Resume

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Education:

1. B.S. in Civil Engineering, 1957, National Taiwan University.

2. M.S. in Engineering Mechanics, 1961, Virginia Polytechnic Institute.

3. Ph. D. in Mechanical Engineering, 1967, University of California at Berkeley.

Experience:

- 1. 1/1967 8/1967, Acting Instructor, Mechanical Engineering Department, University of California at Berkeley.
- 2. 9/1967 8/1971, Assistant Professor, Engineering Science Department, State University of New York at Buffalo.
- 3. 9/1971 8/1974, Associate Professor, Engineering Science Department, State University of New York at Buffalo.
- 4. 9/1971 8/1972, Resident Research Associate, Joint Tsunami Research Effort, Hawaii Institute of Geophysics (On leave from the State University of New York at Buffalo).
- 5. 9/1974 8/1980, Associate Professor, Ocean Engineering Department, Florida Atlantic University (Tenured in 5/1977).
- 6. 9/1979 8/1980. Visiting Associate Professor, Second Institute of Oceanography, State Oceanic Administration. (on leave from the Florida Atlantic University).
- 7. 9/1980 Present, Professor, Second Institute of Oceanography, State Oceanic Administration
- 8. 9/1994 1/1999, Director, Second Institute of Oceanography, State Oceanic Administration

Honour Societies:

Chinese Academy of Sciences, Member since 1991

Third World Academy of Sciences (Renamed *The World Academy of Sciences* after 2012), Member since 1994

Russian Academy of Natural Sciences, Foreign Member since 1999

Representative Professional Services:

Chinese Academy of Sciences --- Vice-Chairman of the Standing Committee of the Earth Sciences Division, 1992-1998, 2002-2006

Chinese Society of Oceanography --- Member of the Standing Committee, 1988-2005; Vice-Chairman, 1994-2005

Chinese Society of Oceanology and Limnology --- Member of the Standing Committee, 1992-1997, Vice-Chairman, 1997-2007

Science and Technology Committee, State Oceanic Administration --- Vice-Chairman, 1981-1986; Chairman, 1987-1989

Chinese Association for Science and Technology --- Member of the Standing Committee, 1996-2005

SCIENCE CHINA Earth Sciences --- Associate Editor-in-Chief, 1997-2012

Acta Oceanologica Sinica --- Editor-in-Chief, 1989-1998, Member of the Editorial Board, 1982-present

Oceanologia et Limnologia --- Member of the Editorial Board, 1989-present

Acta Oceanographica Taiwanica --- Member of the Editorial Board, 1997-present

Marine Geodesy --- Member of the Editorial Board, 1993-2003

Journal of Oceanography --- Member of the Editorial Board, 1998-2011

Scientific Committee on Oceanic Research/International Council for Science (ICSU/SCOR) --- Co-opted Member of the Executive Committee, 1988-1992

IOC Sub-Commission for the Western Pacific (WESTPAC) --- Vice-Chairman, 1990; Acting Chairman, 1991-1992; Chairman, 1993-1996

Intergovernmental Oceanographic Commission (IOC) --- Fourth Vice-Chairman, 1993-1995; Chairman, 1999-2003

UN/IOC Group of Experts on the Law of the Sea Regime for Marine Scientific Research (1988)

UNEP/IOC/WMO Group of Experts on the Long-Term Global Monitoring System of Coastal and Near-Shore Phenomena Related to Climate Change (1990)

Advisory Panel on the Integrated Proposal on Climate Related Programmes of International Organizations / World Climate Programme --- Member, 1994-1996

IPCC Second Assessment Report / Working Group II --- Principal Lead Author, 1993-1996; Convening Lead Author, 1996-1997

IPCC Third Assessment Report / Working Group II --- Review Editor, 1998-2000

Joint Science and Technology Committee / Global Ocean Observing System --- Member, 1994-1997.

