

# CURRICULUM VITAE

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## Education

### UNIVERSITY OF OXFORD

Department of Earth Sciences  
D.Phil. Geology and Geophysics, 2001

### NATIONAL TAIWAN UNIVERSITY

Institute of Geology  
M. Sc. Geology, 1991

### NATIONAL CHENG-KUNG UNIVERSITY

Department of Earth Sciences  
B. Sc. Geology, 1988

## Experience

### NATIONAL CENTRAL UNIVERSITY

- Associate Professor: August 2009 – Present
- Co-coordinator of TIGP-ESS (Taiwan International Graduate Program – Earth System Science): August 2014 - Present
- Acting Head of Department of Earth Science, National Central University: April to July 2015
- Assistant Professor August 2002 – July 2009

### CHINESE PETROLEUM CORPORATION, TAIWAN

- Petroleum Geologist 1991-1996, 2001-2002

## Current Researches

Geodynamics and kinematics of foreland basins and mountain belts, sequence stratigraphy, gas-hydrate exploration, CO<sub>2</sub> geo-sequestration, marine geology and geophysics, thermal structure of the Taiwan arc-continent collision zone

## Recent Professional Services (past 5 years)

### Journal Editorial Services:

- 2012 ~ Present: Associate editor for the journal “Island Arc” (SCI journal, ISSN: 1440-1738) published by Blackwell-Wiley on behalf of the Geological Society of Japan
- 2013 ~ Present: Member of the editorial board for the journal of “Western Pacific Earth Sciences”

(ISSN: 1609-901X) published by Geological Society Located in Taipei

- 2011 ~ Present: Member of the editorial board for the journal of “Petroleum Geology of Taiwan” (ISSN 0553-8890) published by Chinese Petroleum Institute in cooperation with CPC Corporation, Taiwan
- 2011 ~ Present: Member of the editorial board for the journal of “Ti-Chih” (Geology, ISSN 0303-092X), published by Central Geological Survey, Ministry of Economic Affairs, and Geological Society Located in Taipei

#### **Professional Society Services:**

- 2015 ~ Present: Member of the Industrial Development Committee, Taiwan Carbon Capture Storage and Utilization Association (TCCSUA)
- 2013 ~ Present: Chair of Western Pacific Sedimentologists Group (WPSG)
- 2013 ~ Present: National Correspondent of International Association of Sedimentologists (IAS)
- 2009.5 ~ Present: Member of the Council, Geological Society Located in Taipei
- 2013 ~ Present: Chair of the “Committee on International and Mainland Chinese Affairs” of the Geological Society Located in Taipei
- 2011 ~ Present: Member of the Members Committee, Geological Society Located in Taipei
- 2003.8 ~ Present: National member of the Committee for Quaternary Geological Research, Geological Society Located in Taipei
- 2009.5~2013.4: Member of the Awards Committee, Geological Society Located in Taipei
- 2007.5~2013.4: Member of the Committee, Stratigraphy and Paleontology Research Group, Geological Society Located in Taipei

#### **Government Agency Services:**

Members of Project Committees for the following government agencies: Central Geological Survey (MOEA), Bureau of Energy (MOEA), Bureau of Mine (MOEA), Water Resources Agency (MOEA), Environmental Protection Agency, Atomic Energy Council.

#### **Honors and Awards (past 5 years)**

- 2015: 2014 Excellent Paper Award of the journal “Ti-Chih” published by Central Geological Survey (MOEA), and Geological Society Located in Taipei
- 2011: Most Cited Paper 2006-2010 Award of the SCI journal “Terrestrial, Atmospheric and Oceanic Sciences published by Chinese Geoscience Union
- 2011: Outstanding Teaching Award, National Central University

#### **Professional Affiliations**

- Geological Society Located in Taipei (Member)
- Chinese Taipei Geophysical Society (Member)
- International Association of Sedimentologists (Member)
- Society for Sedimentary Geology (Member)

- Geological Society of America (Member)
- American Geophysical Union (Member)

