merikhi, A., Berg, P., & Huettel, M. (2021). Technical note: Novel triple O-2 sensor aquatic eddy covariance instrument with improved time shift correction reveals central role of microphytobenthos for carbon cycling in coral reef sands. *Biogeosciences*, *18*(19), 5381-5395. Retrieved from [Go to ISI>://WOS:000703902300001 doi:10.5194/bg-18-5381-2021
- Ainsworth, C. H., Chassignet, E. P., French-McCay, D., Beegle-Krause, C. J., Berenshtein, I., Englehardt, J., Fiddaman, T., Huang, H., Huettel, M., Justic, D., Kourafalou, V. H., Liu, Y., Mauritzen, C., Murawski, S., Morey, S., Ozgokmen, T., Paris, C. B., Ruzicka, J., Saul, S., Shepherd, J., Socolofsky, S., Gabriele, H. S., Sutton, T., Weisberg, R. H., Wilson, C., Zheng, L., & Zheng, Y. (2021). Ten years of modeling the Deepwater Horizon oil spill. *Environmental Modelling & Software*, *142*. Retrieved from [Go to ISI>://WOS:000659355900005 doi:10.1016/j.envsoft.2021.105070
- Huettel, M., Berg, P., & Merikhi, A. (2020). Technical note: Measurements and data analysis of sediment-water oxygen flux using a new dual-optode eddy covariance instrument. *BIOGEOSCIENCES*, *17*(17), 4459-4476. doi:10.5194/bg-17-4459-2020
- Karthikeyan, S., Rodriguez-R, L. M., Heritier-Robbins, P., Hatt, J. K., Huettel, M., Kostka, J. E., & Konstantinidis, K. T. (2020). Genome repository of oil systems: An interactive and searchable database that expands the catalogued diversity of crude oil-associated microbes. *ENVIRONMENTAL MICROBIOLOGY*, *22*(6), 2094-2106. doi:10.1111/1462-2920.14966
- Karthikeyan, S., Kim, M., Heritier-Robbins, P., Hatt, J. K., Spain, J. C., Overholt, W. A., Huettel, M., Kostka, J. E., & Konstantinidis, K. T. (2020). Integrated Omics Elucidate the Mechanisms Driving the Rapid Biodegradation of Deepwater Horizon Oil in Intertidal Sediments Undergoing Oxidic-Anoxic Cycles. *Environmental Science & Technology*, *54*(16), 10088-10099. Retrieved from [Go to ISI>://WOS:000563025000035 doi:10.1021/acs.est.0c02834
- Shin, B., Bociu, I., Kolton, M., Huettel, M., & Kostka, Joel, E. (2019). Succession of microbial populations and nitrogen-fixation associated with the biodegradation of sediment-oil-agglomerates buried in a Florida sandy beach. *Scientific Reports*, *9*, 19401. Retrieved from <https://www.nature.com/articles/s41598-019-55625-6> doi:10.1038/s41598-019-55625-6
- Karthikeyan, S., Rodriguez-R, L. M., Heritier-Robbins, P., Kim, M., Overholt, W. A., Gaby, J. C., Hatt, J. K., Spain, J. C., Rossello-Mora, R., Huettel, M., Kostka, J. E., & Konstantinidis, K. T. (2019). "Candidatus Macondimonas diazotrophica", a novel gammaproteobacterial genus dominating crude-oil-contaminated coastal sediments. *ISME JOURNAL*, *13*(8), 2129-2134. doi:10.1038/s41396-019-0400-5