GOOS Steering Committee (GSC) / Global Ocean Observing System --- Member, 1998-1999

Independent Would Commission on the Oceans (IWCO) --- Member, 1995-1998 COSTED / ICSU --- Member of the Executive Committee, 1996-2002

Publications in English since 1982:

- 1. Yuan Yaochu, Su Jilan and Zhao Jinsan, A single layer model of the continental shelf circulation in the East China Sea, La Mer, 20(1982), 131-135.
- 2. Wang Kangshan, Su Jilan and Dong Lixian, Hydrographic features of the Changjiang Estuary, Proceedings of the International Symposium on Sedimentation on the Continental Shelf, China Ocean Press, 1983, 125-133.
- 3. Yuan Yaochu and Su Jilan, A two-layer circulation model of the East China Sea, Proceedings of the International Symposium on Sedimentation on the Continental Shelf, China Ocean Press, 1983, 335-345.
- 4. Su Jilan and Xu Weiyi, Modelling of the depositional patterns in Hangzhou Bay, Proceedings of the Nineteenth International Coastal Engineering Conference, ASCE, 1984, 2181-2191.
- 5. Su Jilan, Effects of coastal boundary layers on the wind-driven circulation in shallow sea, in 'Physics of Shallow Estuaries and Bays' (ed. J. van de Kreeke), Springer-Verlag, 1986, 199-208.
- 6. Yuan Yaochu, Su Jilan and Xia Songyun, A diagnostic model of summer circulation on the northwest shelf of East China Sea, Progress in Oceanography, 17(1986), 163-176.
- 7. Su Jilan and Wang Kangshan, The suspended sediment balance in Changjiang Estuary, Estuarine, Coastal and Shelf Science, 23(1986), 81-98.
- 8. Su Jilan, Recent work of the Institute in the East China Sea, EOS, 67(1986), 1063, (invited talk).
- 9. Chen Dake and Su Jilan, Continental shelf waves along the coasts of China, Acta Oceanologica Sinica, 6(1987), 317-334.
- 10. Su Jilan and Pan Yuqiu, On the shelf circulation north of Taiwan, Acta Oceanologica Sinica, 6(Supp. I, 1987), 1-20.
- 11. Wang Wei and Su Jilan, A barotropic model of the Kuroshio system and eddy phenomena in the tropic model of the Kuroshio system and eddy phenomena in the East China Sea, Acta Oceanologica Sinica, 6(Supp. I, 1987), 21-35.

- 12. Yuan Yaochu, Su Jilan and Xia Songyun, Three dimensional diagnostic calculation of circulation over the East China Sea shelf, Acta Oceanologica Sinica, 6(Supp. I, 1987), 36-50.
- 13. Su Jilan and Pu Yongxiu, The Kuroshio, Endeavour, New Series, 11(No. 3, 1987), 137-142.
- 14. Xu Weiyi, Yang Zhaoqing, Su Jilan and Chen Genxin, Prediction of deposition from building Jiantiao tidal power power plant, Proceedings of the Second International Conference on Coastal and Port Engineering in Developing Countries, Beijing, 1987, 1547-1559.
- 15. Su Jilan and Wang Wei, On the sources of the Taiwan Warm Current from the South China Sea, Chinese Journal of Oceanology and Limnology, 5(1987), 299-308.
- 16. Su Jilan, Physical oceanography of the Huanghai Sea: with emphasis on its western part, International Conference on the Yellow Sea: Transnational Ocean Resource Management Issues and Options for Cooperation, East-west Center, Honolulu, 23-26 June 1987.
- 17. Yuan Yaochu, Su Jilan and Zhao Jinsan, A study of numerical model equations of circulation in East China Sea. Acta Oceanologica Sinica, 7(1988), 148-149.
- 18. Su Jilan and Wang Kangshan, Changjiang river plume and suspended sediment transport in Hangzhou Bay, Continental Shelf Research, 9(1988) 93-111.
- 19. Su Jilan and Pan Yuqiu, An ever-present shelf intrusion of the Kuroshio, Joint Oceanographic Assembly, Acapulco, Mexico, 23-31 August, 1988.
- 20. Yuan Yaochu and Su Jilan, The calculation of Kuroshio current structure in the East China Sea --- early summer 1986, Progress in Oceanography, 21(1988), 343-361.
- 21. Yuan Yaochu, Su Jilan and Zhou Weidong, Calculation of the Kuroshio Current south of Japan in May-June 1986, Progress in Oceanography, 21(1988), 503-514.
- 22. Dong Lixian, Su Jilan and Wang Kangshan, The relationship between tidal current field and sediment transport in the Huanghai Sea and the Bohai Sea, Acta Oceanologica Sinica, 8(1989), 587-600.
- 23. Su Jilan, Guan Bingxian and Jiang Jingzhong, The Kuroshio: Part I, Physical Reatures, Oceanography and Marine Biology: an Annual Review, 28(1990), 11-71.

