



# LI Siliang

Professional Title: Professor  
Email: Siliang.li@tju.edu.cn  
Tel: 022-83613963  
Office Location: Rm 605, Building No.16

## Biography

Dr. Siliang Li is Professor and the excellent young scientist funded at 2015 by National Natural Scientific Foundation of China (NSFC). His study is mainly focused on environmental geochemistry, estimation of nitrate sources and transformation based on stable isotopes, chemical weathering processes in the rivers, biogeochemical processes and C-S-N coupling in karst critical zone. His overseas working experiences include being a visiting scholar in Department of Earth Sciences in University of Cambridge, UK, IPGP and Ecole Normale Supérieure de Lyon in France. He has carried out over 10 research projects on biogeochemistry and nutrient cycling. He has published over 50 peer-reviewed journal papers and proceedings, among which over 30 are in the international journals (e.g. EPSL, EST, Chem Geol). He is also the reviewer for multiple high-quality journals e.g. EST, GCA, WR, Chem Geol, J Hydrol.

## Title

Associate Dean

## Education/Employment

2015.12~Now, Institute of Surface-Earth System Science, Tianjin University, Professor,..  
2013.08~2014.08, Department of Earth Sciences, University of Cambridge, UK, Cooperating with Professor Mike Bickle, Visiting Professor,..  
2011.01~2015.11, Institute of Geochemistry, Chinese Academy of Sciences, Professor,..  
2006.07~2010.01, Institute of Geochemistry, Chinese Academy of Sciences, Associate Professor,..  
2005.11~2006.01, Institut de Physique du Globe de Paris -University Paris 7, France, Cooperating with Professor Jérôme Gaillardet, Visiting Scholar,..  
2005.07~2006.01, Institute of Geochemistry, Chinese Academy of Sciences (IGCAS), Assistant Professor,..  
2000.08~2005.05, Institute of Geochemistry, Chinese Academy of Sciences, PhD in Geochemistry,..

## Research

Biogeochemistry in Critical Zone: Determining macronutrient fluxes related important biogeochemical processes within karst catchment, SW China, including source identification and attenuating processes.

Biogeochemical cycling: Understanding Carbon and nutrient transportation as well as riverine biogeochemical processes in Chinese large rivers based on stable isotopes.

Environmental Geochemistry: Using multi stable isotopes (C, N, S) to understand environmental change and human activities in surface Earth.

## Research Projects

- (1) 2016.01~2019.01, Joint funding by NSFC(China) and NERC(UK), The transmissive critical zone under land use and environmental pressures: understanding the karst hydrology-biogeochemical coupling for sustainable management. (Co-I),..
- (2) 2016.01~2021.01, Sub project of National Key Research and Development Programme of China (2016YFA0601000), The critical biogeochemical processes and mechanism of carbon and nutrient cycling in river-reservoir system, SW China. (PI),..
- (3) 2015.01~2017.01, Excellent young scientist funding by NSFC, Geochemistry of the Earth's Surface: "understanding riverine carbon biogeochemistry in the upper reach of Changjiang River using isotopic compositions ( $\delta^{13}C$  and  $\Delta^{14}C$ )" (PI),..

## Selected Publications

- (1) Li S-L, Yue F-J, Liu C-Q, Ding H, Zhao Z-Q, Li X, 2015, The O and H isotope characteristics of water from major rivers in China. *Chin. J. Geochem.*, 34(1): 28–37,.
- (2) Yue F-J, Li S-L, Hu J, 2015, The Contribution of Nitrate Sources in Liao Rivers, China, Based on Isotopic Fractionation and Bayesian Mixing Model, *Procedia Earth and Planetary Science*, 13, 16 – 20,.
- (3) Yue F-J, Li S-L, Liu C-Q, Lang Y-C, Ding H, 2015, Sources and transport of nitrate constrained by the isotopic technique in a karst catchment: an example from Southwest China, *Hydrol. Process.* 29, 1883-1893,.
- (4) Wang Q-L, Chetelata B, Zhao Zhi-Qi, Ding H, Li S-L, Wang B, Li J, Liu X-L, 2015, Behavior of Lithium isotopes in the Changjiang River system: Sources effects and response to weathering and erosion, *Geochimica et Cosmochimica*, 151, 117-132,.
- (5) Li S-L, Chetelat B, Yue F-J, Zhao Z, Liu C-Q, 2014, Chemical weathering processes in the Yalong River draining the eastern Tibetan Plateau, China. *J. Asian Earth Sci.*, 88: 74–84,.
- (6) Yue F-J, Liu C-Q, Li S-L, Zhao Z-Q, Liu X-L, Ding H, Liu B-J, Zhong J, 2014, Analysis of  $\delta^{15}N$  and  $\delta^{18}O$  to identify nitrate sources and transformations in Songhua River, Northeast China, *J. Hydrol.*, 519: 329–339,.
- (7) Yue, F.-J., Li S-L, Liu C-Q, et al., 2013, Using dual isotopes to evaluate sources and transformation of nitrogen in the Liao River, northeast China. *Appl. Geochem.*, 36: 1-9,.
- (8) Li S-L, Liu C-Q, Li J., et al., 2013, Evaluation of nitrate source in surface water of southwestern China based on stable isotopes., *Environmental Earth Sciences*, 68, 219-228,.
- (9) Patra S, Liu C-Q, Wang F, Li S, Wang B, 2012, Behavior of major and minor elements in a temperate river estuary to the coastal sea., *Int. J. Environ. Sci. Technol.* 9, 647–654,.
- (10) Li S-L, Liu C-Q, Patra S., et al., 2011, Using a dual isotopic approach to trace sources and mixing of sulphate in Changjiang Estuary, China., *Applied Geochemistry*, 26: s210-s213,.
- (11) Lang Y-C, Liu C-Q, Li S-L, Zhao Z-Q, Zhou Z-H, 2011, Tracing natural and anthropogenic sources of dissolved sulfate in a karst region by using major ion chemistry and stable sulfur isotopes., *Applied Geochemistry*, 26: s202-s205,.
- (12) Liu X-L, Liu C-Q, Li S-L, Wang F-S, Wang B-L, Wang Z-L, 2011, Spatiotemporal variations of nitrous oxide( $N_2O$ ) emissions from two reservoirs in SW China., *Atmospheric Environment*, 45: 5458-5468,.
- (13) Li S-L, Liu C-Q, Lang Y-C, 2010, Tracing the sources of nitrate in karstic groundwater in Zunyi, Southwest China: a combined nitrogen isotope and water chemistry approach, *Environmental Earth Sciences*, 60: 1415-1423,.
- (14) Li X-D, Liu C-Q, Harue M, Li S-L, Liu X-L, 2010, The use of environmental isotopic (C, Sr, S) and hydrochemical tracers to characterize anthropogenic effects on karst groundwater quality: A case study of the Shuicheng Basin, SW China., *Applied Geochemistry*, 25: 1924-1936,.
- (15) Li S-L, Liu C-Q, Li J, Lang Y-C, Ding H, Li L, 2010, Geochemistry of dissolved inorganic carbon and carbonate weathering in a small typical karstic catchment of Southwest China: Isotopic and chemical constraints., *Chemical Geology*, 277: 301-309,.
- (16) Li S-L, Liu C-Q, