CURRICULUM VITAE

FEI CHAI

Personal and Business Data:

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Present Positions:

Professor, School of Marine Sciences, University of Maine
Cooperating Professor, Climate Change Institute, University of Maine

Education:

Ph.D.	1995	Duke University (Ph.D. advisor: Prof. Richard T. Barber)
M.A.	1991	Princeton University (M. A. advisor: Prof. S. George Philander)
M.S.	1987	Shandong College of Oceanology (now: Ocean University of China)
B.S.	1984	Shandong College of Oceanology (now: Ocean University of China)

Professional Experience:

2012 - 2015	Director, School of Marine Sciences, University of Maine
2008 -	Professor, School of Marine Sciences, University of Maine
2008 -	Adjunct Professor, Climate Change Institute, University of Maine
2012 - 2015	Director, School of Marine Sciences, University of Maine
2002 - 2008	Associate Professor (tenured), School of Marine Sciences, UMaine
2002 - 2008	Adjunct Associate Professor, Climate Change Institute, UMaine
10/02 - 3/03	Visiting Professor, Nagoya University, Japan
1996 - 2001	Assistant Professor, School of Marine Sciences, University of Maine
5/99 - 8/99	Visiting Professor, Hong Kong University of Science & Technology
1994 - 1996	Research Assistant Professor, Department of Oceanography, UMaine
1991 - 1994	Graduate Research Assistant, School of the Environment, Duke Univ.
1992 - 1993	Summer Intern, North Carolina Supercomputing Center
1988 - 1990	Research Assistant, AOS Program, Princeton University

Editorial Board:

Associate Editor: Progress in Oceanography (2017 -)
Associate Editor: Biogeosciences (2011 – 2016)
Associate Editor: Journal of Oceanography (2010 – 2015)
Associate Editor: Acta Oceanological Sinica (2002 – present)
Guest Editor: Ocean Dynamics (2015)
Guest Editor: Oceanography in China (13) - South China Sea Circulation Modeling and Observations (2001)

Reviewer and panel member for:

Journal of Geophysical Research
Deep Sea Research

Journal of Marine Systems
Geophysical Research Letters
Limnology and Oceanography
Global Biogeochemical Cycles
Chemical Oceanography
Marine Chemistry
Nature Geosciences
Proceedings of the National Academy of Sciences (PNAS)
Progress in Oceanography
Journal of Marine Research
Science in China
Science
Ocean Dynamics
National Aeronautics and Space Administration (NASA)
National Oceanic and Atmospheric Administration (NOAA)
National Science Foundation of China (NSFC)
National Science Foundation (NSF)
National Oceanographic Partnership Program (NOPP)
U.S. Environmental Protection Agency (U.S. EPA)
Rhode Island Sea Grant
DIACES Symposium Application Review Committee
External Review Member for PMEL/NOAA
NERACOOS Board Member
Academic Committee Member for the State Key Laboratory of Marine Environmental Science (MEL), Xiamen University, China
International Advisory Committee Member for the State Key Laboratory in Marine Pollution (SKLMP) in Hong Kong
Overseas Evaluation Member for Chinese Academy of Sciences, China.
Member of the Organizing Committee for Ocean Sciences Meeting (OSM) 2014.
Program Advisory Committee for Ocean Observatories Initiative (OOI)
Education Task Team for Consortium for Ocean Leadership (COL)
Membership Committee for the Consortium for Ocean Leadership (COL)
Member of the Executive Council of Global Ocean Acidification Observing Network (GOA-ON)
Review Panel member for NOAA Knauss Marine Policy Fellowship
Review Panel for NOAA Ocean Acidification Program
Session Co-conveners for Third International Symposium Effects of Climate Change on the World's Oceans in Santos (Brazil), March 2015.
Session Co-conveners for PICES 2015 Annual Meeting in Qingdao, October 2015
The review team member for the University of Kiel "Collaborative Research Center (CRC) 754 – Climate and Biogeochemistry Interactions in the Tropical Oceans", September 2015.
Associate Member of SCOR Working Group on Iron Model Intercomparison Project (FeMIP)
Member of the Executive Council of Global Ocean Acidification Observing Network (GOA-ON)

