

**CURRICULUM VITAE**  
**HUIJIE XUE (薛惠洁)**

*(Date: 1 August 2007)*

Date of Birth: July 23, 1965  
Address: School of Marine Sciences  
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University of Maine  
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**I. EDUCATION**

Ph. D.	1991	Princeton University
M. A.	1988	Princeton University
B. S.	1984	Ocean University of China

Ph. D. advisor: Professor George L. Mellor

Post-doc advisor: Professor John M. Bane, Jr.

**II. PROFESSIONAL EXPERIENCE**

2007 -	Professor School of Marine Sciences, University of Maine
2000 - 2007	Associate Professor School of Marine Sciences, University of Maine
2005	CIMAS Visiting Scientist, AOML and U. of Miami
2002 – 2003	Visiting Associate Professor Atmospheric, Marine & Coastal Environment Program Hong Kong University of Science and Technology
2000 -	Visiting Professor 2 <sup>nd</sup> Institute of Oceanography, China
1999 - 2002	Adjunct Professor Ocean University of Qingdao, China
1994 - 2000	Assistant Professor School of Marine Sciences, University of Maine
1993 - 1994	Research Assistant Professor Marine Sciences Program, University of North Carolina at Chapel Hill
1991 - 1993	Post-doctoral Research Associate

1986 - 1990 Marine Sciences Program, University of North Carolina at Chapel Hill  
Ph.D. Candidate and Research Assistant  
Atmospheric and Oceanic Sciences Program, Princeton University  
1984 - 1986 M.S. Candidate and Research Assistant  
Dept. of Phys. Oceanogr., Shandong College of Oceanology, China

### III. TEACHING

Complex Adaptive Systems  
Data Analysis in Marine Sciences  
Dynamical Oceanography  
Marine System Modeling

#### Direction of Graduate Students

##### *Thesis Advisor for:*

Pan, Ziqin - M.S., University of Maine (*graduated*)  
Xu, Danya - Ph.D., University of Maine  
Du, Yi – M.S., University of Maine

##### *Thesis and Dissertation Advisory Committee*

Brickley, Peter - Ph.D., University of Maine (*graduated*)  
Chen, Wei - Ph.D. (CIE), University of Maine (*graduated*)  
Deese, Heather – Ph.D., University of Maine  
Errigo, Micheal – Ph.D., University of Maine  
Hetland, Robert - M.S., University of Maine (*graduated*)  
Klein, Lawrence - M.S., University of Maine (*graduated*)  
Monberg, Alden - Ph.D., University of Maine (*graduated*)  
Neville, Francois – Ph. D., University of Maine  
Sackmann, Brandon - Ph.D., University of Maine (*graduated*)  
Sauer, Micheal – Ph.D., University of Maine  
Savidge, Dana - Ph. D., University of North Carolina at Chapel Hill (*graduated*)  
Stessel, Robert - M.S., University of Maine  
Weatherbee, Ryan – M.S., University of Maine  
Xu, Yi – Ph. D., University of Maine  
Zhang, Yuying – Ph.D., University of Maine  
Zhao, Luizi - M.S. (CIE), University of Maine (*graduated*)  
Zhong, Leijun - Ph.D., Florida State University (*graduated*)  
Zubier, Khalid - M.S., University of Maine (*graduated*)  
Zubier, Khalid - Ph.D., University of Maine (*graduated*)

### IV. RESEARCH

The instability analysis code that I developed as a part of my thesis work has been adopted by a number of researchers with applications to the western boundary currents and coastal/shelf fronts and jets. Over the past few years, we conducted numerical studies of rapidly developing winter storms, which represents the foremost effort to examine air-

sea interactions between mesoscale atmospheric events and prominent oceanic features using coupled atmosphere-ocean models. The synchronized coupling algorithm, which uses concurrent programming, can also be used in other similar coupled systems. The South China Sea project has fostered strong international collaborations between the PI and colleagues in China, Hong Kong and Taiwan. My latest effort focuses on the development of the Gulf of Maine nowcast/forecast system, which produces results that are used for research, management, educational, and recreational purposes.

