

## CURRICULUM VITAE

### Chen-Tung Arthur Chen

Institute of Marine Geology and Chemistry  
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#### Current Positions

Hsi-Wan Chair Professor, NSYSU, since 2006  
Director, Asia-Pacific Ocean Research Center, NSYSU, since 2006  
Vice-Chair, International Geosphere Biosphere Programme, since 2009

#### Education

Ph. D. in Chemical Oceanography, University of Miami, Miami, Florida, 1977  
M.S. in Chemical Oceanography, University of Miami, Miami, Florida, 1974  
Graduate course in Chemistry, Memphis State University, Memphis, Tenn, 1972  
B.S. in Chemical Engineering, National Taiwan University, Taipei, Taiwan, 1970

#### Professional Experience

##### Positions Held

2009 – present, Vice-Chair, International Geosphere Biosphere Programme  
2006 – present, Hsi-Wan Chair Professor, NSYSU  
2006 – present, Director, Asia-Pacific Ocean Research Center, NSYSU  
2003/9 – 2004/1, Visiting Research Fellow, IHAS, Nagoya University  
1989 – 1995, Director, Marine Sciences Research Center, NSYSU  
1989 – 1992, Dean, College of Marine Sciences, NSYSU  
1985 – 1989, Director, Institute of Marine Geology, NSYSU

##### Professional Activities (International)

1. International Geosphere Biosphere Programme (IGBP), Scientific Committee (2008 – 2010), Vice-Chair (2009 – present)
2. Continental Shelf Research; Editorial Board (2007 – present)
3. IAPSO/SCOR Working Group (127) on Thermodynamics and Equation of State of Seawater (2006 – present)
4. IGBP/WCRP/IHDP/DIVERSITAS Monsoon Asia Integrated Regional Study (MAIRS): Planning Committee, member (2002 - 2005); Scientific Steering Committee, member (2006 – present)

5. Journal of Ocean University of China; Editorial Board (2005 – present)
6. Pacific East Asia Circulation Experiment: Scientific Steering Committee, member (2004 – present)
7. Acta Oceanologica Sinica; Editorial Board. (2004 – present)
8. Journal of Marine Systems; Editorial Board (2001 – present)
9. UNESCO/ICES/SCOR/IAPSO Joint Panel of Experts on Oceanographic Tables and Standards, Invited Expert (1976 – 1988)

### **Professional Activities (National)**

1. Presidential Office: Science and Technology Advisory Committee, member (2005 – 2006)
2. Prime Minister's office:
  - Global Environmental Change Policy Steering Committee, member (1994 – 1997);
  - National Sustainable Development Committee, member (1997 – 2000); • Science and Technology Advisory Board, senior researcher (1988 – 1996).
3. Academia Sinica:
  - International Geosphere Biosphere Programme ROC Committee, member (1988 – 2004), Chair (1990 – 1994), executive member (1994 – 2008);
  - International Human Dimensions Programme on Global Environmental Change Taiwan Committee, executive member (2002 – 2004);
  - International Union of Geodesy and Geophysics ROC Committee, member (2000 – 2003);
  - Scientific Committee on Oceanographic Research ROC Committee, member (1987 – 2001), executive member (1992 – 1994);
  - Pacific Science Association ROC Committee, member (1991 – 1993)
4. National Science Council: Natural Sciences Advisor (1990 – 1992, 2002 – 2004), Biological Sciences Advisor (1990 – 1991)
5. Environmental Protection Administration:
  - Environmental Impact Assessment Board, member (1993 – 2005; 2007 – present);
  - Environmental Quality Advisory Board, member (1996 – 2001).
6. Water Resources Administration: Sustainable Development Center, advisor (1999 – 2002).
7. ROC Marine Science and Technology Association, executive member (1986 – 1990, 1995 – present), president (1990 – 1994).
8. Proceedings, Marine Science and Technology, Publisher (1991 – 1995)

