Biographical Sketch: Kendra M. Dresback, University of Oklahoma
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EDUCATION

Institution and Location	Field	Degree	Year
University of Oklahoma	Civil Engineering	B.S.	1997
University of Oklahoma	Civil Engineering	M.S.	1999
University of Oklahoma	Civil Engineering	PhD.	2005
University of Oklahoma	Postdoctoral Research Associate		2005-2008

APPOINTMENTS

Research Assistant Professor, School of Civil Engineering and Environmental Science, University of Oklahoma, 9/2008-present.
Postdoctoral Research Associate, School of Civil Engineering and Environmental Science, University of Oklahoma, 2/2005-9/2008.
Graduate Research Assistant, School of Civil Engineering and Environmental Science, University of Oklahoma, 8/1997-2/2005.
Visiting Researcher, Naval Research Laboratory, Stennis Space Center, Bay St. Louis, MS, 3/2001-5/2001.
Engineering Intern, Trust Environmental Services, LLC, Norman, OK, 3/1995-8/1997
Undergraduate Research Assistant, School of Civil Engineering and Environmental Science, University of Oklahoma, 9/1993-8/1994.

TEN PUBLICATIONS:

1. R.L. Kolar, T.C.G. Kibbey, C.M. Szpilka, K.M. Dresback, E.M. Tromble, I.P. Toohey, J.H. Hoggan and J.H. Atkinson, "Process-Oriented Tests for Validation of Baroclinic Shallow Water Models: The Lock-Exchange Problem," *Ocean Modelling*, 28(1-3), 137-152, 2009.
2. J. H. Atkinson, J.J. Westerink, T. Wamsley, M. Cialone, J.C. Dietrich, K.M. Dresback, R.L. Kolar, D. Resio, C. Bender, B. Blanton, S. Bunya, W. de Jong, B. Ebersole, A. Grzegorzewski, B. Jensen, H. Pourtaheri, J. Ratcliff, H. Roberts, J. Smith, C.M. Szpilka, "Hurricane Storm Surge and Wave Modeling in Southern Louisiana: A Brief Overview," *Estuarine and Coastal Modeling, Proceedings of the Tenth International Conference*, K. Bedford (ed.), American Society of Civil Engineers, pp. 467-506, 2008.
3. R. L. Kolar, K. M. Dresback, C. M. Szpilka, J. H. Atkinson, E. M. Tromble, T. C. G. Kibbey, R. A. Richard and J. L. Hoggan, "A Comparison of Continuous and Discontinuous Galerkin Algorithms for Shallow Water Transport," *Estuarine and Coastal Modeling, Proceedings of the Ninth International Conference*, M.L. Spaulding and K. Bedford (eds.), American Society of Civil Engineers, pp. 503-522, 2006.
4. K. M. Dresback, R. L. Kolar and R. A. Luettich, "On the Form of the Momentum Equation and Lateral Stress Closure Law in Shallow Water Modeling," *Estuarine and Coastal Modeling, Proceedings of the Ninth International Conference*, M.L. Spaulding and K. Bedford (eds.), American Society of Civil Engineers, pp. 399-418, 2006.
5. K. M. Dresback, C. A. Blain and R. L. Kolar, "Methods to Compute Baroclinic Pressure Gradients in FE Models," *Estuarine and Coastal Modeling, Proceedings of the Seventh International Conference*, M.L. Spaulding and K. Bedford (eds.), American Society of Civil Engineers, pp. 103-119, 2002.

6. J. C. Dietrich, R.L. Kolar and K. M. Dresback, “Another Look at Mass Balance in GWC-based Shallow Water Models,” *ASCE Journal of Hydraulic Engineering*, 134(5), 520-532, 2008.
7. K. M. Dresback, R. L. Kolar and J. C. Dietrich, “On the Form of the Momentum Equation for Shallow Water Models Based on the Generalized Wave Continuity Equation,” *Advances in Water Resources*, 28, 345-358, 2005.
8. K. M. Dresback, R. L. Kolar and J. C. Dietrich, “A 2D Implicit Time-Marching Algorithm for Shallow Water Model Based on the Generalized Wave Continuity Equation,” *Int. J. Numer. Meth. Fluids*, 45, 253-274, 2004.
9. K. M. Dresback, C. A. Blain and R. L. Kolar, “Resolution and Algorithmic Influences on the Baroclinic Pressure Gradient in Finite Element Based Hydrodynamic Models” *Computational Methods in Water Resources XV Volume 2: Computational Methods, Surface Water Systems and Hydrology*, C.T. Miller, et al. (eds.), pp.1755-1766, 2004.
10. FEMA, *Flood Insurance Study: Southeastern Parishes, Louisiana, Intermediate Submission 2: Offshore Water Levels and Waves*, Federal Emergency Management Agency, 850 pp., 2007.

SYNERGISTIC ACTIVITIES

Member of 2 graduate committees (one MS and one PhD), Reviewer of articles in Advances in Water Resources and Estuarine and Coastal Modeling Conference and International Journal on Numerical Methods in Fluids. Served as session chair at the Workshop on Unstructured Grid Numerical Modeling of Coastal, Shelf and Ocean Flows, Reviewer of a candidate for a ASEE Postdoctoral Fellowship, Seminar presentation about Hurricane storm surge modeling to undergraduate students as part of seminar series.

COLLABORATORS & OTHER AFFILIATIONS

Collaborators & Co-Editors

U Oklahoma: Civil Engr: R. Kolar, B. Vieux, Y. Hong; Comp Sci:, S. Lakshmivarahan. ***U North Carolina***: R. Luettich, T. Shay, J. Fleming, R. Weaver, C. Forbes. ***U Notre Dame***: J.J. Westerink. ***U Texas***: C. Dawson. ***Rutgers U***: C. Werner. ***RENCI in NC***: B. Blanton ***NRL-SSC***: C. A. Blain, K. Cambazoglu, P. McKay. ***NOAA-NSSL***: K. Kelleher, J.J. Gourley, S. Van Cooten.

Graduate & Postdoctoral Advisors

Kolar, Randall, M.S. advisor/PhD advisor/Postdoctoral advisor, School of Civil Engineering and Environmental Science, U Oklahoma.

Graduate Committees (M.S. and PhD.)

E. Tromble (in progress), I. Toohey (Garver)