- 24. Su Jilan, Wang Kangshan and Li Yan, A plume front in Hangzhou Bay and its role in suspended sediment transport, in `Residual Currents and Long-Term Transport Processes' (ed. R. T. Cheng), Springer-Verlag, 1990, 333-347.
- 25. Su Jilan, Kursohio-induced circulation in the South China Sea and the East China Sea. EOS, 71(1990), 880, (invited talk).
- 26. Liu Xianbing and Su Jilan, A numerical study for the coastal upwelling and the coastal front off Zhejiang coast, Acta Oceanologica Sinica, 9(1990), 499-512.
- 27. Xu Weiyi, Chen Genxin and Su Jilan, Land reclamation and sedimentation in Leqing Bay --- a numerical study, International Symposium on Exploration and Management of Island Coast and Embayment Resources, Haikou, 1990.
- 28. Yuan Yaochu, Su Jilan and Pan Ziqin, A study of Kuroshio in the East China Sea and the currents of the Ryukyu Islands in 1988. In: Oceanography of the Asian Marginal Seas (ed. K. Takano), Elsevier Science Publishers, 1991, 305-319.
- 29. Huang Daji and Su Jilan, On the stability of fronts near shelfbreak, Acta Oceanologica Sinica, 10(1991), 167-182.
- 30. Chen Wei and Su Jilan, Mechanisms of low-frequency sea level fluctuations in the Hangzhou Bay, Acta Oceanologica Sinica, 10(1991), 183-198.
- 31. Pan Yuqiu, Su Jilan and Xu Duanrong, The formation and evolution of the East China Sea Winter Dense Water, Acta Oceanologica Sinica, 10(1991), 525-538.
- 32. Su Jilan and Chen Wei, On meteorologically induced subtidal motions in Hangzhou Bay, in "Dynamics and Exchanges in Estuaries and the Coastal Zone" (ed. D. Prandle), American Geophysical Union, 1992, 173-190.
- 33. Yuan Yaochu, Su Jilan and Pan Ziqin, Volume and heat transport of the Kuroshio in the East China Sea in 1989. La Mer, 30(1992), 151-162.
- 34. Su Jilan, Influence of Changjiang River plume on Hangzhou Bay: Implication for sewage outfall siting, IOC Workshop on Coastal Oceanography in Relation to Integrated Coastal Zone Management, Kona, Hawaii, 1-5 June 1992, IOC Workshop Report No. 85, 51-57.
- 35. Liu Xianbing and Su Jilan, A reduced gravity model of the circulation in the South China Sea, Oceanologia et Limnologia Sinica, 23(1992), 167-174 (in Chinese with English abstract).
- 36. Su Jilan, Wang Kangshan and Li Yan, Fronts and transport of suspended matter