### **Honors**

Hsi-Wan Chair Professorship, 2006 – 2009, 2009 – 2012  
 Outstanding Research Award, National Science Council, 1992, 2004, 2010  
 Cheng Chung Chair Professorship (Xiamen University), 2009  
 Ho Chin-Tuei Outstanding Honorable Award (500,000 TWD award), 2004  
 Distinguished Research Award, National Science Council, 1990, 1993 – 2001  
 Biwako Prize for Ecology (5 M Japanese Yen award), 1997  
 Sun Yat-Sen Research Award, 1984  
 Outstanding Young Man of America, 1978  
 Listed in Who's Who in the World and 30 other Who's Whos

## Recent Publications

### Papers Published in the Past Five Years

1. **Chen, C.T.A.\***, 2005. Tracing tropical and intermediate waters from the South China Sea to the Okinawa Trough and beyond; *Journal of Geophysical Research*, Vol. 110, C05012, doi:10.1029/2004JC002494, 2005 (SCI: 3.147; cited 12 times until 2010/03/16; this paper acknowledged NSC 92-2611-Z-110-005 and 92-2611-M-110-014).
2. **Chen, C.T.A.\***, B.J. Wang, J.F. Huang, J.Y. Lou, F.W. Kuo, Y.Y. Tu and H.S. Tsai, 2005. Investigation into extremely acidic hydrothermal fluids off Kueishan Tao, Taiwan, China; *Acta Oceanologica Sinica*, 24(1), 125-133 (SCI: 0.441; cited 4 times until 2010/03/16; this paper acknowledged NSC 91-2611-M-110-010).
3. **Chen, C.T.A.\*** and L.Y. Hsing, 2005. Degree of nutrient consumption as an aging index of upwelling or vertically mixed water in the Northern Taiwan Strait; *Acta Oceanologica Sinica*, 24(1), 115-124, (SCI: 0.441; cited 4 times until 2010/03/16; This paper acknowledged NSC-922611-M-110-014).
4. **Chen, C.T.A.\***, J. Zhang, T.R. Peng, and T. Hagiwara, 2005. Exploratory sampling of submarine groundwater discharge in Taiwan; *Geochemistry*, 39, 165-171 (cited once until 2010/03/16; this paper acknowledged NSC 93-2621-Z-110-004 and 93-2621-Z-005-002).
5. **Chen, C.T.A.\* (Chentung, A.C.)**, Z.G. Zeng, F.W. Kuo, T.Y. F. Yang, B.J. Wang, and Y.Y. Tu, 2005. Tide-influenced acidic hydrothermal system offshore NE Taiwan; *Chemical Geology*, 224, 69-81, doi:10.1016/j.chemgeo.2005.07.022 (SCI: 3.531; cited 9 times until 2010/03/16; this paper acknowledged NSC 89-2611-M-110-001).