### Research Interests

coastal ocean modeling and coastal ocean forecasting  
regional air-sea interactions  
theoretical and numerical studies of the western boundary currents

### Recent Collaborators

George Aiken (USGS), William Balch (Bigelow Laboratory for Ocean Sciences), John Bane (UNC-CH), Andrew Bernard (WET Labs), David Brooks (Texas A&M), Fei Chai (UMaine), David Greenberg (Bedford Institute of Oceanography, Canada), Thomas Huntington (USGS), Lewis Incze (U. of Southern Maine), Alexis K. Lau (HKUST), George Mellor (Princeton University), Neal Pettigrew (UMaine), Collin Roesler (BLOS), Joseph Salisbury (U. of New Hampshire), Mouchong Shi (OUQ, China), Andrew Thomas (UMaine), David Townsend (UMaine), Lai-Ah Wong (HKUST)

### Publications

- H. Xue, L.S. Incze, D. Xu, N. Wolff, and N.R. Pettigrew, 2007: Circulation, Connectivity and transport of lobster larvae in the coastal Gulf of Maine. *Ecological Modelling*. doi:10.1016/j.ecolmodel.2007.07.024.
- Incze, L. S., R. A. Wahle, N. Wolff, C. Wilson, R. Steneck, E. Annis, P. Lawton, H. Xue, and Y. Chen, 2006: Early Life History and a Modeling Framework for Lobster (*Homarus americanus*) Populations in the Gulf of Maine. *J. of Crustacean Biology*, 26(4), 555–564.
- Xu, D., H. Xue, D. Greenberg, 2006: A Numerical Study of the Circulation and Drifter Trajectories in Cobscook Bay. *Proceedings of the 9<sup>th</sup> International Conference on Coastal & Estuarine Modeling*. 176-195, doi 10.1061/40876(209)11.
- Wong, L. A., J. C. Chen, K. H. Lau and H. Xue, (*in press*): Temporal Variation in the Coastal Circulation near the Pearl River Estuary due to Typhoon Leo. *Acta Oceanologica Sinica*.
- Pettigrew, N. R., J. H. Churchill, C. D. Janzen, L. Mangum, R. P. Signell, A. Thomas, D. W. Townsend, J. P. Wallinga, and H. Xue, 2005: The kinematic and hydrographic structure of the Gulf of Maine Coastal Current. *Deep Sea Res. II.*, 52, 2369-2391.
- Xue, H., L. Shi, S. Cousins, and N. R. Pettigrew, 2005: The GoMOOS nowcast/forecast system. *Cont. Shelf Res.*, 25, 2122-2146.
- Xue, H., L. Shi, and S. Cousins, 2004: SST assimilation and assessment of the predicted temperature from the GoMOOS nowcast/forecast system. *Proceedings*

- of the 8<sup>th</sup> International Conference on Coastal & Estuarine Modeling, ASCE, 128-143.
- Ning, X., F. Chai, H. Xue, Y. Cai, C. Liu, G. Zhu, and J. Shi, 2004: Physical-biological oceanographic coupling influencing phytoplankton and primary production in the South China Sea. *J. Geophys. Res.*, Vol. 109, C10005, doi:10.1029/2004JC002365.
- Xue, H., F. Chai, N. R. Pettigrew, D. Xu, M. Shi, and J. Xu, 2004: Kuroshio Intrusion and the Circulation in the South China Sea. *J. Geophys. Res.*, Vol. 109, C02017, doi:10.1029/2002JC001724.
- Wong, L. A., J. C. Chen, H. Xue, L. X. Dong, J. L. Su, and G. Heinke, 2003: A model study of the circulation in the Pearl River Estuary (PRE) and its adjacent coastal waters: 1. Simulations and comparison with observations, *J. Geophys. Res.*, 108(C5), 3156, doi:10.1029/2002JC001451.
- Wong, L. A., J. C. Chen, H. Xue, L. X. Dong, W. B. Guan, and J. L. Su, 2003: A model study of the circulation in the Pearl River Estuary (PRE) and its adjacent coastal waters: 2. Sensitivity experiments, *J. Geophys. Res.*, 108(C5), 3157, doi:10.1029/2002JC001452.
- Li, Y., H. Xue, and J. M. Bane, 2002: Air-Sea Interactions during the Passage of a Winter Storm over the Gulf Stream: A 3D Coupled Atmosphere-Ocean Model Study. *J. Geophys. Res.*, 107, C11, 3200, doi:10.1029/2001JC001161.
- Xue, H., and F. Chai, 2002: Coupled Physical-Biological Model for the Pearl River Estuary: A Phosphate Limited Subtropical Ecosystem. *Proceedings of the 7<sup>th</sup> International Conference on Estuarine and Coastal Modeling*. ASCE, 913-928.
- Xue, H., F. Chai, and M. Shi, 2001: The Loop Current Incursion of Kuroshio and Circulation Features in the Northeastern South China Sea. In *Oceanography in China* (13), H. Xue, F. Chai, and J. Xu eds., China Ocean Press. 23-38.
- Xue, H., F. Chai, D. Xu, and M. Shi, 2001: Characteristics and Seasonal Variation of the Coastal Currents in the South China Sea. In *Oceanography in China* (13), H. Xue, F. Chai, and J. Xu eds., China Ocean Press. 64-75.
- Xue, H., F. Chai, L.-A. Wong, J.-C. Chen, 2001: Pearl River Estuarine Circulation Model. In *Oceanography in China* (13), H. Xue, F. Chai, and J. Xu eds., China Ocean Press. 138-151.
- Xue, H., Chai, F., and M. Shi, 2001: Transport through the Luzon Strait and Water Balance in the South China Sea. *Oceanography in China* (13), H. Xue, F. Chai, and J. Xu eds., China Ocean Press. 152-167.
- Xue, H., F. Chai, N. R. Pettigrew, D. Xu, and M. Shi, 2000: Upper Ocean Circulation in the Northern South China Sea. *Proceedings - Second International Ocean and Atmosphere Conference COAA 2000*, 73-78.
- Xue, H., Y. Xu, D. Brooks, N. R. Pettigrew, and J. Wallinga, 2000: Modeling the circulation in Penobscot Bay, Maine. *Proceedings of the 6<sup>th</sup> International Conference on Estuarine and Coastal Modeling*, ASCE, 1112-1127.
- O'Brien, K. M., H. Xue, and B. D. Sidell, 2000: Quantification of diffusion distance within the spongy myocardium of hearts from Antarctic fishes. *Respiration Physiology*, 122, 71-80.
- Xue, H., F. Chai, and N. R. Pettigrew, 2000: A model study of seasonal circulation in the Gulf of Maine. *J. Phys. Oceanogr.*, 30, 1111-1135.