- in Hangzhou Bay, Acta Oceanologica Sinica, 12(1993), 1-16.
- 37. Wang Kangshan and Su Jilan, Hydrographic features of the plume front in Hangzhou Bay, Acta Oceanologica Sinica, 12(1993), 17-28.
- 38. Li Yan, Li Jing, Su Jilan and Ren Fuhu, A study on the fluctuations of plume front and turbidity maximum in the Hangzhou Bay by remote sensing data, Acta Oceanologica Sinica, 12(1993), 51-62.
- 39. Su Jilan and Xu Jianping, Study of Kuroshio, in 'Marine Science Study and its Prospect in China' (eds. C. K. TSENG, Zhou Haiou and LI Benchuan), Qingdao Publishing House, 1993, 517-522.
- 40. Liang Xiangsan, Su Jilan and Dong Zhaoqian, Pseudo-inverse determination of the circulation in Prydz Bay and its adjacent open ocean, Antarctica. Antantic Research, 4(1993), 42-61.
- 41. Pan Yuqiu, Su Jilan and Su Yufen, Seasonal characteristics in the southern East China Sea. In: Proceedings of China-Japan Joint Symposium of the Cooperative Research on the Kuroshio, China Ocean Press, 1994, 179-195.
- 42. Yu Honghua, Su Jilan, Miao Yutian and Li Binglan, Low salinity water center of Kuroshio in the East China Sea and intrusion of western boundary current east of Ryukyu Islands. In: Proceedings of the China-Japan Joint Symposium of the Cooperative Research on the Kuroshio, China Ocean Press, 1994, 145-164.
- 43. Su Jilan, Pan Yuqiu and Liang Xiangsan, Kuroshio intrusion and the Taiwan Warm Current, in: "Oceanology of China Seas", Vol. 1, (eds. Liang Yuanbo, Zhou Ti and Zeng Cheng-Kui), Kluwer Academic Publishers, 1994, 59-70.
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- 45. Liang Xiangsan and Su Jilan, A two-layer model for the summer circulation of the East China Sea, Acta Oceanologica Sinica, 13(1994), 325-344.
- 46. Yuan Y., Z. Pan, J. Su, S. Umatani, S. Imawaki, K. Kawatate and K. Takano, Spectra of the deep currents southeast of Okinawa Islands. La Mer, 32(1994), 245-250.
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- 48. Su Jilan and Huang Daji, On the current field associated with the Yellow Sea Cold Water Mass, Oceanologia et Limnologia Sinica, 26(1995), Supplement, 1-7 (in Chinese with English abstract).
- 49. Huang Daji, Chen Zongyong and Su Jilan, Modelling of the barotropic processes in the Bohai Sea. Acta Oceanologica Sinica, 14(1995), 337-353.
- 50. Huang Daji, Su Jilan and Chen Zongyong, Simulation of the seasonal thermal structure in the Bohai Sea. Acta Oceanologica Sinica, 14(1995), 461-474.
- 51. Ittekkot, V., Su Jilan and E. Miles, Oceans, Chapter 8 in: "Climate Change 1995: Impacts, Adaptations and Mitigation of Climate Change" (eds., R. T. Watson, M. C. Zinyowera and R. H. Moss), Cambridge University Press, 1996, pp. 267-288.
- 52. Li Yan, Pan Yuqiu, Wang Kangshan and Su Jilan, Transport of Particles and Contaminants in the Changjiang Estuary and Hangzhou Bay. In: "Sources, Transport and Environmental impact of Contaminants in the Coastal and Estuarine Areas of China", SCOPE CHINA Publication Series 4, (ed. Zhou Jiayi), China Ocean Press, Beijing China, 1997, 38-55.
- 53. Xu Jianping and Su Jilan, Hydrographic Analysis on the Intrusion of the Kuroshio into the South China Sea, II: Observational Results during the Cruise from August to September in 1994. Tropic Oceanology, 16(1997), 1-23. (in Chinese with English abstract)
- 54. Su Jilan, 1998. Circulation dynamics of the China Seas: north of 18°N, In: "The Sea", Vol. 11, The Global Coastal Ocean: Regional Studies and Syntheses (eds. A. R. Robinson and K. Brink), John Wiley, 483-506.
- 55. Su Jilan and V. B. Lobanov, 1998. Eastern Asia, Kamachatka to eastern coast of Philippines. In: "The Sea", Vol. 11, The Global Coastal Ocean: Regional Studies and Syntheses (eds. A.R. Robinson and K. Brink), John Wiley, 415-428.
- 56. Li Li, W. D. Nowlin, Jr. and Su Jilan, Anticyclonic rings from the Kuroshio in the South China Sea. Deep-Sea Research, Part I, 45(1998), 1469-1482.
- 57. Su Jilan and Dong Lixian, Application of Numerical Models in Marine Pollution Research in China. Marine Pollution Bulletin, 39(1999), 73-79.
- 58. Xu Jianping and Su Jilan. Hydrological analysis of Kuroshio water intrusion into the South China Sea. Acta Oceanologica Sinica, 19(2000), No.3, 1-21.
- 59. Lin Chuanlan, Su Jilan and Xu Bingrong. Long-term Variations of Temperature and Salinity of the Bohai Sea and Their Influence on its Ecosystem. Progress in Oceanography, 49(2001), 7-19.
- 60. Su Jilan, Chen Bangyan and Jin Xianglong. Development in Precision Seafloor Survey and Mapping in China. Marine Geodesy, 25(2002), 79-86.
- 61. Cai Shuqun, Su Jilan, Gan Zijun and Liu Qinyu. The numerical study of the