6. Chou, W.C.\*, D.D.D. Sheu, **C.T.A. Chen**, S.L. Wang and C.M. Tseng, 2005. Seasonal variability of carbon chemistry at the SEATS Time-Series Site, northern South China Sea between 2002 and 2003; *Terrestrial, Atmospheric and Oceanic Sciences*, Vol. 16, No. 2, 445-465 (SCI: 0.594; cited 11 times until 2010/03/16).
7. Yang, T.F., T.F. Lan, H.F. Lee, C.C. Fu, P.C. Chuang, C.H. Lo, C.H. Chen, **C.T.A. Chen**, C.S. Lee; Gas compositions and helium isotopic ratios of fluid samples around Kueishantao, NE offshore Taiwan and its tectonic implications; *Geochemical Journal*, 39(5), 469-480 (SCI: 0.798; cited 13 times until 2010/03/16).
8. Liu, C.H.\*, Z.G. Zeng, X.B. Yin and Zhen-Dong (**Chen-Tung**) **Chen**, 2006. Basic characters of native sulfur chimneys near the sea off Kueishantao from the Northern Taiwan; *Journal of Oceanography in Taiwan Strait*, 25, 309-317 (in Chinese with English abstract).
9. Selvaraj, K.\* and **C.T.A. Chen**, 2006. Moderate chemical weathering of subtropical Taiwan: Constraints from solid-phase geochemistry of sediments and sedimentary rocks; *The Journal of Geology*, volume 114, p. 101-116 (SCI: 3.035; cited 13 times until 2010/03/16; this paper acknowledged NSC 93-2611-M-110-009, 93-2821-M-110-006 and 93-2621-Z-110-004).
10. **Chen, C.T.A.\*** and D.D. Sheu, 2006. Does the Taiwan Warm Current originate in the Taiwan Strait in winter-time? *Journal of Geophysical Research*, VOL. 111, C04005, doi:10.1029/2005JC003281 (SCI: 3.147; cited 12 times until 2010/03/16; this paper acknowledged NSC 94-2611-M-110-001, NSC 94-2621-Z-110-001 and Aim for the Top University Plan 95C 030211).
11. **Chen, C.T.A.\***, W.P. Hou, T. Gamo, and S.L. Wang, 2006. Carbonate related parameters of subsurface waters in the West Philippine, South China and Sulu Seas; *Marine Chemistry*, 99, 151-161, doi:10.1016/j.marchem.2005.05.008 (SCI: 2.977; cited 13 times until 2010/03/16; this paper acknowledged NSC 93-2621-Z-110-004).
12. **Chen, C.T.A.\***, S.L. Wang, W.C. Chou and D.D. Sheu, 2006. Carbonate chemistry and projected future changes in pH and CaCO<sub>3</sub> saturation state of the South China Sea; *Marine Chemistry*, 101, 277-305, doi:10.1016/j.marchem.2006.01.007 (SCI: 2.977; cited 7 times until 2010/03/16; This paper acknowledged NSC 94-2611-Z-110-001, 95-2611-M-110-001, EPA 851003-09-13 and Aim for the Top University Plan 95C 100302).

