

## CURRICULUM VITA

### Jing Lin Research Assistant Professor

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#### EDUCATION:

The College of William and Mary, Marine Science, Ph.D., 2001.

Ocean University of China, Marine Meteorology, M.S., 1996.

Ocean University of China, Meteorology, B.S., 1993.

#### APPOINTMENTS :

Research Assistant Professor, Dept. Marine, Earth, and Atmospheric Sciences, North Carolina State University.	2003 –
Assistant Research Scientist , Virginia Institute of Marine Science, The College of William and Mary.	2002-2003
Post-doctoral Research Associate, Virginia Institute of Marine Science, The College of William and Mary.	2001-2002
Research Assistant, Virginia Institute of Marine Science, The College of William and Mary.	1996-2001
Research/Teaching Assistant, Ocean University of China	1993-1996

#### Recent Research Projects (Since 2004):

Principal Investigator, 2007, Maryland Department of the Environment, *Development of PCB TMDLs in Baltimore Harbor and Back River, Maryland*

Principal Investigator, 2006-2009, North Carolina Department of Environment and Natural Resources, *Nutrient Response Modeling for Falls Lake*

Co-PI., 2006-2008, U.S. Environmental Protection Agency-319/NC Department , *Identifying Sources of Fecal Contamination and TMDL Development in the Swanquarter Bay.* (P.I.: Graves, LeVine, Lin, Li).

Principal Investigator, 2004-2006, Maryland Department of the Environment, *Methodology of TMDL Development for Heavy Metals in Small Tidal Water Embayments in Chesapeake Bay, Maryland.*

Co-PI, 2005-2006, U.S. NOAA, National Sea Grant, *IFLOW: Phase IV – Coupling Watershed/Estuarine Water Quality Model*.

Principal Investigator, 2004-2006, Maryland Department of the Environment, *Development of a Sediment Transport Model for Chesapeake Bay, Adjacent to the Lower and Upper Western Shore of Maryland*.

Co-PI, 2005, North Carolina State University, *Watershed and Water Quality Modeling for Neuse River Basin and Estuary*.

Principal Water Quality Modeler, 2004-2007, U.S. NOAA, *Coastal Ocean Research and Monitoring Program (CORMP)*. (P.I.: Pietrafesa and Xie)

### **PROFESSIONAL MEMBORSHIP**

American Geophysical Union  
Estuarine Research Federation  
Coastal Education and Research Foundation  
North Carolina Water Resources Association

### **AWARDS AND HONORS**

2006 Wang Kwan-Cheng Research Award, Chinese Academy of Sciences  
2005 University Extension and Engagement Grant Award, NCSU

### **REVIEWER for Journals and Research Funding Agencies:**

*Journal of Geophysical Research -Ocean;*  
*Estuarine, Coastal and Shelf Sciences;*  
*Estuaries and Coasts;*  
*Continental Shelf Research;*  
*Journal of Coastal Research;*  
*Marine Ecological Progress Series;*  
*Water Research*  
*Maryland Sea Grant proposal reviewer*

### **PUBLICATIONS:**

#### **Peer-Reviewed Journals:**

**Lin, J.**, et al., 2008. Interannual variability of hypoxic conditions in a shallow Estuary. *Journal of Marine System*, Doi: 10.1016/j.marsys.2007.10.011

**Lin, J.**, et al., 2008. Water quality responses to simulated flow and nutrient reductions in the Cape Fear River Estuary and adjacent coastal region, North Carolina. *Ecological Modeling*, Doi: 10.1016/j.ecomodel.2007.10.026

Xu, H., **J. Lin**, and D. Wang, 2008, Numerical study on salinity stratification in Pamlico River Estuary. *Estuarine, Coastal, and Shelf Science* (submitted) .

- Xu, H., **J. Lin**, D. Wang, 2008, Numerical study on pollutant residence time, *Advances in Water Environment* (in press)
- Xu, H. **J. Lin**, D. Wang and J. Shen, 2008, Wind impact on pollutant transport in a shallow estuary, *Acta Oceanologica Sinica* (accepted) .
- Zhang, Z. and **J. Lin**, 2007. Dynamics of Jovian Atmospheres with Applications of Nonlinear Singular Vector Method, *International Journal for Numerical Methods in Fluids*, DOI: 10.1002/flid.1471
- Lin, J.**, L. Xie, and L.J. Pietrafessa, J.S. Ramus, and H.W. Paerl, 2007. Water Quality Gradients across Albemarle-Pamlico Estuarine System: Seasonal Variations and Model Applications. *Journal of Coastal Research*. 23(1): 213-229.
- Lin, J.**, L. Xie, L.J. Pietrafesa, J. Shen, M. Mallin, M. Durako, 2006. Dissolved oxygen stratification in micro-tidal, partially-mixed estuaries. *Estuarine, Coastal and Shelf Science*, doi:10.1016/j.ecss.2006.06.032.
- Shen, J. and **J. Lin**, 2006. Modeling study of the influence of tide and stratification on age of water in the tidal James River. *Estuarine, Coastal and Shelf Science* 68: 101-112.
- Kuo, A.Y., K. Park, S.-C. Kim, and **J. Lin**, 2005. A Tidal Prism Water Quality Model for Small Coastal Basins, *Coastal Management* 33(1), 101-117.
- Lin, J.**, H.V. Wang, G.M. Sisson, and J. Shen, 2004. Toxic Modeling in an Industrial Harbor – A Case Study for Baltimore Harbor. *Estuarine and Coastal Modeling* 8, 455-474.
- Lin, J.** et al. 2003. A new approach to model sediment resuspension in tidal estuaries, *Journal of Coastal Research*. 19(1): 76-88.
- Lin, J.** and A.-Y. Kuo. 2003. Modeling the Secondary Turbidity Maximum in the York River, Estuary, Virginia, *Estuaries* 26(5): 1269-1280.
- Lin, J. and A.Y. Kuo. 2001. Secondary turbidity maximum in a micro-tidal partially-mixed estuary. *Estuaries* 24(5): 707-720.
- Liu, J.P. and J. Lin. 1995. The Variation of typhoon of the north-west Pacific during the last glacial period and its influence on the shelf environment. *Marine Sciences (Chinese)* 5: 26-28.
- Thesis :**
- Lin, J.** 2001. A Study of the Secondary Turbidity Maximum in the York River Estuary, Virginia. Ph.D. dissertation. School of Marine Science, The College of William and Mary.
- Lin, J.** 1996. A Study of the winter sea surface heat flux in the mid-altitude. M.S. thesis. Ocean University of China.

## **Reports :**

**Lin, J.** et al., 2006, Maryland Coastal Bay Nutrient and Dissolved Oxygen TMDL- I. Physical, Biological and Chemical Characteristics of the Coastal Bays, Maryland. Draft Special Report to Maryland Department of the Environment.

**Lin, J. J. Shen,** and H.V. Wang, 2005, Methodology for PCB and Metal TMDL in Maryland's Tidal Waters and Coastal Embayments. Draft Special Report to Maryland Department of the Environment.

Wang, H.V., **J. Lin,** and G.M. Sisson, 2003, Toxic Modeling in Baltimore Harbor. Special Report to Maryland Department of the Environment.

Kuo, A.Y., A.J. Butt, S.-C. Kim and **J. Lin.** 1998. Application of a tidal prism water quality model to Virginia small coastal basins: Poquoson River, Piankatank River, Cherrystone Inlet, and Hungars Creek. A Report to the Virginia Coastal Resources Management Program, Virginia Department of Environmental Quality. Special Report No. 348 in Applied Marine Science and Ocean Engineering.