Member of GESAMP Working Group 41 on Marine Geoengineering

Research Interests:

- Developing and testing physical-biogeochemical models for the Pacific Ocean and coastal seas, with focus on the upwelling regions such as the equatorial Pacific, the coast of Peru, California Coastal Upwelling, the Gulf of Maine, the China Seas, and polar regions.
- Studying the nutrient transport from the interior ocean to the surface by the ocean circulation and mixing processes, and their impacts on carbon cycle;
- Linking nutrient and plankton dynamics with living marine resources and fisheries;
- Studying the role of iron in global productivity and carbon cycle;
- Use models to investigate past, present, and future climate variability;
- Using state-of-the-art supercomputing power for the large-scale and coastal ocean models;
- Investigating anthropogenic impacts on global and coastal environment;
- Forecasting responses of marine ecosystems and carbon cycle to El Nino and other climatic strong events.

Thesis advisor and postdoctoral-scholar sponsors:

Li Xu (former M.S. student, now in computer science)
Lawrance Klein (former M.S. student, now with NOAA)
Yi Xu (former Ph.D. student, now with NOAA)
Jeremy Winn (former M.S. student, now in environmental science)
Artur Palacz (former Ph.D student, now at Danish Technical University)
Carrie Armbrecht (former M.S. student, now science teacher in Maine)
Mingshun Jiang (former postdoc, now at Harbor Branch Oceanographic Institution)
Lei Shi (former postdoc, research associate, now at NOAA)
Masahiko Fujii (former postdoc, now at Hokkaido University in Japan)
Guimei Liu (former postdoc, now at State Oceanic Administration of China)
Lionel Pawlowski (postdoc, now at Laboratoire Biologie Halieutique)
Peng Xiu (former postdoc, research scientist, now at the South China Sea Institute of Oceanography)
Shivanesh Rao (former postdoc, now at CSIRO)
QianQian Liu (former postdoc at University of Maine, now at NOAA)
Jiexin Xu (former postdoc at University of Maine, now at the SCSIO)
Ango Xu (current Ph.D. student at University of Maine)
Alice Ren (former Master student at University of Maine)

I advise about 4 to 5 undergraduate students a year, including Capstone projects.

Courses taught at the University of Maine

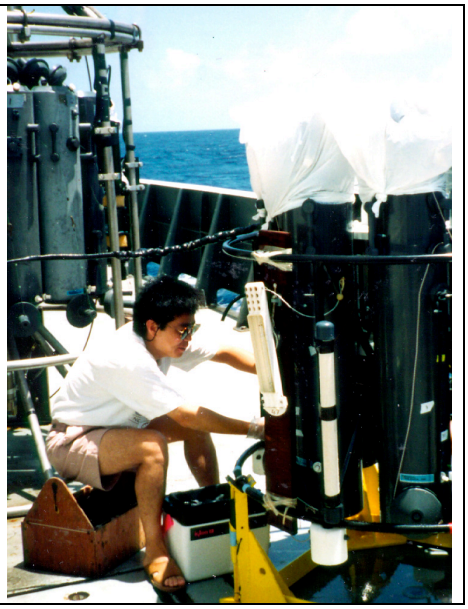
"Marine System Modeling" (graduate course, 10 student enrolled every another year)

"Marine Science Seminar" (required graduate course, about 15 students enrolled every year)
"Oceans and Climate Change" (required undergraduate course, about 40 to 50 students enrolled every year)

Research Cruise Experience:

Participant on 10 cruises, a total of 173 days at sea.

East China Sea:	1983,	14 days
Yellow Sea:	1986,	10 days
Equatorial Pacific:	1992,	30 days
Gulf of Maine:	1994,	3 days
Arabian Sea:	1995,	32 days
Gulf of Maine:	1995,	3 days
Equatorial Pacific:	1996,	40 days
Gulf of Maine:	1996,	2 days
Pearl River Estuary:	1999,	8 days
Equatorial Pacific:	2004,	31 days



Current Research Grants (4 ongoing projects with a total amount of $1.0 millions):

- NASA (Interdisciplinary Science Team): Impacts of population growth on the San Francisco Bay and Delta ecosystem. 4/1/2014 – 8/31/2017.
- NSF: MRI Track 1: Acquisition of High Performance Computing to Model Coastal Responses to a Changing Environment. 8/1/2015 – 7/31/2018.
- DOE: Improving tide-estuary representation in MAPS-Ocean. 9/1/2016 – 8/31/2019.

I had 15 completed research projects during past six years with a total amount of $3.5 millions.

Peer Reviewed Publications (a total of 124) (my h-index is 36 on Google Scholar):

[128] Chao, Y., J. Farrara, E. Bjorkstedt, F. Chai, F. Chavez, D. Runick, W. Enright, J. Fisher, W. Peterson, G. Welch, C. Davis, R. Dugdale, F. Wilkerson, H. Zhang, Y. Zhang, E. Ateljevich, (2017): The origins of the anomalous warming in the California coastal ocean and San Francisco Bay during 2014-2016. *Journal of Geophysical Research: Oceans, in press.*

[127] Chao, Y., J. Farrara, H. Zhang, Y. Zhang, E. Ateljevich, F. Chai, C. Davis, R. Dugdale, F. Wilkerson (2017): Development, implementation, and validation of a modeling system for the San Francisco Bay and Estuary. Estuarine, Coastal and Shelf Science 194 (2017) 40-56.

[126] Guo, M., P. Xiu, S. Li, F. Chai, H. Xue, K. Zhou, M. Dai (2017): Seasonal variability and mechanisms regulating chlorophyll distribution in mesoscale eddies in the South China Sea. *Journal of Geophysical Research: Oceans.* doi:10.1002/2016JC012670.

[125] Zhang, Z., H. Xue, F. Chai, and Y. Chao (2017): Variability of the Pacific North Equatorial Current from 1993 to 2012 based on a 1/8^o Pacific model simulation. *J. Geophys. Res. Oceans*, 122, doi:1002/2016JC012143.

[124] Hsu, A., H. Xue, F. Chai, P. Xiu, and Y. Han (2016): Variability of the Pacific North Equatorial Current and its implications on Japanese eel (Anguilla japonica) larval migration. Fisheries Oceanography, doi:10.1111/fog.12189.

[123] Zhang, Wen-Zhou, Haili Wang, **Fei Chai**, and Guoqiang Qiu (2016), Physical drivers of chlorophyll variability in the open South China Sea, *J. Geophys. Res. Oceans*, 121, 7123–7140.

[122] Xiu, P., M. Guo, L. Zeng, N. Liu, **F. Chai** (2016): Seasonal and spatial variability of surface chlorophyll inside mesoscale eddies in the South China Sea. Aquatic Ecosystem Health & Management, 19(3): 250–259, DOI: 10.1080/14634988.2016.1217118.

[121] Shu, Y., H. Xue, D. Wang, **F. Chai**, Q. Xie, S. Cai, R. Chen, J. Chen, J. Li, and Y. He (2016): Persistent and energetic bottom-trapped topographic Rossby waves observed in the southern South China Sea. Scientific Reports, 6:24338, DOI: 10.1038/srep24338.