13. **Chen, C.T.A. (Chen, TA)\*** and S.L. Wang, 2006. A salinity front in the southern East China Sea separating the Chinese coastal and Taiwan Strait waters from Kuroshio waters; *Continental Shelf Research*, 26, 1636-1653, doi:10.1016/j.csr.2006.05.003 (SCI: 2.136; cited twice until 2010/03/16; this paper acknowledged NSC 94-2611-M-110-001, 94-2621-Z-110-001 and Aim for the Top University Plan 95C 030211).
14. **Chen, C.T.A.\*** and H.C. Tseng, 2006. Abnormally high CH<sub>4</sub> concentration in seawater at middepths on the continental slopes of the northern South China Sea; *Terrestrial, Atmospheric Oceanic Sciences*, 17(4), 951-959 (SCI: 0.594; cited 9 times until 2010/03/16; this paper acknowledged NSC 94-2621-Z-110-001, 94-2611-M-110-001 and Aim for the Top University Plan 95C 030211; HiCi in 2007).
15. Zhang, S.R.\*, X.X. Lu, D.L. Higgitt, **C.T.A. Chen**, H.G. Sun and J.T. Han, 2007. Water chemistry of the Zhujiang (Pearl River): natural processes and anthropogenic influences; *Journal of Geophysical Research*, 112, F01011, doi:10.1029/2006JF000493 (SCI: 3.147; cited 6 times until 2010/03/16).
16. Selvaraj, K.\*, **C.T.A. Chen** and J.Y. Lou, 2007. Holocene East Asian monsoon variability: links to solar and tropical Pacific forcing; *Geophysical Research Letters*, 34, L01703, doi:10.1029/2006GL028155 (SCI: 2.959; cited 3 times until 2010/05/19; this paper acknowledged NSC 94-2621-Z-110-001 and 94-2611-M110-001).
17. N.Z. Jiao\*, Y. Zhang, Y.H. Zeng, W.D. Gardner, A.V. Mishonov, M.J. Richardson, N. Hong, D.L. Pan, X.H. Yan, Y.H. Jo, **C.T.A. Chen**, P.X. Wang, Y.Y. Chen, H.S. Hong, Y. Bai, X.H. Chen, B.Q. Huang, H. Deng, Y. Shi and D.C. Yang, 2007. Ecological anomalies in the East China Sea: Impacts of the Three Gorges Dam? *Water Research*, 41, 1287-1293, doi:10.1016/j.watres.2006.11.053 (SCI: 3.587; cited 18 times until 2010/05/19).
18. Nagender Nath, B.\*, A. Aldahan, G. Possnert, K. Selvaraj, M.B.L. Mascarenhas-Pereira and **C.T.A. Chen**, 2007. <sup>10</sup>Be variation in surficial sediments of the Central Indian Ocean Basin; *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 259, 610-615, doi:10.1016/j.nimb.2007.01.293 (SCI: 0.999; cited once until 2010/03/17; this paper acknowledged NSC 94-2621-Z-110-001, 94-2611-M110-001 and 95-2621-Z-110-005).
19. Chou, W.C.\*, D.D. Sheu, B.S. Lee, C.M. Tseng, **C.T.A. Chen**, S.L. Wang and G.T.F. Wong, 2007. Depth distributions of alkalinity, TCO<sub>2</sub> and δ<sup>13</sup>C<sub>TCO<sub>2</sub> at SEATS time-series site in the northern South China Sea; *Deep-Sea Research II*, 54, 1469-1485, doi: 10.1016/ j.dsr 2.2007.05.002 (SCI: 1.411; cited 6 times until 2010/05/19).</sub>
20. Chou, W.C.\*, D.D. Sheu, **C.T.A. Chen**, L.S. Wen, Y. Yang and C.L. Wei, 2007. Transport of the South China Sea subsurface water outflow and its influence on carbon chemistry of Kuroshio waters off southeastern Taiwan; *Journal of Geophysical Research*, Vol. 112, C12008, doi:10.1029/2007JC004087 (SCI: 3.147; cited 4 times until 2010/05/19).
21. Zeng, Z.G.\*, C.H. Liu, **C.T.A. Chen**, X.B. Yin, D.G. Chen, X.Y. Wang, X.M. Wang and G.L. Zhang, 2007. Origin of a native sulfur chimney in the Kueishantao hydrothermal field, offshore northeast Taiwan; *Science in China (D)*, 50(11), 1746-1753, doi: 10.1007/s11430-007-0092-y (SCI: 0.725).
22. **Chen, C.T.\*** and K. Selvaraj, 2008. Evaluation of elemental enrichments in surface sediments off southwestern Taiwan; *Environmental Geology*, 54, 1333-1346, DOI 10.1007/s00254-0070916-2, (SCI: 1.026; cited once until 2010/03/17; This paper acknowledged NSC 86-2611-M110-007W, 93-2621-Z-110-004, 95-2621-Z-110-005, 95-2611-M-110-001 and Aim for the Top University Plan 95C 0312).
23. Zhang, S.R.\*, X.X. Lu, D.L. Higgitt, **C.T.A. Chen**, J.T. Han and H.G. Sun, 2008. Recent changes of water discharge and sediment load in the Zhujiang (Pearl River) Basin, China; *Global and Planetary Change*, 60, 365-380, doi:10.1016/j.gloplacha.2007.04.003 (SCI: 2.670; cited 10 times until 2010/03/17).