- Xue, H., Z. Pan, and J. M. Bane, Jr., 2000: A 2D coupled atmosphere-ocean model study of air-sea interactions during a cold air advection over the Gulf Stream. *Mon. Wea. Rev.*, 128, 973-996.
- Chai, F., and H. Xue, 1999: The response of the equatorial western Pacific to a westerly wind burst. *Acta Oceanologica Sinica*, 18(4), 69-78.
- Pettigrew, N. R., D. W. Townsend, H. Xue, J. P. Wallinga, P. J. Brickley, and R. D. Hetland, 1998: Observation of the Eastern Maine Coastal Current and its offshore extensions. *J. Geophys. Res.*, 103, 30623-30639.
- Xue H., and J. M. Bane, Jr., 1997: A numerical investigation of the Gulf Stream and its meanders in response to cold air outbreaks. *J. Phys. Oceanogr.*, 27, 2606-2629.
- Xue, H., J. M. Bane, Jr. and L. M. Goodman, 1995: Modification of the Gulf Stream through Strong Air-Sea Interaction in Winter: Observational and Modeling Results. *J. Phys. Oceanogr.*, 25, 533-557.
- Xue, H., and G. L. Mellor, 1993: Instability of the Gulf Stream Front in the South Atlantic Bight. *J. Phys. Oceanogr.*, 23, 2326 - 2350.
- Xue, H., 1991: Gulf Stream Meanders in the South Atlantic Bight. Ph. D. dissertation, Princeton University, 188 pp.
- Li, X., and H. Xue, 1987: Geostrophic and Frictional Adjustment of Effluent Flow of the Huanghe River. *Chin. J. Oceanol. Limnol.*, 5 (3), 241-250.
- Li, X., and H. Xue, 1985: A Model of the Estuarine Circulation in the River Delta Area. *Journal of Shandong College of Oceanology*, 15 (4), 1-13.