## Publications

**ARTICLES** (Peer reviewed, \*: Corresponding author)

- Liao, W.-Z., **Lin, A.T.\***, Liu, C.-S., Oung, J.-N., Wang, Y. 2016. A study on tectonic and sedimentary development in the rifted northern continental margin of the South China Sea near Taiwan. Interpretation (under review).
- Lehu, R., Lallemand, S., Hsu, S.-K., Ratzov, G., Babonneau, N., **Lin, A.T.**, Dezileau, L. 2016. Reconstructing 2,700 years earthquakes history using deep-sea turbidites offshore eastern Taiwan. Tectonophysics (under revision).
- Lin, J.-Y., Hsu, S.-K., **Lin, A.T.**, Yeh, Y.-C., Lo, C.-L. 2015. Vp/Vs distribution in the northern Taiwan area: Implications for the tectonic structures and rock property variations. Tectonophysics, doi:10.1016/j.tecto.2015.09.013 (in press).
- Wu, W.-J., Dong, J.-J., **Lin, A.T.**, Yu, Y.-C., Pan, T.-Y., Tong, L.-T., Li, M.-H., Ni, C.-F., Shimamoto, T. 2015. Influence of stress history on estimates of the porosity of sedimentary rocks: Implications for geological CO<sub>2</sub> storage in northern Taiwan. Terrestrial Atmospheric and Oceanic Sciences (accepted)
- Dezileau, L., Lehu, R., Lallemand, S., Hsu, S.-K., Babonneau, N., Ratzov, G., **Lin, A.T.**, Dominguez, S. 2016. Historical reconstruction of submarine earthquakes using <sup>210</sup>Pb, <sup>137</sup>Cs and <sup>241</sup>Am turbidite chronology and radiocarbon reservoir age estimation off East Taiwan. Radiocarbon 1-12, doi:10.1017/RDC.2015.3.
- Lehu, R., Lallemand, S., Hsu, S.-K., Babonneau, N., Ratzov, G., **Lin, A.T.**, Dezileau, L. 2015. Deep-sea sedimentation offshore eastern Taiwan: Facies and processes characterization. Marine Geology, 369, 1-18. doi:10.1016/j.margeo.2015.05.013.
- Pan, T.-Y., **Lin, A.T.\***, Chi, W.-R. 2015. Paleoenvironments of the evolving Pliocene to early Pleistocene foreland basin in northwestern Taiwan: An example from the Dahan River section. Island Arc, 24, 317-341. doi:10.1111/iar.12113.
- 林殿順、劉家瑄 2014. 台灣西南外海天然氣水合物賦存模式暨資源潛能。地質，第 33 卷，第 3 期，25-29 頁。
- Liao, W.-Z., **Lin, A.T.\***, Liu, C.-S., Oung, J.-N., Wang, Y. 2014. Heat flow in the rifted continental margin of the South China Sea near Taiwan and its tectonic implications. Journal of Asian Earth Sciences, 92, 233–244.
- Mesalles, L., Mouthereau, F., Bernet, M., Chang, C.-P., **Lin, A.T.**, Fillon, C., Sengelen, X. 2014. From submarine continental accretion to arc-continent orogenic evolution: the thermal record in southern Taiwan. Geology, 42(10), 907-910.
- Sung, R.-T., Li, M.-H., Dong, J.-J., **Lin, A.T.**, Hsu, S.-K., Wang, C.-Y., Yang, C.-N. 2014. Numerical assessment of CO<sub>2</sub> geological sequestration in sloping and layered heterogeneous formations: A case study from Taiwan. International Journal of Greenhouse Gas Control, 20, 168–179.
- Nagel, S., Castelltort, S., Garzanti, E., **Lin, A.T.**, Willet, S.D., Mouthereau, F., Limonta, M., Adatte, T. 2014. Provenance evolution during arc-continent collision: Sedimentary petrography of Miocene