24. Kurian, S.\*, B. Nagender Nath, V. Ramaswamy, D. Naman, T. Gnaneshwar Rao, K.A. Kamesh Raju, K. Selvaraj and **C.T.A. Chen**, 2008. Possible detrital, diagenetic and hydrothermal sources for Holocene sediments of the Andaman backarc basin; *Marine Geology*, 247, 178-193; doi:10.1016/j.margeo.2007.09.006 (SCI: 2.100; This paper acknowledged NSC 94-2621-Z110-001 and 94-2611-M-110-001).
25. **Chen, C.T.A.\***, S.L. Wang, X.X. Lu, S.R. Zhang, H.K. Lui, H.C. Tseng, B.J. Wang and H.I. Huang, 2008. Hydrogeochemistry and greenhouse gases of the Pearl River, its estuary and beyond; *Quaternary International*, 186, 79-90, doi:10.1016/j.quaint.2007.08.024 (SCI: 1.482; cited 3 times until 2010/03/19; this paper acknowledged NSC 95-2621-Z-110-005, 95-2611-M110-001 and Aim for the Top University Plan 95C 0312).
26. Cai, W.J.\*, X.H. Guo, **C.T.A. Chen**, M.H. Dai, L.J. Zhang, W.D. Zhai, S.E. Lohrenz, K. Yin, P.J. Harrison and Y.C. Wang, 2008. A comparative overview of weathering intensity and HCO<sub>3</sub><sup>-</sup> flux in the world's largest rivers with emphasis on the Changjiang, Huanghe, Zhujiang (Pearl) and Mississippi Rivers; *Continental Shelf Research*, 28, 1538-1549, doi:10.1016/j.csr.2007.10.014 (SCI: 2.136; cited 5 times until 2010/03/17; this paper acknowledged NSC 95-2621-Z-110-005).
27. **Chen, C.T.A.\***, W.D. Zhai and M.H. Dai, 2008. Riverine input and air-sea CO<sub>2</sub> exchanges near the Changjiang (Yangtze River) Estuary: Status quo and implication on possible future changes in metabolic status; *Continental Shelf Research*, 28, 1476-1482; doi:10.1016/j.csr.2007.10.013, 2008. (SCI: 2.136; cited twice until 2010/03/17; this paper acknowledged NSC 94-2621-Z-110-001, 95-2611-M-110-001 and Aim for the Top University Plan 95C 0312).
28. Peng, T.R.\*, **C.T.A. Chen**, C.H. Wang, J. Zhang and Y.J. Lin, 2008. Assessment of terrestrial factors controlling the submarine groundwater discharge in water shortage and highly deformed island of Taiwan, Western Pacific Ocean; *Journal of Oceanography*, 64, 323-337 (SCI: 1.189; this paper acknowledged NSC 93-2621-Z-005-002, 94-2621-Z-005-006, 95-2621Z-005-005, 95-2611-M-110-001, 95-2621-Z-110-005).
29. Naik, H.\* and **C.T.A. Chen**, 2008. Biogeochemical cycling in the Taiwan Strait; *Estuarine, Coastal and Shelf Science*, 78, 603-612; doi:10.1016/j.ecss.2008.02.004 (SCI: 2.072; cited once until 2010/03/17; this paper acknowledged NSC 95-2621-M-110-001 and 94-2621-Z-110-001).
30. Rabouille, C.\*, D.J. Conley, M. Dai, W.-J. Cai, **C.T.A. Chen**, B. Lansard, R. Green, K. Yin, P.J. Harrison, D. Magg, B. McKee, 2008. Comparison of hypoxia among four river-dominated ocean margins: The Changjiang (Yangtze), Mississippi, Pearl and Rhône rivers; *Continental Shelf Research*, 28, 1527-1537; doi:10.1016/j.csr.2008.01.020 (SCI: 2.136; cited 3 times until; 2010/03/17).
31. Selvaraj, K.\*, **C.T.A. Chen** and J.Y. Lou, 2008. Holocene weak summer East Asian monsoon intervals in subtropical Taiwan and their global synchronicity; *Climate of the Past Discussions*, 4, 929-953 (this paper acknowledged NSC NSC-95-2621-Z-110-005 and 95-2611-M110-001).
32. **Chen, C.T.A.\***, 2008. Distributions of nutrients in the East China Sea and the South China Sea connection; *Journal of Oceanography*, 64, 737-751 (SCI: 1.189; cited twice until 2010/03/17; this paper acknowledged NSC 96-2621-Z-110-002, 96-2628-M-110-002-MY3 and Aim for the Top University Plan (95C 0312)).
33. Aldrian, E.\*, **C.T.A. Chen**, S. Adi, Prihartanto, N. Sudiana and S. P. Nugroho, 2008. Spatial and seasonal dynamics of riverine carbon fluxes of the Brantas catchment in East Java; *Journal of Geophysical Research - Biogeochemical*, VOL. 113, G03029, doi:10.1029/2007G000626 (SCI: 3.147; cited once until; 2010/03/18; this paper acknowledged NSC 95-2621-Z-110-005 and Aim for the Top University Plan (94C 030200)).
34. Liu, Z.F.\*, S. Tuo, C. Colin, J.T. Liu, C.-Y. Huang, K. Selvaraj, **C.T.A. Chen**, Y. Zhao, F.P. Siringan, S. Boulay and Z. Chen, 2008. Detrital fine-grained sediment contribution from Taiwan to the northern South China Sea and its relation to regional ocean circulation; *Marine Geology*, 255, 149-155, doi: 10.1016/j.margeo.2008.08.003 (SCI: 2.100; cited 3 times until; 2010/03/18)