#### **Selected Abstracts (last 5 years)**

- Xue, H., F. Chai, H. Zhang, and Y. Chao, 2006: Mass, heat and salt exchanges through the Luzon Strait and the balances in the South China Sea, *Eos, Trans., AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS16E-05.
- Chai, F., G. Liu, L. Shi, H. Xue, Y. Chao, K. Liu, and C. Tseng, 2006: Seasonal and Interannual Variability of Ecosystem Dynamics and Carbon Cycle in South China Sea: a Three-Dimensional Physical-Biogeochemical Modeling Study, *Eos, Trans., AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS12O-01.
- Cousins, S., H. Xue, N. Pettigrew, and M. Mickelson, 2006: Responses of the Gulf of Maine to Northeasters in May 2005 - A case study using the GoMOOS Nowcast/Forecast System. *Eos, Trans., AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS26N-21.
- Liu, G., F. Chai, H. Xue, and A. Thomas, 2006: Seasonal and Interannual Variability of Nutrients and Plankton Dynamics in the Gulf of Maine: a Three-Dimensional Physical-Biological Modeling Study, *Eos, Trans., AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS36D-13.
- Son, S., A. Thomas, R. Weatherbee, P. Brickley, and H. Xue, 2006: Satellite-measured Interannual Variability of the Gulf of Maine Spring Phytoplankton Bloom. *Eos, Trans., AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS36D-17.
- Salisbury, J., D. Vandemark, A. Mahadavan, H. Xue, W. McGillis, J. Campbell, J. Morrison, and C. Hunt, 2006: Biogeochemical controls on carbon metabolism in the coastal Gulf of Maine surface waters: The contrasts between 2004 and 2005. *Eos, Trans., AGU*, 87(36), Ocean Sci. Meet. Suppl., Abstract OS46K-08.

- Xu, D., H. Xue, D. Greenberg, 2005: A Numerical Study of the Circulation and Drifter Trajectories in Cobscook Bay. 9<sup>th</sup> *International Conference on Coastal & Estuarine Modeling*.  
<https://www.regonline.com/activereports/customreports/ViewReportPDF.aspx?format=pdf&eventid=20635&crd=79285&startdate=1/1/1980&enddate=1/1/2050&typedate=add&orientation=landscape&layout=2&EventSessionId=Direct200511281139546405tslmu45sxfntue0xo2v5m55>. p. 121.
- Incze, Lewis, H. Xue, N. Pettigrew, Y. Chen, R. Steneck, C. Wilson, P. Lawton, D. Greenberg, F. Page, D. Brooks, D. Townsend, and R. Wahle, 2005: Data Assimilation and Modeling of Source-Sink Relationships and Fishery Production of *Homarus americanus* in the Gulf of Maine.
- Incze, Lewis, J. Manning, H. Xue, N. Pettigrew, D. McGillicuddy, and N. Wolff, 2004: Connectivity Across a Front in the Maine Coastal Current System: Implications for Population Recruitment Patterns in *Homarus americanus*.
- Raineault, N., and H. Xue, 2005: Seasonal and Interannual Variations over the Gulf of Maine: Comparisons of the National Data Buoy Center Observations and Eta Model Results. American Geophysical Union Joint Assembly, New Orleans, [http://www.agu.org/meetings/sm05/sm05-sessions/sm05\\_A41A.html](http://www.agu.org/meetings/sm05/sm05-sessions/sm05_A41A.html).
- Xue, H., L. Shi, and S. Cousins, 2004: Assessment of the prediction from the GoMOOS nowcast/forecast system. <http://www.agu.org/cgi-bin/SFgate/Sfgate>.
- Xue, H., Y. Li, and J. M. Bane, 2003: Air-Sea Interactions during the Passage of Winter Storms. IUGG General Assembly 2003.
- Chai, F., and H. Xue, M. Jiang, A. Thomas, D. Townsend, 2002: Modeling Nutrient and Phytoplankton Dynamics in the Gulf of Maine. *Eos, Trans., AGU*, **83(4)**, *Ocean Sciences Meet. Suppl.*, Abstract OS12N-04.
- Xue, H., F. Chai, N. R. Pettigrew, and M. Shi, 2002: Kuroshio Intrusion and the Circulation in the Northeastern South China Sea. *Eos, Trans., AGU*, **83(4)**, *Ocean Sciences Meet. Suppl.*, Abstract OS22N-03.
- Li, Y., H., Xue, and J. M. Bane, 2002: Air-Sea Interactions during the Passage of a Winter Storm over the Gulf Stream: A 3D Coupled Atmosphere-Ocean Model Study. *Eos, Trans., AGU*, **83(4)**, *Ocean Sciences Meet. Suppl.*, Abstract OS42B-131.
- Weatherbee, R., A. Thomas, F. Chai, H. Xue, D. Townsend, 2002: Seasonal and Interannual Phytoplankton Variability in the Gulf of Maine. *Eos, Trans., AGU*, **83(4)**, *Ocean Sciences Meet. Suppl.*, Abstract OS21C-31.
- Bogden et al., 2002: GoMOOS: Transition to an Operational Observing System. *Eos, Trans., AGU*, **83(4)**, *Ocean Sciences Meet. Suppl.*, Abstract OS12M-03.

