

## Vitae

Nicholas J. Nidzieko

University of Maryland Center for Environmental Science  
Horn Point Laboratory  
P.O. Box 775, Cambridge, MD 21613-0775

## Academic History

Ph.D. Stanford University, Environmental Fluid Mechanics, 2009

M.S. Stanford University, Environmental Fluid Mechanics, 2004

B.S. UCLA, Marine Biology (*major with honors*), Atmospheric and Oceanic Sciences (*minor*), 2000

## Positions Held

Assistant Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory, 2011-present

Adjunct Assistant Professor, University of Maryland College Park, Department of Atmospheric and Oceanic Science, 2012-present

Adjunct Assistant Professor, University of Maryland Center for Environmental Science, 2010-2011

Postdoctoral Scholar, Wood Hole Oceanographic Institution, 2009-2011

Postdoctoral Researcher, Stanford University, 2009

Graduate Research Assistant, Stanford University, 2004-09

Marine Scientist, Sea Engineering, Inc., Santa Cruz, California, 2002-03

Scientific Assistant, Woods Hole Group, Redwood City, California, 2001-02

## Post-docs Advised

N. Berkay Basdurak, 2011

## Publications

Nidzieko, N. J., J. A. Needoba, S. G. Monismith, and K. S. Johnson, 2014: Tidal control of net ecosystem production in a mesotidal estuary. *Estuaries and Coasts*, **37 (Suppl 1)**, S91–S110, doi:10.1007/s12237-013-9765-2.

Ganju, N., N. J. Nidzieko, and M. L. Kirwan, 2013: Inferring tidal wetland stability from channel sediment fluxes: observations and a conceptual model. *Journal of Geophysical Research-Earth Surface*, **118**, 1–14, doi:10.1002/jgrf.20143.

Nidzieko, N. J. and S. G. Monismith, 2013: Contrasting seasonal and fortnightly variations in the circulation of a seasonally-inverse estuary, Elkhorn Slough, California. *Estuaries and Coasts*, **36 (1)**, 1–17, doi: 10.1007/s12237-012-9548-1.

Nidzieko, N. J. and J. L. Largier, 2013: Inner shelf intrusions of offshore water in an upwelling system affect coastal connectivity. *Geophysical Research Letters*, **40 (20)**, 5423–5428, doi:10.1002/2013GL056756.

Ralston, D. K., W. R. Geyer, P. A. Traykovski, and N. J. Nidzieko, 2013: Effects of estuarine and fluvial processes on sediment transport over deltaic tidal flats. *Continental Shelf Research*, **60 (Supplement)**, S40–S57, doi:http://dx.doi.org/10.1016/j.csr.2012.02.004.

Boicourt, W. C., M. Li, N. J. Nidzieko, A. Blumberg, N. Georgas, E. Kelly, T. Updyke, and W. Wilson, 2012: Observing the urban estuary: Review and prospect. *Oceans, 2012*, IEEE, 1–9.

- Nidzieko, N. J. and D. K. Ralston, 2012: Tidal asymmetry and velocity skew over tidal flats and shallow channels within a macrotidal river delta. *Journal of Geophysical Research-Oceans*, **117 (C03001)**, doi: 10.1029/2011JC007384.
- Wong, S. H. C., A. E. Santoro, N. J. Nidzieko, J. L. Hench, and A. B. Boehm, 2012: Coupled physical, chemical, and microbiological measurements suggest a connection between internal waves and surf zone water quality in the Southern California Bight. *Continental Shelf Research*, **34**, 64–78, doi: 10.1016/j.csr.2011.12.005.
- Walter, R. K., N. J. Nidzieko, and S. G. Monismith, 2011: Similarity scaling of turbulence spectra and cospectra in a shallow tidal flow. *Journal of Geophysical Research-Oceans*, **116 (C10019)**, doi: 10.1029/2011JC007144.
- Nidzieko, N. J., 2010: Tidal asymmetry in estuaries with mixed semidiurnal/diurnal tides. *Journal of Geophysical Research-Oceans*, **115 (C8)**, doi:10.1029/2009JC005864.
- Monismith, S. G., et al., 2010: Flow effects on benthic grazing on phytoplankton by a Caribbean reef. *Limnology & Oceanography*, **55 (5)**, 1881–1892.
- Santoro, A. E., N. J. Nidzieko, G. L. Van Dijken, K. R. Arrigo, and A. B. Boehm, 2010: Contrasting spring and summer phytoplankton dynamics in the nearshore Southern California Bight. *Limnology & Oceanography*, **55 (1)**, 264–278.
- Breier, J. A. C., N. J. Nidzieko, S. G. Monismith, A. Paytan, and W. S. Moore, 2009: Tidally driven chemical fluxes at the sediment-water interface in Elkhorn Slough, California: evidence from a coupled geochemical and hydrodynamic approach. *Limnology & Oceanography*, **54 (6)**, 1964–1980.
- Monismith, S. G., J. L. Hench, D. A. Fong, N. J. Nidzieko, W. Fleenor, L. Doyle, and G. Schladow, 2009: Thermal variability in a tidal river. *Estuaries and Coasts*, **32 (1)**, 100–110, doi:10.1007/s12237-008-9109-9.
- Nidzieko, N. J., 2009: Dynamics of a Seasonally Low-inflow Estuary: Circulation and Dispersion in Elkhorn Slough, California. Ph.D. thesis, Stanford University.
- Nidzieko, N. J., J. L. Hench, and S. G. Monismith, 2009: Lateral circulation in well-mixed and stratified estuarine flows with curvature. *Journal of Physical Oceanography*, **39 (4)**, 831–851, doi: 10.1175/2008JPO4017.1.
- Cacchione, D. A., P. D. Thorne, Y. Agrawal, and N. J. Nidzieko, 2008: Time-averaged near-bed suspended sediment concentrations under waves and currents: Comparison of measured and model estimates. *Continental Shelf Research*, **28**, 470–484, doi:10.1016/j.csr.2007.10.006.
- Gross, E., N. J. Nidzieko, M. MacWilliams, and M. T. Stacey, 2008: Parameterization of estuarine mixing processes in the san francisco estuary based on analysis of three-dimensional hydrodynamic simulations. *Proceedings of 10th International Conference on Estuarine and Coastal Modeling*, ASCE.
- Nidzieko, N. J., D. A. Fong, and J. L. Hench, 2006: Comparison of Reynolds stress estimates derived from standard and fast-ping ADCPs. *Journal of Atmospheric and Oceanic Technology*, **23 (6)**, 854–861.