35. **Chen, C.T.A.(Arthur, C.C.T.)\***, 2008. Buoyancy leads to high productivity of the Changjiang Diluted Water: a note; *Acta Oceanologica Sinica*, 27(6), 133-140 (SCI: 0.441; This paper acknowledged NSC 96-2621-Z-110-002, 96-2628-M-110-002-MY3 and Aim for the Top University Plan 96C 0312).
36. **Chen, C.T.A.\***, 2009. Chemical and physical fronts in the Bohai, Yellow and East China Seas; *Journal of Marine Systems*, 78(3), 394-410, doi:10.1016/j.jmarsys.2008.11.016 (SCI: 2.255; cited 3 times until 2010/05/19; this paper acknowledged NSC 95-2611-M-110-001, 94-2621-Z110-001 and Aim for the Top University Plan (Contract No. 95C 0312)).
37. **Chen, C.T.A.\*** and A.V. Borges, 2009. Reconciling opposing views on carbon cycling in the coastal ocean: continental shelves as sinks and near-shore ecosystems as sources of atmospheric CO<sub>2</sub>; *Deep-sea Research II*, 56, 578-590, doi:10.1016/j.dsr2.2009.01.001 (SCI: 1.411; cited 13 times until 2010/05/19; this paper acknowledged NSC 95-2621-Z-110-005 and 95-2621-M-10-001; HiCi in 2010).
38. Dai, M.H.\*, Z.M. Lu, W.D. Zhai, B.S. Chen, Z.M. Cao, K.B. Zhou, W.J. Cai and **C.T.A. Chen**, 2009. Diurnal variations of surface seawater pCO<sub>2</sub> in contrasting coastal environments; *Limnology and Oceanography*, 54(3), 735-745, 2009. (SCI: 3.663; cited once until 2010/05/19).
39. Jan, S.\* and **C.T.A. Chen**, 2009. Potential biogeochemical effects from vigorous internal tides generated in Luzon Strait: A case study at the southernmost coast of Taiwan; *Journal of Geophysical Research*, 114, C04021, doi:10.1029/2008JC004887 (SCI: 3.147; cited once until; 2010/03/18; this paper acknowledged NSC 95-2621-Z-110-005, NSC 96-2628-M110-002-MY3, and Aim for the Top University Plan 95C0312).
40. Sheu, D.D.\*, W.C. Chou, **C.T.A.Chen**, C.L. Wei, H.L. Hsieh, W.P. Hou and M.H. Dai, 2009. Riding over the Kuroshio from the South to the East China Sea: Mixing and transport of DIC; *Geophysical Research Letters*, VOL. 36, L07603, doi:10.1029/2008GL037017 (SCI: 2.959).
41. Luh, L.J.\*, M.H.A. El-Razek, C.-C. Liaw, **C.T.A. Chen**, Y.S. Lin, Y.H. Kuo, C.T. Chien, and Ya-Ching Shen, 2009. Tri- and Bicyclic Taxoids from the Taiwanese Yew *Taxus sumatrana*; *Helvetica Chimica Acta*, 92(7), 1349-1358 (SCI: 1.396).
42. Liu, C.H.\*, X.M. Wang, X.D. Jin, Z.G. Zeng, **C.T.A Chen**, 2009. The contribution of trace elements from seawater to chimneys: a case study of the native sulfur chimneys in the sea area off Kueishantao, northeast of Taiwan Island; *Chinese Journal of Oceanology and Limnology*, 27 (1), 162-171, 2009.
43. West, A.J.\*, H.C. Wang, K. Selvaraj, **CTA Chen**, TC Lin, 2009. An empirical case study of contrasting chemical depletion of hillslope regolith and eroding sediment, and implications for soil-derived catchment weathering rates; *Geochimica et Cosmochimica Acta*, 73(13): A1430A1430 (SCI: 4.235)
44. Andreev, A.G.\*, **C.T.A. Chen**, S. Watanabe, 2009. Calculation methods and the distribution of anthropogenic variations of pH values in the Pacific Subarctic; *Oceanology*, 49 (3), 418-428, doi: 10.1134/S000143700903014X (SCI: 0.343)
45. Peng, T.R.\*, C.H. Wang, C.C. Huang, L.Y. Fei, **C.T.A. Chen**, J.L. Hwong, 2010. Stable isotopic characteristic of Taiwan's precipitation: A case study of western Pacific monsoon region; *Earth and Planetary Science Letters*, 289 (3-4), 357-366, doi:10.1016/j.epsl.2009.11.024 (SCI:3.955; cited once until; 2010/03/18)
46. Gao, X.L.\*, **C.T.A. Chen**, G. Wang, Q.Z. Xue, C. Tang, S.Y. Chen, 2010. Environmental status of Daya Bay surface sediments inferred from a sequential extraction technique; *Estuarine, Coastal and Shelf Science*, 86 (3), 369-378, doi:10.1016/j.ecss.2009.10.012 (SCI: 2.072)
47. **Chen, C.T.A.\***, S. Jan , T.H. Huang , Y.H. Tseng, 2010. The Spring of no Kuroshio Intrusion in the Southern Taiwan Strait; *Journal of Geophysical Research*, accepted.(SCI: 3.147; This paper acknowledged NSC96-2621-Z-110-002; NSC96-2628-M-110-002-MY3, and the "Aim for the Top University" program (Contract No. 96 C0312)
48. Selvaraj, K.\*, G. Parthiban, **C.T.A. Chen**, and J.Y. Lou, 2010. Anthropogenic effects on sediment quality offshore southwestern Taiwan: Assessing the sediment core geochemical record;