- South China Sea upper circulation characteristics and its dynamic mechanism, in winter. Continental Shelf Research, (22)2002, 2247-2264.
- 62. Wang Guihua, Su Jilan and Peter C. Chu. Mesoscale eddies in the South China Sea observed with altimeter data. Geophysical Research Letters, 30(2003), No. 21, 2121, OCE 6-1 6-4.
- 63. Wong, L.A., Chen, J.C., Xue, H.L., Dong, X., Su, J.L., Heinke, G. A model study of the circulation for the Pearl River Estuary (PRE) and its adjacent coastal waters 1, Simulations and comparison with observations. Journal of Geophysical Research (Oceans), 108 (2003), 3156.
- 64. Wong, L.A., Chen, J.C., Xue, H.L., Dong, X., Su, J.L., Heinke, G. A model study of the circulation for the Pearl River Estuary (PRE) and its adjacent coastal waters. 2, Sensitivity Analysis. Journal of Geophysical Research (Oceans), 108 (2003), 3157.
- 65. WONG Lai Ah, GUAN Weibing, CHEN Jay-Chung and SU Jilan. A model study of influence of circulation on the pollutant transport in the Zhujiang River Estuary and adjacent coastal waters. Acta Oceanologica Sinica, 23 (2004), 225~237.
- 66. Su Jilan. Overview of the South China Sea circulation and its influence on the coastal physical oceanography outside the Pearl River Estuary. Continental Shelf Research, 24(2004), 1745-1760.
- 67. Dong L, J Su, L Wong, Z Cao and J Chen. Seasonal variation and dynamics of the Pearl River plume. Continental Shelf Research, 24(2004), 1761-1777.
- 68. Lin, C., X. Ning, J. Su, Y. Lin and B. Xu. Environmental Changes and the Responses of the Ecosystems of the Yellow Sea during 1976-2000. Journal of Marine Systems, 55(2005), 223-234.
- 69. Wang Guihua, Su Jilan and Li Ronfeng. Mesoscale eddies in the South China Sea and their impact on temperature profiles. Acta Oceanologica Sinica, 24 (2005), No.1, 39-45.
- 70. Huang, D., X. Fan, D. Xu, Y. Tong, and J. Su, Westward shift of the Yellow Sea warm salty tongue. Geophysical Research Letters, 32 (2005), L24613, doi:10.1029/2005GL024749.
- 71. Wang Guihua, Dake Chen and Su Jilan. Generation and life cycle of the dipole in the South China Sea summer circulation. Journal of Geophysical Research, 111 (2006), C06002, doi:10.1029/2005JC003314.
- 72. Oguz, T. and Su Jilan. Semi-Enclosed Seas, Islands and Australia Pan-Regional Overview. In: "The Sea", Vol. 14, The Global Coastal Ocean: Interdisciplinary Regional Studies and Syntheses (eds. A. R. Robinson and K. Brink), Harvard University Press, Cambridge, MA, 2006, (Part A) 83-116.
- 73. Zhang, J. and Su Jilan. Nutrient Dynamics of the China Seas: the Bohai Sea, Yellow Sea, East China Sea and South China Sea. In: "The Sea", Vol. 14, The Global Coastal Ocean: Interdisciplinary Regional Studies and Syntheses (eds. A. R.