- to Pleistocene sediments in the western foreland basin of Taiwan. *Journal of Sedimentary Research*, 84, 513-528.
- Lin, C.-C., **Lin, A.T.\***, Liu, C.-S., Horng, C.-S., Chen, G.-Y., Wang, Y. 2014. Canyon-infilling and gas hydrate occurrences in the frontal fold of the offshore accretionary wedge off southern Taiwan. *Marine Geophysical Research* 35, 21-35
- Teng, L.S., Song, S.-R., Yeh, E.-C., **Lin, A.T.**, Liu, C.-M., Tsai, Y.-L. 2013. Tectonic appraisal of geothermal potential of Taiwan. *Western Pacific Earth Sciences* 13, 1-38. (in Chinese) (鄧屬予、宋聖榮、葉思肇、**林殿順**、劉佳玫、蔡宜伶(2013) 從大地構造看台灣地熱潛能。西太平洋地質科學，第 13 卷，1-38 頁。)
- Lin, Z.-C., **Lin, A.T.\***, Yu, S.-W., Liao, T.-P., Xu, G.-W. 2013. Fossil seed from the Miocene Shihti Formation of Taiwan. *Terr. Atmos. Sci.* 24(4, Part II), 731-735.
- Nagel, S., Castellort, S., Wetzels, A., Willett, S.D., Mouthereau, F., **Lin, A.T.** 2013. Sedimentology and foreland basin paleogeography during Taiwan arc continent collision. *Journal of Asian Earth Sciences* 62, 180-204.
- Chen, L., Yi, H., Tsai, L.L., Xu, G., Da, X., **Lin, A.T.** 2013. Jurassic black shales facies from Qiangtang Basin (Northern Tibet): Rare earth and trace elements for paleoceanographic implications. *Acta Geologica Sinica*, 87(2), 540-554.
- Chen, L., **Lin, A.T.**, Tsai, L.L., Yi, H., Xu, G., Da, X. 2012. Sea-level change records by cerium anomalies of the Tithonian (Late Jurassic) black rock series in Qiangtang Basin, northern Tibet. *Oil Shale*, 29(1), 18-35.
- Chen, L., Zhong, H., Hu, R., Xiao, J., Tsai, L.L., **Lin, A.T.**, Zou, Y. 2012. Paleoceanographic indicators for early Cambrian black shales from the Yangtze Platform, South China: Evidence from biomarkers and carbon isotopes. *Acta Geologica Sinica*, 86(5), doi:10.1111/j.1755-6724.2012.00737.x.
- Huang, A.-H., **Lin, A.T.\***, Jiang, W.-T., Wu, R.-Z. 2012. Clay mineralogy of the Miocene-Pleistocene sedimentary rocks, NW Taiwan. *Western Pacific Earth Sciences* 12, 65-84. (in Chinese) (黃安和、**林殿順\***、江威德、吳榮章(2012) 台灣西北部中新世--更新世沈積岩黏土礦物研究。西太平洋地質科學，第 12 卷，第 2 期，65-84 頁。)
- Schnurle, P., Liu, C.-S., **Lin, A.T.**, Lin, S. 2011. Structural controls on the formation of BSR over a diapiric anticline from a dense MCS survey offshore southwestern Taiwan. *Marine and Petroleum Geology*, 28(10), 1932-1942.
- Castellort, S., Nagel, S., Mouthereau, F., **Lin, A.T.**, Wetzels, A., Kaus, B., Willett, S., Chiang, S.-P., Chiu, W.-Y. 2011. Sedimentology of early Pliocene sandstones in the south-western Taiwan foreland: Implications for basin physiography in the early stages of collision. *Journal of Asian Earth Sciences* 40(1), 52-71.
- Chuang, P.-C., Yang, T.F., Hong, W.-L., Lin, S., Sun, C.-H., **Lin, A.T.**, Chen, J.-C., Wang, Y., Chung, S.-H. 2010. Estimation of methane flux offshore SW Taiwan and the influence of tectonics on gas hydrate accumulation. *Geofluids* 10, 497-510.
- Yuan, B.-D., **Lin, A.T.** 2009. Introduction to the draft for the "Stratigraphic Code of the Republic of

China", Central Geological Survey, Special Publication 22, 1-11. (in Chinese) (袁彼得、林殿順 (2009)簡介『中華民國地層命名原則』草案。經濟部中央地質調查所特刊，第22號，1-11頁。)