[120] Gomes, Helga do Rosario, Sergio deRada, Joaquim I. Goes, John Kindle, and **Fei Chai** (2016): Examining Features of Enhanced Phytoplankton Biomass in the Bay of Bengal Using a Coupled Physical-Biological Model. *Journal of Geophysical Research – Oceans.* DOI 10.1002/2015JC011508

[119] Nosal, Andrew, Yi Chao, John D. Farrara, **Fei Chai**, Phillip A. Hastings (2016): Ofaction Contributes to Pelagic Navigation in a Coastal Shark. PLoS ONE 11(1): e0143758. doi:10.1371/journal.pone.0143758.

[118] Huang, K., S. Derada, H. Xue, P. Xiu, **F. Chai**, Qiang Xie, and Dongxiao Wang (2015): A 1/8 coupled biochemical-physical Indian Ocean Regional Model: Physical results and validation. Ocean Dynamics, DOI 1.1007/s10236-01500860-8.

[117] Weber, E., Y. Chao, **F. Chai**, S. McClatchie (2015): Transport Patterns of Pacific Sardine *Sardinops sagax* Eggs and Larvae in the California Current System. Deep Sea Research 1, doi:10.1016/j.dsr.2015.02.012.

[116] Xu, Y., K.A. Rose, **F. Chai**, F. P. Chavez, and P. Ayon (2015): Does spatial variation in environmental conditions affect recruitment? A study using a 3-D model

of Perivian anchovy. *Progress in Oceanography*, 2015, doi:10.1016/j.pocean.2015.04.013

[115] Gehlen, M., R. Barciela, L. Bertino, P. Brasseur, M. Butenschon, **F. Chai**, A. Crise, Y. Drillet, D. Ford, D. Lavoie, C. Perruche, A. Samuelsen, E. Simon (2015): Building the capacity for forecasting marine biogeochemistry and ecosystems. Journal of Operational Oceanography, Vol. 7., No. 3, 171-190.

[114] Zhang, W., **F. Chai**, H. Xue, and Q. Ni (2015): Dynamical processes within an anticyclonic eddy revealed from Argo floats. *Geophysical Research Letter, 42,* 10.1002/2015GL063120.

[113] Mobley, C., **F. Chai**, P. Xiu, and L. Sundman (2015): Impact of improved light calculations on predicted phytoplankton growth and heating in an idealized upwelling-downwelling channel geometry. *Journal of Geophysical Research – Oceans, 120, doi:10.1002/2014JC010588.*

[112] Ma, W., **F. Chai**, P. Xiu, H. Xue, and J. Tian (2014): Simulation of export production and biological pump structure in the South China Sea. Geo-Mar Lett (2014) 34:541-554. DOI 10.1007/s0036-014-0384-0.

[111] Xiu, P. and **F. Chai** (2014): Variability of oceanic carbon cycle in the North Pacific from seasonal to decadal scales. Journal of Geophysical Research – Oceans. 10.1002/2013JC009505.

[110] Zhang, W., **F. Chai**, H.S. Hong, and H. Xue (2014): Volume transport through the Taiwan Strait and the effect of synoptic events. Continental Shelf Research 88 (2014) 117-125.

[109] Chen, G., P. Xiu, and **F. Chai** (2014): Physical and biological controls on the summer chlorophyll bloom to the east of Vietnam. Journal of Oceanography, 70 (3), 323-328.

[108] Wang, Y., H. Xue, **F. Chai**, Y. Chao, and J. Farrara (2014): A model study of the Copper River plume and its effects on the northern Gulf of Alaska. Ocean Dynamics, 64:241-258. DOI 10.1007/s10236-013-0684-3.

[107] Y. Shu, H. Xue, D. Wang, **F. Chai**, Q. Xie, J. Yao, and J. Xiao (2014): Meridional overturning circulation in the South China Sea envisioned from the high resolution global reanalysis data GLBa0.08, J. Geophys. Res., 119, doi:10.1002/2013JC009583.

[106] Guo, L., **F. Chai**, P. Xiu, H. Xue, S. Rao, Y. Liu, and F.P. Chavez (2014): Seasonal dynamics of physical and biological processes in the central California Current System: A modeling study. Ocean Dynamics, DOI 10.1007/s10236-014-0721-x.