- Robinson and K. Brink), Harvard University Press, Cambridge, MA, 2006, (Part A) 637-671.
- 74. Dong, L., J. Su, Y. Li, X. Xia and W. Guan. Physical Processes and Sediment Dynamics in the Pearl River Estuary, In: "The Environment in Asia Pacific Harbours" (ed. E. Wolanski), Springer, 2006, 127-138.
- 75. Dong Lixian, Su Jilan, Deng Jingyao and Chen Qi. The importance of estuarine gravitational circulation in the early life of the Bohai Penaeid Prawn. Journal of Marine Systems, 67 (2007), 253-262.
- 76. Wang G., J. Su, Y. Ding and D. Chen. Tropical Cyclones Genesis over the South China Sea. Journal of Marine Systems, 68 (2007), 318-326.
- 77. Wang G., Chen D. and J. Su. Winter Eddy Genesis in the Eastern South China Sea due to Orographic Wind-Jets. Journal of Physical Oceanography, 38 (2008), 726-732.
- 78. W Fennel, D Gilbert and Jilan Su. Chapter 6: Physical Processes in Semi-Enclosed Marine Systems. In "Watersheds, Bays and Bounded Seas" (eds. ER Urban, Jr., B Sundby, P Malanotte-Rizzoli and JM. Melillo), Island Press, Chicago, IL, 2008, 288pp.
- 79. J van de Koppel, P Tett, W Naqvi, T Oguz, GME Perillo, N Rabalais, MR d'Alcalà, Su Jilan, and Jing Zhang. Chapter 3: Threshold Effects in Semi-Enclosed Marine Systems. In "Watersheds, Bays and Bounded Seas" (eds. ER Urban, Jr., B Sundby, P Malanotte-Rizzoli and JM. Melillo), Island Press, Chicago, IL, 2008, 288pp.
- 80. Qinyu Liu, Arata Kwaneko and Su Jilan. Recent Progress in Studies of the South China Sea Circulation. Journal of Oceanography, 64 (2008), 753-762.
- 81. ZHOU Feng, HUANG DaJi & SU JiLan. Numerical simulation of the dual-core structure of the Bohai Sea cold bottom water in summer. Chinese Science Bulletin, 2009, doi:10.1007/s11434-009-0019-4
- 82. Ning XR, CL Lin, JL Su, CG Liu, Q Hao, FF Le, QS Tang. Long-term environmental changes and the responses of the ecosystems in the Bohai Sea during 1960–1996. Deep-Sea Research II, 57(2010), 1079-1091.
- 83. Ning XR, CL Lin, JL Su, CG Liu, Q Hao, FF Le. Long-term changes of dissolved oxygen, hypoxia, and the responses of the ecosystems in the East China Sea from 1975 to 1995. Journal of Oceanography, 67(2011), 59-75. doi:10.1007/s10872-011-0006-7
- 84. Wang, G.H, R. X. Huang, J.L. Su, and D. Chen: The effects of thermohaline circulation on wind-driven circulation in the South China Sea. Journal of Physical Oceanography, 42 (2012), 2283-2296
- 85. Wang, W., Liu H., Li Y.Q., Su J.L. (2014), Development and management of land reclamation in China, Ocean & Coastal Management, 415-425
- 86. Liu, X., C. Dong, D. Chen, and J. Su (2014), The pattern and variability of winter

- Kuroshio intrusion northeast of Taiwan, J. Geophys. Res. Oceans, 119, doi:10.1002/2014JC009879.
- 87. Yan, Y., G. Wang, C. Wang, and J. Su (2015), Low-salinity water off West Luzon Island in summer, J. Geophys. Res. Oceans, 120, 3011–3021, doi:10.1002/2014JC010465.
- 88. Liu, H and J Su (2015), Vulnerability of China's Nearshore Ecosystems under Intensive Mariculture Development, Environmental Science & Pollution Research (DOI: 10.1007/s11356-015-5239-3)

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- 1. Impact of Sea-Level Rise on the Major Deltas in China and its Mitigation Policy Options. Science Press, (1994), 354pp.
- 2. Study on Ecosystem Dynamics in Coastal Ocean. II. Processes of the Bohai Sea Ecosystem Dynamics, Science Press, (2002), 445pp.
- 3. Physical Oceanography of the China Seas. Ocean Press, (2005), 367pp.
- 4. Ecosystem Issues and Policy Options Addressing the Sustainable Development of China's Ocean and Coasts. (with extended English summary). China Environment Science Press, (2013), 493pp
- 5. Ecosystem Issues and Policy Options from Rapid Expansion of Ocean and Coastal Engineering along China's Coasts. Science Press, (2014), 209pp.