- Bociu, I., Shin, B., Wells, W. B., Kostka, J. E., Konstantinidis, K. T., & Huettel, M. (2019). Decomposition of sediment-oil-agglomerates in a Gulf of Mexico sandy beach. *SCIENTIFIC REPORTS*, 9. doi:10.1038/s41598-019-46301-w
- Geyer, N., Huettel, M., & Wetz, M. (2018). Biogeochemistry of a River-Dominated Estuary Influenced by Drought and Storms. *Estuaries and Coasts*, 41(7), 2009-2023. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000445240600011> doi:10.1007/s12237-018-0411-x
- Huettel, M., Overholt, W. A., Kostka, J. E., Hagan, C., Kaba, J., Wells, W. B., & Dudley, S. (2018). Degradation of Deepwater Horizon oil buried in a Florida beach influenced by tidal pumping. *Marine Pollution Bulletin*, 126, 488-500. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000425569400063> doi:10.1016/j.marpolbul.2017.10.061
- Huettel, M., Overholt, W. A., Kostka, J. E., Hagan, C., Kaba, J., Wells, W. B., & Dudley, S. (2018). Degradation of Deepwater Horizon oil buried in a Florida beach influenced by tidal pumping (vol 126, pg 488, 2018). *Marine Pollution Bulletin*, 133, 943-943. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000441853600104> doi:10.1016/j.marpolbul.2018.06.027
- Santema, M., & Huettel, M. (2018). Dynamics of microphytobenthos photosynthetic activity along a depth transect in the sandy northeastern Gulf of Mexico shelf. *Estuarine Coastal and Shelf Science*, 212, 273-285. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000446286100027> doi:10.1016/j.ecss.2018.07.016
- Merikhi, A., Berg, P., Meyer, V., & Huettel, M. (2018). Jet-nozzle method for measuring response times of scalar sensors used in liquids and gases. *Limnology and Oceanography-Methods*, 16(8), 475-483. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000442497000001> doi:10.1002/lom3.10259

- Geyer, N. L., Huettel, M., & Wetz, M. S. (2018). Phytoplankton Spatial Variability in the River-Dominated Estuary, Apalachicola Bay, Florida. *Estuaries and Coasts*, 41(7), 2024-2038. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000445240600012> doi:10.1007/s12237-018-0402-y
- Berg, P., Delgard, M. L., Glud, R. N., Huettel, M., Reimers, C. E., & Pace, M. L. (2017). Non-invasive flux Measurements at the Benthic Interface: The Aquatic Eddy Covariance Technique. *Limnology and Oceanography E-Lectures*, 7, 1–50. Retrieved from <https://aslopubs.onlinelibrary.wiley.com/doi/abs/10.1002/loe2.10005> doi:10.1002/loe2.10005
- Berg, P., Koopmans, D. J., Huettel, M., Li, H., Mori, K., & Wuest, A. (2016). A new robust oxygen-temperature sensor for aquatic eddy covariance measurements. *Limnology and Oceanography-Methods*, 14(3), 151-167. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000372701900001> doi:10.1002/lom3.10071
- Chipman, L., Berg, P., & Huettel, M. (2016). Benthic Oxygen Fluxes Measured by Eddy Covariance in Permeable Gulf of Mexico Shallow-Water Sands. *Aquatic Geochemistry*, 22(5-6), 529-554. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000391427600007> doi:10.1007/s10498-016-9305-3
- Dickey, R., & Huettel, M. (2016). Seafood and Beach Safety in the Aftermath of the Deepwater Horizon Oil Spill. *Oceanography*, 29(3), 196-203. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000382334500025> doi:10.5670/oceanog.2016.83
- Rodriguez, L. M., Overholt, W. A., Hagan, C., Huettel, M., Kostka, J. E., & Konstantinidis, K. T. (2015). Microbial community successional patterns in beach sands impacted by the Deepwater Horizon oil spill. *ISME Journal*, 9(9), 1928-1940. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000360019500004> doi:10.1038/ismej.2015.5

- Suryaputra, I., Santos, I. R., Huettel, M., Burnett, W. C., & Dittmar, T. (2015). Non-conservative behavior of fluorescent dissolved organic matter (FDOM) within a subterranean estuary. *Continental Shelf Research*, *110*, 183-190. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000365464400014> doi:10.1016/j.csr.2015.10.011
- Berg, P., Reimers, C. E., Rosman, J. H., Huettel, M., Delgard, M. L., Reidenbach, M. A., & Ozkan-Haller, H. T. (2015). Technical note: Time lag correction of aquatic eddy covariance data measured in the presence of waves. *Biogeosciences*, *12*(22), 6721-6735. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000365442600011> doi:10.5194/bg-12-6721-2015
- Santema, M., Clarke, A. J., Speer, K., & Huettel, M. (2015). Water column oxygen dynamics within the coastal gradient in the northeastern Gulf of Mexico inner shelf. *Continental Shelf Research*, *104*, 104-119. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000358097600009> doi:10.1016/j.csr.2015.05.006
- Cheng, C. H., Huettel, M., & Wildman, R. A. (2014). Ebullition-enhanced solute transport in coarse-grained sediments. *Limnology and Oceanography*, *59*(5), 1733-1748. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000345462100022> doi:10.4319/lo.2014.59.5.1733
- Ruddy, B. M., Huettel, M., Kostka, J. E., Lobodin, V. V., Bythell, B. J., McKenna, A. M., Aeppli, C., Reddy, C. M., Nelson, R. K., Marshall, A. G., & Rodgers, R. P. (2014). Targeted Petroleomics: Analytical Investigation of Macondo Well Oil Oxidation Products from Pensacola Beach. *Energy & Fuels*, *28*(6), 4043-4050. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000337783800053> doi:10.1021/ef500427n
- Canion, A., Overholt, W. A., Kostka, J. E., Huettel, M., Lavik, G., & Kuypers, M. M. M. (2014). Temperature response of denitrification and anaerobic ammonium oxidation rates and microbial community structure in Arctic fjord sediments. *Environmental Microbiology*, *16*(10), 3331-3344. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000343867700025> doi:10.1111/1462-2920.12593