## **Abstracts and Talks:**

Lin, J., Mechanisms of Dissolved Oxygen Stratification in Micro-tidal, Partially-mixed Estuaries, Estuarine Research Federation 2007 Conference, Nov., 2007, Providence, RI

Lin, J., Water Quality Modeling in Cape Fear River Estuary and its Coastal Region, Nov., 2007, New Port, RI.

Lin, J., Numerical Modeling of Sediment Transport and Eutrophication, invited oral presentation at East Carolina University, Greenville, North Carolina. April, 2007.

Lin, J., Coastal Eutrophication and Water Quality Modeling, invited oral presentation in Xiamen University. April, 2007. Xiamen, China.

Lin, J., Water quality modeling in Cape Fear River and its adjacent coastal region. Oral presentation in Water Resources Research Institution annual conference, Mar 2007, Raleigh, NC.

Lin, J., Coastal Eutrophication and Water Quality Modeling, invited oral presentation in Coastal Carolina University. March, 2007. Conway, SC.

Lin, J., Falls Lake Modeling, invited oral presentation at Falls Lake Technical Advisory Committee meeting, Nov., 06, Raleigh, NC.

Lin, J., Water Quality Modeling in North Carolina Rivers, invited oral presentation at North Carolina Department of Environment and Natural Resources, Raleigh, NC, Feb., 2006.

Lin, J., Water Quality Model for CORMP, invited oral presentation in Center for Marine Science, University of North Carolina at Wilmington. December, 2005. Wilmington, NC.

Lin, J., Water Quality Modeling in North Carolina Rivers, invited oral presentation at East Carolina University, Greenville, NC. Sept. 30, 2005.

- Lin, J., An Introduction to Water Quality Modeling, invited oral presentation for Lower Cape Fear River Program. June, 2005, Wilmington, NC.
- Lin, J., Three-tiered approach in metal TMDL development for Maryland's tidal waters. Abstract in WRII annual conference, April 2005. Raleigh, NC.
- Lin, J., L. Xie, and L.J. Pietrafessa. Water Quality Gradients across Albemarle-Pamlico Estuarine System: Seasonal Variations and Model Applications. In Abstract of 2004 American Geophysical Union Fall Meeting, San Francisco, CA.
- Lin, J., H.V. Wang, G.M. Sisson, and J. Shen, 2004. Toxic Modeling in an Industrial Harbor – A Case Study for Baltimore Harbor. Estuarine and Coastal Modeling, In Abstract of 8<sup>th</sup> International Conference on Estuarine and Coastal Modeling, Monterey, CA.
- Lin, J. and A.Y. Kuo, Nov. 2001, Modeling the Secondary Turbidity Maximum in the York River Estuary, Virginia, In Abstract of 7<sup>th</sup> International Conference on Estuarine and Coastal Modeling, St. Pete Beach, Florida.
- Lin, J. and A.Y. Kuo. 1999. Secondary Turbidity Maximum in the York River. Virginia, p. 63. In Abstract of ERF'99, the 15<sup>th</sup> Biennial International Conference, New Orleans, LA.
- Friedrichs, C.T., L.C. Schaffner, T.M. Dellapenna, and J. Lin. 1999. Migration of mud beds associated with double turbidity maxima in a tidally energetic, partially-mixed estuary, p. 37. In Abstract of ERF'99, the 15<sup>th</sup> Biennial International Conference, New Orleans, LA.
- Maa, J.P.-Y., A.Y. Kuo and J. Lin. 1998. Suspended sediment measurements in the York River System. In Abstract of AGU 1998 Ocean Sciences Meeting, San Diego, CA

## **COURSES TAUGHT**

<b>MEA 200</b>	<b>Introduction to Oceanography</b>	(38 students, Spring 07)
<b>MEA 250</b>	<b>Introduction to Coastal Environments</b>	(guest Instructor)

## **STUDENTS and POSTDOCS**

Hongzhou Xu (Ph. D., graduated)

Jie Li (Ph.D. Student, co-advising with Ocean University of China)

Dr. Zhiyue Zhang (Visiting scholar/Postdoc, Nanjing Normal University, 2007)