[105] Fiechter, J., E. N. Curchitser, C. A. Edwards, **F. Chai,** N. L. Goebel and F. P. Chavez (2014): Air-sea CO_2 fluxes in the California Current: Impacts of model resolution and coastal topography DOI: 10.1002/2013GB004683.

[104] Chu, X., H. Xue, Y. Qi, G. Chen, Q. Mao, D. Wang and **F. Chai** (2014): An exceptional anticyclonic eddy in the South China Sea in 2010. Journal of Geophysical Research – Oceans. DOI: 10.1002/2013JC009314

[103] Xiu, P. **F. Chai**, A.C. Thomas (2014): Remote sensing of phytoplankton blooms induced by natural and artificial iron addition in the Gulf of Alaska. *Remote Sensing of Environment*, 145 (2014) 38-46.

[102] Xiu, P. and **F. Chai** (2014): Connections between physical, optical and biogeochemical processes in the Pacific Ocean. *Progress in Oceanography*, Vol.

122, page 30-53.
[101] Lin, P., **F. Chai**, H. Xue, and P. Xiu (2014): Modulation of Decadal Oscillation on Surface Chlorophyll in the Kuroshio Extension. Journal of Geophysical Research – Oceans, DOI: 10.1002/2013JC009359.
[100] Takeda, S., Chai, F. and Nishioka, J. (Eds.) 2013. Report of Working Group 22 on Iron Supply and its Impact on Biogeochemistry and Ecosystems in the North Pacific Ocean. PICES Sci. Rep. No. 42, 60 pp.
[99] Gao, J., H. Xue, **F. Chai**, and M. Shi (2013): Modeling the circulation in the Gulf of Tonkin, South China Sea. Ocean Dynamics, DOI 10.1007/s10236-013-0636-y.
[98] Huff, D., M.M. Yoklavich, M.S. Love, D.L. Watters, **F. Chai**, and S.T. Lindley (2013): Environmental factors that influence the distribution, size, and biotic relationships of the Christmas tree coral *Antipathes dendrochristos* in the Southern California Bight. Mar Ecol Prog Ser (MEPS), Vol. 494, 159-177. doi: 10.3354/meps10591.
[97] Zhou, K., M. Dai, S. Kao, L. Wang, P. Xiu, **F. Chai**, J. Tian, and Y. Liu (2013): Apparent enhancement of 234^{Th}-based particle export associated with anticyclonic eddies. Earth and Planetary Science Letters 381, 198-209.
[96] Ma, W. **F. Chai**, P. Xiu, H. Xue, J. Tian (2013): Modeling the seasonal and inter-annual phytoplankton dynamics in the South China Sea during 1958-2009. *Journal of Oceanography*, 69.527-544. DOI 10.1007/s10872-013-0190-8.
[95] Schick R.S., J.J. Roberts, S.A. Eckert, P.N. Halpin, H. Bailey, **F. Chai**, L. Shi, and J.S. Clark (2013): Plagic movements of Pacific leatherback turtles (dermochelys coriacea) highlight the role of prey and ocean currents. Movement Ecology, 2013, 1:11. http://www.movementecologyjournal.com/content/1/1/11
[94] Wang, J., H. Hong, Y. Jiang, **F. Chai** (2013): Summer nitrogenous nutrient transport and its fate in the Taiwan Strait: a coupled physical-biological modeling approach. *Journal of Geophysical Research* – Oceans, Vol. 118, 4184-4200, doi:10.1002/jgrc.20300
[93] Nan F., H. Xue, **F. Chai**, D. Wang, F. Yu, M. Shi, G. Guo (2013): Weakening of the Kuroshio intrusion into the South China Sea over the past two decades. *Journal of Climate*, Vol. 26, 8097-8110. DOI: 10.1175/JCLI-D-12-00315.1
[92] Tang, Q.S., Z.D. Chen, K.F. Yu, M. Dai, M. Zhao, C. Ke, T. Wong, **F. Chai**, G. Wei, P. Zhou, L. Chen, J. Su, J. Barry, Y. Wu, K. Gao (2013); The effects of ocean acidification on marine organisms and ecosystem (in Chinese). Chinese Sci Bull (Chinese Version), 2013, 58, doi: 10.1360/972010-1640
[91] Santora, J.A., W.J. Sydeman, M. Messié, **F. Chai**, Yi Chao, S.A. Thompson, B.K. Wells, F.P. Chavez (2013): Triple check: Observations verify structural realism of an ocean ecosystem model. *Geophysical Research Letter*. doi:10.1002/grl.50312.
[90] Xu, Y., **F. Chai**, K. A. Rose, and F. P. Chavez (2013): Environmental influences on the interannual variation and spatial distribution of Peruvian anchovy population dynamics from 1991 to 2007: a three-dimensional modeling study. *Ecological Modelling*, dx.doi.org/10.1016/j/ecolmodel2013.01.009.
[89] Palacz, A.P. and **F. Chai** (2012): Spatial and temporal variability in nutrients and carbon uptake during 2004 and 2005 in the eastern equatorial Pacific Ocean. *Biogeosciences*, 9, 4369-4383.
[88] Huff, D.D., S.T. Lindley, B.K. Wells, **F, Chai** (2012): Green Sturgeon Distribution in

