李家維 (Chia-Wei Li)

Distinguished Professor

Ph.D, Scripps Institution of Oceanography, University of California, 1983

Evolution; Biomineralization

Research Interests

There are many missing links in the early history of life evolution on Earth. The research in this field requires best fossil materials and state of arts methodology. Our laboratory had rich experience in field study, acquired abundant fossils from various sources, and developed several unique analytical techniques. We study the following five critical themes in life evolution. (1) Searching for the origin of multicellular organisms; (2) Exploring the diversity of the earliest known animal assemblages; (3) Identifying the problematic animal embryos in the beginning of Cambrian; (4) Determining the types of biomineralization in the period of Cambrian explosion; (5) Reconstruct the process of phosphatization in the fossil formation of Wengan animal fossils.

Recent Publications

1. **Li, C.W.***, Chen, J.Y., Lipps, J.H., Gao, F., Chi, H.M., and Wu, H.J. (2007). Ciliated protozoans from the Precambrian Doushantuo Formation, Wengan, South China. Geological Society, London, Special Publications 286, 151-156.
2. Hua, T.E., and **Li, C.W.** (2007). Silica biomineralization in the radula of a limpet Notoacmea schrenckii (Gastropoda : Acmaeidae). Zoological Studies 46(4), 379-388.
3. Hsu, CY.*, Ko, F.Y., **Li, C.W.**, Fann, K., and Lue, J.-T. (2007). Magnetoreception System in Honeybees (Apis mellifera). Plos ONE 4:e395 1-11.
4. Chen, J.Y., Bottjer, D.J., Davidson, E.H., Dornbos, S.Q., Gao, X., Yang, Y.H., **Li, C.W.**, Li, G., Wang, X.Q., Xian, D.C., Wu, H.J., Hwu, Y K., and Tafforeau, P. (2006). Phosphatized polar lobe-forming embryos from the Precambrian of Southwest China. Science. 312(5780), 1644-1646.
5. Dornbos, S. ., Bottjer, D.J., Chen, J.Y., Gao, F., Oliveri, P., and **Li, C.W.** (2006). Environmental controls on the taphonomy of phosphatized animals and animal embryos from the neoproterozoic doushantuo formation, Southwest China. Palaios. 21(1), 3-14.
6. Lin, J.P., Scott, A.C., **Li, C. W.**, Wu, H.J., Ausich, W.I., Zhao, Y.L., and Hwu, Y.K. (2006). Silicified egg clusters from a Middle Cambrian Burgess Shale-type deposit, Guizhou, south China. Geology. 34(12), 1037-1040.
7. Dornbos, S.Q., Bottjer, D.J., Chen, J.Y., Oliveri, P., Gao, F., and **Li, C.W.** (2005) Precambrian animal life: Taphonomy of phosphatized metazoan embryos from southwest China. Lethaia 38(2), 101-109.

8. Li, G.X., Zhu, M.Y., Iten, H.V., and **Li, C.W.** (2004). Occurrence of the earliest known *Sphenothallus* Hall in the Lower Cambrian of Southern Shaanxi Province, China. Geobios 37(2), 229-237.
9. Chen, J.Y., Bottjer, D.J., Oliveri, P., Dornbos, S.Q., Gao, F., Ruffins, S., Chi H, **Li, C.W.**, and Davidson, EH. (2004). Small bilaterian fossils from 40 to 55 million years before the Cambrian" Science as a research article. Science. 305(5681), 218-22.
10. Chi, H.M., Chen, J.Y., and **Li, C.W.** (2003). Early Developmental Eggs with Perivitelline Space from Precambrian Weng'an Fauna, Weng'an, Central Giuzhou (South China). Acta Palaeontologica Sinica 42(3), 448-451.