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- Canion, A., Kostka, J. E., Gihring, T. M., Heuttel, M., van Beusekom, J. E. E., Gao, H., Lavik, G., & Kuypers, M. M. M. (2014). Temperature response of denitrification and anammox reveals the adaptation of microbial communities to in situ temperatures in permeable marine sediments that span 50 degrees in latitude. (vol 11, pg 309-320, 2014). *Biogeosciences*, *11*(2), 461-462. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000331260900023> doi:10.5194/bg-11-461-2014
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Invited Book Chapters

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Refereed Proceedings

Magen, C., Huettel, M., Podgorski, D. C., & Cooper, W. T. (2010). Anoxia in coastal permeable sediments induces the release of Dissolved Organic Matter (DOM). In *Conference on Goldschmidt 2010 - Earth, Energy, and the Environment, Knoxville, TN* (pp. A655). GEOCHIMICA ET COSMOCHIMICA ACTA 74.

Huettel, M., Chipman, L., Podgorski, D. C., Green, S. J., Magen, C., Niggemann, J., Ziervogel, K., Arnosti, C., Berg, P., Cooper, W. T., Dittmar, T., Kostka, J. E., & Hallas, K. (2010). Organic matter degradation and nutrient remobilization in permeable coastal sands. In *Conference on Goldschmidt 2010 - Earth, Energy, and the Environment, Knoxville, TN* (pp. A435). GEOCHIMICA ET COSMOCHIMICA ACTA 74(12, 1).

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Refereed Reports

Huettel, M. (2005). *COSA Technological Implementation Plan* (EU-publication, 1-87). EU Brussels.

Invited Newsletter Articles

Huettel, M. (2002). Understanding the biocatalytical sand filter in the shelf. *LOICZ Newsletter*, 25, 1-4.

Huettel, M. (2000). Transport and reaction in permeable marine sediments. *UGA Skidaway Institute of Oceanography*, 11, 3-5.

Nonrefereed Proceedings

Ruddy, B. M., Hendrickson, C. L., Lobodin, V. V., Huettel, M., Kostka, J. E., Reddy, C. M., Rodgers, R. P., & Marshall, A. G. (2013). Gulf of Mexico oil spill ketone transformation products revealed by increased acid/analyte concentration positive ion ESI FT-ICR MS. In *National Spring Meeting of the American-Chemical-Society (ACS)2013 Orleans, LA*. Abstracts of Papers of the American Chemical Society. Retrieved from <http://apps.isiknowledge.com/InboundService.do?Func=Frame&product=WOS&action=retrieve&SrcApp=EndNote&Init=Yes&SrcAuth=ResearchSoft&mode=FullRecord&UT=WOS:000324303600022>

Chipman, L., Huettel, M., Berg, P., Meyer, V., Klimant, I., Glud, R. N., & Wenzhoefer, F. (2011). Oxygen optodes as fast sensors for eddy correlation measurements in aquatic systems. In Goldschmidt Conference Abstracts. *Mineralogical Magazine*. (Ed.), *Mineralogical Magazine* (pp. 666). New York. Retrieved from Volume 75, Number 3

Huettel, M., Kostka, J. E., Prakash, M., Overholt, W. A., Green, S., Freyer, G., Canion, A., Delgardio, D., & Norton, N. (2011). Penetration, Accumulation and Degradation of Deepwater Horizon Oil in Florida Sandy Beaches. In Goldschmidt Conference Abstracts, *Mineralogical Magazine* (Ed.), *Goldschmidt Conference* (pp. 1068). Mineralogical Magazine.