the Pacific Ocean Estimated from Modeled Oceanographic Features and Migration Behavior. *PLoS ONE* 7(9): e45852. doi:10.1371/journal.pone.0045852.

[87] Xiu, P. and **F. Chai** (2012): Spatial and temporal variability in phytoplankton carbon, chlorophyll, and nitrogen in the North Pacific. *Journal of Geophysical Research* VOL. 117, C11023, doi:10.1029/2012JC008067.

[86] Xiu, P, **F. Chai**, L. Shi, H. Xue, Y. Chao (2012): Modeling meso-scale eddy field in the Gulf of Alaska. *Deep Sea Research I*, 63, 102-117.

[85] Nan, F., H. Xue, P. Xiu, **F. Chai**, , M. Shi, P. Guo (2011): Oceanic eddy formation and propagation southwest of Taiwan. *Journal of Geophysical Research*. Vol. 116, doi:10.1029/2011JC007386.

[84] Xiu, P. and **F. Chai** (2011): Modeled biogeochemical responses to mesoscale eddies in the South China Sea. *Journal of Geophysical Research, doi*:10.1029/2010JC006800.

[83] Palacz, A., H. Xue, C. Armbrecht, C. Zhang, **F. Chai** (2011): Seasonal and interannual changes in the surface chlorophyll of the South China Sea. *Journal of Geophysical Research, VOL. 116, C09015, doi:10.1029/2011JC007064.*

[82] Nan, F., H. Xue, F. Chai, L. Shi, M. Shi, P. Guo (2011): Identification of Different Types of Kuroshio Intrusion into the South China Sea. Ocean Dynamics, *61:1291-1304.doi 10.1007/s10236-011-0426-3.*

[81] Xiu, P., A. Palacz, **F. Chai**, E. Roy, and M. Wells (2011): Iron flux induced by Haida eddies in the Gulf of Alaska. *Geophys. Res. Lett. VOL 38, L13607, doi:10.1029/2011GL047946.*

[80] Hong, H. **F. Chai**, C. Zhang, B. Huang, Y. Jiang, J. Hu (2011): An overview of physical and biogeochemical processes and ecosystem dynamics in the Taiwan Strait. *Continental Shelf Research* 31 (2011) S3–S12.