#### **Technical Reports (last 5 years)**

- Xue, H., and D. Brooks, 2002: Characterization of Fronts and Eddies in Penobscot Bay Using a Three-Dimensional Ocean Circulation Model (year 2001 final report submitted to Island Institute). University of Maine, 16 pp.

#### **Presentations (last 5 years)**

**2006**

- April 2006: Responses of the Gulf of Maine to Northeasters in May 2005. MIT Sea Grant Red Tide Symposium, Boston, MA
- February 2006: Mass, heat and salt exchanges through the Luzon Strait and the balances in the South China Sea. Ocean Sciences Meeting, Honolulu, HI

## 2005

- December 29, 2005: Lagrangian particle tracking and an oil-spill trajectory model. Xiamen University, Xiamen, China
- December 23, 2005: Coastal ocean forecast – Issues and opportunities. Ocean University of China, Qingdao, China
- November 30, 2005: The GoMOOS nowcast/forecast system. University of Massachusetts – Boston, MA.
- February 28 and March 1 2005: Coastal Ocean Forecast – the Gulf of Maine Story. RSMAS, University of Miami, FL.

## 2004

- **(invited)** December 17, 2004: The GoMOOS nowcast/forecast system. AGU fall meeting, San Francisco, CA.
- July 15, 2004: The GoMOOS nowcast/forecast system. RARGOM Theme Session on Integrative, Multidisciplinary Modeling. Boston, MA.
- January 29, 2004: Assessment of the Prediction from the GoMOOS Nowcast/Forecast System. Ocean Sciences Meeting, Portland, OR.

## 2003

- January 18, 2003: A Coupled Physical-Biological Model of the Gulf of Maine. National Institute of Oceanography, Goa, India. February 26, 2003: A Nowcast/Forecast System for the Gulf of Maine. Hong Kong University of Science & Technology. Hong Kong.
- April 7, 2003: Coastal Ocean Forecast – the Gulf of Maine Story. National Ocean Data and Information Center, Tianjin, China
- **(Invited)** July 11, 2003: Air-Sea Interaction over the Gulf Stream during the Passage of Winter Storms. IUGG 2003 General Assembly. Sapporo, Japan.
- July 30, 2003: East Coast Winter Storms. Bigelow Laboratory for Ocean Sciences. West Boothbay Harbor, Maine.
- November 3, 2003: SST Assimilation and Assessment of the Temperature Prediction from the GoMOOS Nowcast/Forecast System. 8<sup>th</sup> International Conference on Estuarine and Coastal Modeling, Monterey, CA.
- November 5, 2003: The GoMOOS Nowcast/Forecast System. Naval Postgraduate School, Monterey, CA.

## Grants and contracts:

### *Current*

- Segee, Bhaganagar, Fastook, Koons, and Xue: Acquisition of Interactive Visualization Tools for Supercomputer Models. NSF. 09/06 – 08/08. \$480,000.
- Xue: Oil Spill Trajectory & Behavior Prediction Models. Maine DEP/MOSAC. 03/06 – 02/08. \$72,102.

- Thomas, A. and H. Xue: Oceanographic Links to Alexandrium Imposed Toxicity in the Gulf of Maine. ECOHAB - NCER. 10/04 – 09/07.
- Balch, W., H. Xue and others: Using remote sensing to understand the consequences of climate, sea level changes and increased human activities in the coastal Gulf of Maine-- An interdisciplinary study of land-sea carbon coupling. NASA. 03/04 - 03/07.
- Xue and Chai: Development of the Gulf of Maine Physical-Biogeochemical Model and Kennebec Estuary Circulation Model. Subcontract from UNH. 10/05 - 09/07.
- Xue, H.: Gulf of Maine Ocean Observing System – Circulation Modeling. GoMOOS. 07/01/01 – 06/30/06.