Huettel, M., Cook, P., & Drazek, J. M. (2004). COSA: Coastal Sands as Biocatalytical Filters. In G. Scherenewski, & N. Löser (Eds.), *Managing the Baltic Sea. BalticCoast 2004* (pp. 149-154). Germany.

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Huettel, M., Wesnigk, J., Cook, P., Wenzhöfer, F., Massel, S., Weslawski, J. M., Middelburg, J., van Beusekom, J., Glud, R. N., Jaszewski, J., & Eskildsen, K. (2006). *COastal Sands as biocatalytical filters - A successful project on filtration and nutrient cycling in sandy coastal sediments* (Coastline 2006, 4: 18-22). EUCC, Leiden, NL.

Huettel, M., MacCready, P., & Ruttenberg, K. (2004). *Benthic-pelagic fluxes, including inputs and production of organic matter* (Coastal Benthic Exchange Dynamics (CBED) Workshop 2004, 1-19). SKIO.

Reimers, C., Friedrichs, C., Bebout, B., Howd, P., Huettel, M., Jahnke, R., MacCready, P., Ruttenberg, K., Sanford, L., & Trowbridge, J. (2004). *Coastal Benthic Exchange Dynamics* (Skidaway Institute of Oceanography Technical Report, CoOP Report No. 10. TR-04-01, 92 pp). Skidaway Institute of Oceanography.

Huettel, M. (2003). *Coastal sands as biocatalytical filter (COSA)* (Coastline 1: 8-11). EUCC - The Coastal Union, Leiden, NL.

Presentations

Invited Keynote and Plenary Presentations at Conferences

Huettel, M. (presented 2017). *Estuarine and nearshore sediments: biogeochemical hot spots in the coastal zone*. Keynote presentation at 14th International Estuarine Biogeochemistry Symposium, IEBS, Rimouski, Canada. (International)

Huettel, M. (presented 2012). *Benthic-pelagic coupling in shallow waters. Keynote. ECSA 51th International Symposium, Klaipeda, Lithuania, September 23 - 27, 2012*. Keynote presentation at ECSA, ECSA. (International)

Huettel, M., Roey, H., & Precht, E. (presented 2002). *Hydrodynamical impact on biogeochemical processes in aquatic sediments*. Plenary presentation at 9th International Association of Sediment and Water Science Symposium, International Association of Sediment and Water Science, Banff, Canada. (International)

Invited Presentations at Conferences

Huettel, M., Overholt, W. A., Kostka, J. E., Hagan, C., Kaba, J., Wells, W. B., & Dudley, S. (presented 2017). *Degradation of Deepwater Horizon Oil Buried in a Florida Sandy Beach*. Presentation at Gulf of Mexico Oil Spill and Ecosystem Science Conference, GOMRI. (International)

Huettel, M., Konstantinidis, K., & Kostka, J. E. (presented 2016). *A systems approach to improve predictions of biodegradation and ecosystem recovery in coastal marine sediments impacted by oil spills*. Presentation at 2016 Oil Spill and Ecosystem Science Conference, GOMRI, GoMRI, Tampa. (International)