Continental Shelf Research, 30 (10), 1200–1210, doi:10.1016/j.csr.2010.03.010 (SCI: 2.136; This paper acknowledged NSC NSC 97-2611-M-110-002 and 97-2811-M-110-026) and the Aim for the Top University Program)

49. Kim, T.-W., K. Lee\*, R.A. Feely, C.L. Sabine, **C.T.A. Chen**, H.J. Jeong and K.Y. Kim, 2010. Prediction of East/Japan Sea acidification over the past 40 years using a multiple-parameter regression model; *Global Biogeochemical Cycles*, in press (SCI: 4.090).
50. Yung-Yao Lan, Ben-Jei Tsuang\*, Noel Keenlyside, Shu-Lun Wang, **Chen-Tung Arthur Chen**, Bin-Jye Wang, Tsun-Hsien Liu, 2010. Error estimations of dry deposition velocities of air pollutants using bulk sea surface temperature under common assumptions; *Atmospheric Environment*, accepted, doi:10.1016/j.atmosenv.2010.04.021 (SCI: 2.89)

#### **Books and Book Chapters Published in the Past Five Years**

1. Salomons, Wim, H.H. Kremer, R.K. Turner, E.N. Andreeva, R.S. Arthurton, H. Behrendt, P. Burbridge, **C.T.A. Chen**, C.J. Crossland, J. Gandrass, V.V. Gordeev, N. Harvey, G.H. Hong, B. Kjerfve, L.D. de Lacerda, J.I. Marshall Crossland, N. Morcom, E. Odada, J. Pacyna, N.N. Rabalais, D. Swaney, W.J. Wiebe, 2005. The catchment to coast continuum; in “Coastal Fluxes in the Anthropocene”, C.J. Crossland, H.H. Kremer, H.J. Lindeboom, J.I. Marshall Crossland, M.D.A. Le Tissier (Eds.), Springer, Berlin, ISBN: 3-540-25450-1, 145-200 (231pp) (cited 5 times until 2010/03/16).
2. Fu, C., F.W.T Penning de Vries, Ailikun, **C.T.A. Chen**, L. Lebel, M. Manton, A. Snidvongs, H. Virji (eds), 2006. The Initial Science Plan of the Monsoon Asia Integrated Regional Study; MAIRS-IPO, IAP-CAS, P.O. Box 9804, 100029 Beijing, China, 80 pp.
3. Nihoul, J.C.J. and **C.T.A. Chen**, 2007. Oceanography; in: “Oceanography” (<http://www.eolss.net/eBooks>), ed. by J.C.J. Nihoul and C.T.A. Chen, in *Encyclopedia of Life Support Systems (EOLSS)*, Developed under the Auspices of the UNESCO, Eolss Publishers, Oxford, UK, ISBN: 978-1-905839-62-9 e-Book, Vol. 1, 1-36.
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