*Completed*

- Xue, H., and J. M. Bane: Coupled and 3-D model studies of air-sea interaction processes along Gulf Stream. NSF. 03/01/94 -02/28/98.
- Xue, H., F. Chai, N. Pettigrew, D. Campbell and C. Pilskaln: A prognostic ecosystem model for the Gulf of Maine. NOAA. 08/01/95-07/31/98.
- Thomas, A., F. Chai, D. Townsend, and H. Xue: Biological-Physical Coupling in the Gulf of Maine: Satellite and Model Studies of Phytoplankton Variability. NASA. 09/01/97-08/31/00.
- Xue, H.: Real-time simulations of the circulation in Penobscot Bay: A study of the predictability of a coastal embayment. NOAA Sea Grant. 02/01/98-01/31/01.
- Xue, H., F. Chai, and J. Fastook. "A networked parallel computing facility: Advanced ocean modeling and teaching tool." Maine Science and Technology Foundation and University of Maine. 10/01/99 – 06/30/01.
- Xue, H., and D. A. Brooks: Characterizing fronts and eddies in Penobscot Bay using a three-dimensional circulation model. NOAA NESDIS. 09/15/98-09/14/01.
- Pettigrew, N. R., H. Xue, F. Chai, and A. Thomas: Physical oceanography of the shelf/slope region in the northern South China Sea. ONR. 11/14/97-11/13/01.
- Xue, H., and J. M. Bane: Coupled atmosphere-ocean model study of air-sea interactions off the east coast of North America. NSF. 03/15/99-02/28/04.
- Thomas, A., F. Chai, H. Xue, and D. Townsend: Multi-Sensor & Modeling Analysis of Gulf of Maine Phytoplankton Variability. NASA. 03/01/01-02/28/05.
- Incze, L. S., H. Xue and others: SYNTHESIS: Impact of Transport Processes on Lobster Fishery Patterns. NOAA. 09/02-08/05.
- Xue, Hopkins, Leighton, Bartlett, Fraser, and Brooks: Drifter Study and an Oil Spill Trajectory and Fate Model for Cobscook Bay. Maine DEP/MOSAC. 02/03-01/06.

**V. PROFESSIONAL AND UNIVERSITY SERVICE ACTIVITIES**

- Oceanography Program Coordinator (2005 - )
- Science Judge for the 2006 Nor'easter Ocean Sciences Bowl (2006)
- School of Marine Sciences Seminar Committee (2004-05, 2005-06)
- MMSETS Advisory Board (2004)
- College of NSFA Curriculum Committee (1998 - 2000)

School of Marine Sciences Graduate Admission Committee (1998 - 2001)  
Department of Oceanography Graduate Admission Committee (1996 - 1997)  
UMaine Graduate Board (1995 - 1998)  
Search Committees - Satellite Oceanographer (1995)  
Director for the Institute for Quaternary and Climate Change  
Assistant Professor in Mechanical Engineering  
Graduate Advisory Committee (UMaine, UNC-CH, and FSU)

Massachusetts Water Resources Authority's Model Evaluation Group  
NSF Physical Oceanography Panel  
NSF SEIII Panel

**Member of:**

American Geophysical Union (since 1989)  
American Meteorological Society (since 1987)  
Chinese American Oceanic and Atmospheric Association (since 1993)  
The Oceanography Society (89-90, since 1997)

**Reviewer for:**

Advances in Atmospheric Sciences  
Continental Shelf Research  
Deep Sea Research  
Environmental Modelling & Software  
Geophysical Research Letter  
Journal of Applied Meteorology  
Journal of Coastal Research  
Journal of Geophysical Research  
Journal of Marine Systems  
Journal of Physical Oceanography  
Journal of Waterway, Port, Coastal and Ocean Engineering  
Ocean Dynamics  
Ocean Modelling  
National Science Foundation  
Natural Sciences and Engineering Research Council of Canada  
Prince William Sound Oil Spill Recovery Institute  
New Hampshire Sea Grant Office  
Rhode Island Sea Grant Office

**Editorships and Editorial Boards:**

Xue H., F. Chai, and J. Xu, 2001: Oceanography in China (13) – The South  
China Sea: Circulation Modeling and Observations. China Ocean Press,  
Beijing, China, 254 pp.  
Guest Editor – Northeastern Naturalist special issue on Mount Hope Bay

Session Chair, "Integration of Modeling and Observing Systems". 2007 Gordon Research Conferences on Coastal Ocean Modeling, New London, NH.

Session Chair, "Biogeochemical and Physical Processes in the South China Sea", 2006 Ocean Sciences Meeting, Honolulu, Hawaii

Session Chair, "Workshop on Establishing a Consortium of East Coast Ocean Observatories", Diana Beach, Florida, 2001.

Organizer and session chair, "Sigma Coordinate Ocean Model Users Meeting'99", Bar Harbor, Maine, 1999.

Organizer and session chair, "Gulf of Maine Ecosystem Modeling Workshop", Orono, Maine, 1995.