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[78] Song, J., H. Xue, X. Bao, D. Wu, **F. Chai**, L. Shi, Z. Yao, Y. Wang, F. Nan, and K. Wan (2011): A spectral mixture model analysis of the Kuroshio variability and the water exchange between the Kuroshio and the East China Sea. *Chinese J. of Oceanology and Limnology*, 29, 446-459. DOI:10.1007/s00343-011-0114-7.

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[76] Strutton, P.G., A.P. Palacz, R.C. Dugdale, **F. Chai**, A. Marchi, A.E. Parker, V. Hogue, F.P. Wilkerson (2010): The impact of equatorial Pacific tropical instability waves on hydrography and nutrients: 2004-2005. *Deep Sea Res. II*, doi:10.1016/j.dsr2.2010.08.015

[75] Palacz, A., **F. Chai**, R.C. Dugdale, C.I. Measures (2010): Estimating iron and aluminum removal rates in the eastern equatorial Pacific Ocean using a box model approach. *Deep Sea Res. II*, doi:10.1016/j.dsr2.2010.08.012

[74] Liu, G., H. Li, H. Wang, **F. Chai** (2010): Review on the Ecological Dynamics Studies of Green Tide. *Advances in Earth Science*, Vol. 25, No. 2, Feb. 2010.

[73] Brzezinski, M.A., S.B. Baines, W.M. Balch, C.P. Beucher, **F. Chai**, R.C. Dugdale, J.W. Krause, M.R. Landry, A. Marchi, C. Measures, D.M. Nelson, A. Parker, A. Poulton, K. Selph, P. Strutton, A. Taylor, B. Twining (2010): Co-limitation of diatoms by iron and silicic acid in the equatorial Pacific. *Deep Sea Res. II*, 58, 493-511, doi:10.1016/j.dsr2.2010.08.005

[72] Dugdale, R.C., **F. Chai**, R. Feely, C. Measures, A. Parker, F. Wilkerson (2010): The regulation of equatorial Pacific new production and pCO2 by silicate-limited diatoms. *Deep Sea Res. II*, 58, 477-492.

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[69] Xiu, P, **F. Chai**, L. Shi, H. Xue, Y. Chao (2010): A census of eddy activities in the South China Sea during 1993-2007. *Journal of Geophysical Research, Vol. 115, C03012,doi:10.1029/2009JC005657.*

[68] Fujii, M. and **F. Chai** (2009): Influences of initial plankton biomass and mixed-layer depths on the outcome of iron-fertilization experiments. Deep-Sea Research II, doi:10.1016/j.dsr2.2009.07.007.

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[61] Liu, G. and **F. Chai** (2009): Seasonal and interannual variation of physical and biological processes during 1994-2001 in the Sea of Japan/East Sea: a three-dimensional physical-biogeochemical modeling study. *Journal of Marine Systems*, Vol. 78, 265-277.

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Professional Presentations

On the average I give about ten presentations per year at professional conferences and before professional groups, not counting the ones coauthored but delivered by others. The following is an incomplete list of presentations I gave during the last few years (the titles are not included).