- Huettel, M., Chipman, L., & Berg, P. (presented 2013). *Controls of oxygen flux in permeable coastal sediments*. Presentation at Aquatic Sciences Meeting, ASLO, New Orleans. (International)
- Huettel, M., & Kostka, J. E. (presented 2011). *Crude oil in the Gulf of Mexico, oil spills, and the fate of the oil in the beach environment*. Presentation at the meeting of Florida A&M University. (Regional)
- Huettel, M., & Kostka, J. E. (presented 2011). *Deepwater Horizon Oil In Florida Sandy Beaches*. Presentation at 21st Biennial Conference of the Coastal and Estuarine Research Federation, 6-10 November 2011, Estuarine Research Federation, Daytona Beach, Florida, USA. (International)
- Huettel, M., & Kostka, J. E. (presented 2011). *Deepwater Horizon Oil In Florida Sandy Beaches*. Presentation at 21st Biennial Conference of the Coastal and Estuarine Research Federation, Coastal and Estuarine Research Federation, Daytona Beach, Florida, USA. (International)
- Huettel, M., Kostka, J. E., M Prakash, M., Overholt, W., Green, S., Freyer, G., Canion, A., Jonathan Delgardio, J., & Norton, N. (presented 2011). *Penetration, Accumulation and Degradation of Deepwater Horizon Oil in Florida Sandy Beaches*. Presentation at Goldschmidt Conference 2011, Prague, Czech Republic, Goldschmidt Conference. (International)
- Huettel, M., Chipman, L., Podgorski, D. C., Green, S. J., Magen, C., Niggemann, J., Ziervogel, K., Arnosti, C., Berg, P., Cooper, W. T., Dittmar, T., Kostka, J. E., & Hallas, K. (presented 2010). *Organic matter degradation and nutrient remobilization in permeable coastal sands*. Presentation at Goldschmidt 2010, GCA, Knoxville Tennessee, USA, 13-18 June. (International)
- Huettel, M., Chipman, L., Podgorski, D. C., Green, S. J., Magen, C., Niggemann, J., Ziervogel, K., Arnosti, C., Berg, P., Cooper, W., Dittmar, T., Kostka, J. E., & Hallas, K. %. 2. (presented 2010). *Organic matter degradation and nutrient remobilization in permeable coastal sands*. Presentation at Goldschmidt 2010: Earth, Energy, and the Environment, Goldschmidt Conference, Knoxville Tennessee, USA. (International)
- Huettel, M. (presented 2007). *Filtering Shelf Sediments*. Presentation at Second International Conference on Porous Media and its Applications in Science, Engineering and Industry, June 17-21, 2007, Kauai, Hawaii, Second International Conference on Porous Media. (International)
- Huettel, M. (presented 2006). *Filtering coastal sediments*. Presentation at Geological Society of America annual meeting, 22-25 Oct 2006 Philadelphia, Geological Society of America annual meeting. (International)

- Huettel, M. (presented 2006). *Invisible flows with unknown consequences*. Presentation at Gordon Research Conference on Permeable Sediments, Waterville ME, June 25-30, Gordon Research Conference. (International)
- Huettel, M. (presented 2005). *Spatial and temporal patterns of sediment-water exchange processes in nearshore environments*. Presentation at 18th Biennial Conference of the Estuarine Research Federation, Norfolk, Virginia, 16-20 October 2005, Conference of the Estuarine Research Federation. (International)
- Huettel, M. (presented 2004). *Biological and physical transport processes at the seafloor*. Presentation at CoOP workshop (CBED), SKIO, St. Petersburg, Florida. (International)
- Huettel, M. (presented 2004). *Particle Filtration in Permeable Intertidal Sediments*. Presentation at Chapman Conference on Salt Marsh Geomorphology: Physical and Ecological Effects on Landform, Chapman Conference, Halifax, NS. (International)
- Huettel, M., Wild, C., Kremb, S., Rasheed, M., Klueter, A., & Joergensen, B. B. (presented 2004). *The role of permeable lagoon sediments in the cycling of nutrients in coral reefs*. Presentation at ASLO Summer meeting, Savannah, Georgia, ASLO conference, Savannah, Georgia. (International)
- Huettel, M. (presented 2002). *Exchange of dissolved and particulate substances across the sediment-water interface in coastal environments: mechanisms and consequences*. Presentation at IHP/OHP conference, Bremerhaven. (International)
- Huettel, M. (presented 2002). *Exchange of dissolved and particulate substances across the sediment-water interface in coastal environments: mechanisms and consequences*. Presentation at IHP/OHP conference, Bremerhaven, IHP/OHP, Bremerhaven/Germany. (International)
- Huettel, M., & Rusch, A. (presented 1999). *Flow-induced transport of planktonic algae into sandy sediments*. Presentation at American Society of Limnology and Oceanography Meeting, Santa Fe, USA. 1-5, American Society of Limnology and Oceanography, Santa Fe, USA. (International)
- Huettel, M., Ziebis, W., Forster, S., & Berninger, U.-G. (presented 1998). *Advective Pore Water Exchange in Permeable Sea Beds and its Consequences for Sedimentary Geochemical and Microbial Processes*. Presentation at 1998 Ocean Sciences Meeting, American Geophysical Union, American Society of Limnology and Oceanography, San Diego, California, USA. February 9-13, American Geophysical Union, American Society of Limnology and Oceanography, San Diego, California, USA. (International)

Patented Inventions

Huettel, M., & Merikhi, A. (submitted). *MULTI-FLUID JET NOZZLE FOR SENSOR CALIBRATION*. No. 2066.204.PRC, FSU. US.