- Lin, A.T.**, Yao, B., Hsu, S.-K., Liu, C.-S., Huang, C.-Y., 2009. Tectonic features of the incipient arc-continent collision zone of Taiwan: Implications for seismicity. *Tectonophysics* 479, 28-42, 10.1016/j.tecto.2008.11.004.
- Wu, M.-S., Liang, S.-C., Chang, K.-H., Hu, C.-C., Wang, C.-Y., **Lin, A.T.** 2009. Discussion of highstand systems tract of Lower Miocene, Northern Depression of Tainan Basin. *Journal of Petroleum* 45(1), 1-16. (in Chinese) (吳明賢、梁守謙、張國雄、胡錦城、王乾盈、林殿順 (2009)台南盆地北部凹陷下部中新統高水位體系域之探討。石油季刊，第45期，1-16頁。)
- Lin, C.-C., **Lin, A.T.\***, Liu, C.-S., Schnurle, P., Chen, G.-Y., Liao, W.-Z., 2009. Geological controls on BSR occurrences in the incipient arc-continent collision zone off southwest Taiwan. *Marine and Petroleum Geology* 26, 1118-1131, 10.1016/j.marpetgeo.2008.11.002.
- Lin, A.T.**, Liu, C.-S., Lin, C.-C., Schnurle, P., Chen, G.-Y., Liao, W.-Z., Teng, L.S., Chuang, H.-J., Wu, M.-S., 2008. Tectonic features associated with the overriding of an accretionary wedge on top of a rifted continental margin: An example from Taiwan. *Marine Geology* 255, 186-203, 10.1016/j.margeo.2008.10.002.
- Chiang, C.-W., Chen, C.-S., Unsworth, M., Chen, C.-C., **Lin, A.T.**, Hsu, H.-L. 2008. Fault zone resistivity structure and monitoring at the Taiwan Chelungpu Drilling Project (TCDP). *Terrestrial, Atmospheric and Oceanic Sciences* 19(5), 473-479, doi:10.3319/TAO.2008.19.5.473(T).
- Hsu, S.-K., Yeh, Y.-C., Lo, C.-L., **Lin, A.T.**, 2008. Link between crustal magnetization and earthquakes in Taiwan. *Terrestrial, Atmospheric and Oceanic Sciences* 19(5), 445-450, doi:10.3319/TAO.2008.19.5.445(T).
- Clift, P.D., **Lin, A.T.**, Carter, A., Wu, F., Draut, A.E., Lai, T.-H., Fei, L.-Y., Schouten, H., Teng, L.S., 2008. Post-collisional collapse in the wake of migrating arc-continent collision in the Ilan Basin, Taiwan. in Draut, A.E., Clift, P.D., Scholl, D.W. (eds) *Formation and Applications of Sedimentary Record in Arc Collision Zones*, Geological Society of America Special Papers, 436, 257-278, doi: 10.1130/2008.2436(12).
- Lin, A.T.**, Wang, S.-M., Hung, J.-H., Wu, M.-S., Liu, C.-S., 2007. Lithostratigraphy of the Taiwan Chelungpu-fault Drilling Project-A borehole and its neighboring region, central Taiwan. *Terrestrial, Atmospheric and Oceanic Sciences*, 18(2), 223-241, doi: 10.3319/TAO.2007.18.2.223(TCDP).
- Cheng, P.-H., **Lin, A.T.**, Ger, Y.-I., Chen, K.-H., 2006. Resistivity structures of the Chelungpu Fault in the Taichung area, Taiwan. *Terrestrial, Atmospheric and Oceanic Sciences*, 17(3), 547-561.
- Lin, A.T.**, Chen, M.-L., 2005. Time-depth conversion: An example from the Vulcan sub-basin of northwest shelf Australia. *Bulletin of Exploration and Production Research*, 27, 591-596. (in Chinese)
- Teng, L.S., **Lin, A.T.**, 2004. Cenozoic tectonics of the China continental margin: insights from Taiwan.

in Malpas, J., Fletcher, C. J., Aitchinson, J. C. & Ali, J. (eds) Aspects of the Tectonic Evolution of China. Geological Society, London, Special Publications, 226, 313-332.

**Lin, A.T.**, Watts, A. B., Hesselbo, S. P., 2003. Cenozoic stratigraphy and subsidence history of the South China Sea margin in the Taiwan region. *Basin Research*, 15 (4), 453-478, doi: 10.1046/j.1365-2117.2003.00215.x.

**Lin, A.T.**, Watts, A. B., 2002. Origin of the West Taiwan Basin by orogenic loading and flexure of a rifted continental margin. *Journal of Geophysical Research*, 107 (B9), 2185, doi:10.1029/2001JB000669.

Deramond, J., Delcaillau, B., Souquet, P., Angelier, J., Chu, H.-T., Lee, J.-F., Lee, T.-Q., Liew, P.-M., **Lin, A.T.**, Teng, L.S., 1996. Signatures de la surrection et de la subsidence dans les bassins d'avant chaine actifs: les Foothills de Taiwan (de 8 Ma a l'Actuel). *Bull. Soc. Geol. France*, 1996, 167, 1, 111-123.

Delcaillau, B., Deramond, J., Souquet, P., Angelier, J., Chu, H.-T., Lee, J.-C., Lee, T.-Q., Lee, T.-F., Liew, P.-M., **Lin, A.T.**, 1994. Tectono-sedimentary records of two arc-continent collisions in the northwestern foreland of the mountain belt of Taiwan. *C.R. Sci. Acad. Paris*, 318, 985-991.

## **BOOKS AND OTHERS**

1. **Lin, A.T.** 1991. Lithofacies and the sedimentary environment evolution of the Plio-Pleistocene Series in the southwestern Taiwan foothills region. MSc thesis, National Taiwan University, 93pp. (in Chinese)
2. **Lin, A.T.** 2001. Cenozoic stratigraphy and tectonic development of the west Taiwan basins. D.Phil Thesis, University of Oxford, 246 pp.
3. Chu, H.-T. and **Lin, A.T.** (2006) Tectonics and sedimentation of the active Taiwan mountain belt. 17th International Sedimentological Congress, 2006 Fukuoka, Field Excursion Guidebook (Edited by Ito, M., Yagishita, K., Ikehara, K., and Matsuda, H.), Sedimentological Society of Japan.