01/2017: An invited talk at the 3rd Xiamen Symposium on Marine Environmental Sciences (XMAS-III), Xiamen, China
12/2016: A keynote talk at the Workshop on the Development of an Integrated Ocean Research Network (Future Earth "Ocean – KAN"), Kiel, Germany
10/2016: An invited presentation at the Workshop on Western Pacific Ocean Circulation and Climate. Qingdao, China
10/2016: A keynote talk at the Deep Sea Observational Network in Qingdao, China
09/2016: A plenary talk at the CLIVAR Open Science Conference, Qingdao, China
05/2016: An invited talk at the Third Workshop of Global Ocean Acidification Observing Network (GoA-ON), Hobart, Australia.
04/2016: An invited talk at the Ocean Acidification Workshop in Eastern Normal University, Shanghai, China.
02/2016: One lead oral presentation, and several co-authored oral and poster presentations at the Ocean Sciences Meeting 2016, New Orleans, USA
02/2016: An invited talk at the IOCCG Working Group (Ocean Color Applications for Biogeochemical, Ecosystem and Climate Modeling) in New Orleans, USA
12/2015: An invited talk at the Second Institute of Oceanography (SIO)/State Oceanic Administration (SOA) in Hangzhou, China
12/2015: An invited talk at the ENSO Workshop in Qingdao, China
11/2015: An invited talk in a workshop on ocean acidification in IAEA in Monaco.
11/2015: An invited talk in a workshop on developing blue economy during the World Ocean Week (WOW) in Xiamen, China.
11/2015: An invited talk at the Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China.
10/2015: Three oral presentations at the PICES (North Pacific Marine Science Organization) 24th Annual Meeting, Qingdao, China.
10/2015: A keynote lecture for PARE (Population, Activities, Resources, and Environment) at Hokkaido University, Sapporo, Japan.
09/2015: An oral presentation at the 57th Annual Eastern Pacific Ocean Conference (EPOCE), South Lake Tahoe, California.
07/2015: Two lectures at the 3rd International Ocean Science Summer School, Guangzhou, China.
06/2015: An oral presentation at the 7th International Workshop on Modeling the Ocean, Canberra, Australia.
06/2015: An invited talk at the School of Energy and Environment, City University of Hong Kong.
03/2015: An invited talk at the Maine Maritime Academy, Castine, Maine.
03/2015: An oral presentation at the Third International Symposium Effects of Climate Change on the World's Oceans in Santos, Brazil
03/2015: An invited talk at Fudan University, Shanghai, China
03/2015: An invited talk at State Key Lab of Estuarine and Coastal Research, Eastern China Normal University, Shanghai, China
01/2015: An invited presentation at the 2nd Xiamen Symposium on Marine Environmental Sciences, Xiamen, China
11/2014: An invited seminar at the University of New England

10/2014: An oral presentation at the Ocean Optics 2014, Portland, Maine

10/2014: An invited talk at the Global Ocean Summit, Qingdao, China

09/2014: An invited seminar at North Carolina State University

09/2014: An invited seminar at University of Massachusetts Dartmouth

09/2014: An invited seminar at Northeastern University

06/2014: An oral presentation at the 6th International Workshop on Modeling the Ocean, Halifax, Nova Scotia.

05/2014: An invited talk at the Shallow Water Dynamics Workshop in Qingdao, China.

04/2014: An invited plenary talk at the 10th Cross-Strait Ocean Research Conference, Taiwan.

02/2014: One lead oral presentation, and several co-authored oral and poster presentations at the Ocean Sciences Meeting 2014, Hawaii, USA.

12/2013: An invited talk at the NOAA Fisheries Lab in San Cruz, USA.

11/2013: An invited talk at the World Ocean Week in Xiamen, China.

11/2013: An invited talk at the GODAE Ocean View Symposium. Baltimore, USA.

06/2013: A talk about UMaine's marine science research and education at Ocean University of China, Qingdao, China.

05/2013: An invited talk at the Sanya Institute of Deep-Sea Science and Engineering, Snaya, China.

03/2013: A talk about UMaine's marine science research and education at Xiamen University, Xiamen, China.

01/2013: An invited talk at Zhejiang University, Hangzhou, China.

01/2013: An invited talk at the Graduate School of Tsinghua University in Shen Zhen.

07/2012: An invited talk at the Institute of Atmospheric Physics International Summer Symposium, Xining, China.

07/2012: Two invited lectures at the International Summer School on ocean modeling and climate change, Qingdao, China.

07/2012: An invited lecture at the International Summer School on climate change and ocean health, Xiamen, China.

04/2012: Two invited talks in Academia Sinica, Taiwan.

04/2012: An invited talk at Tsinghua University, Beijing, China

02/2012: Two invited talks at South China Institute of Oceanography, Guangzhou, China.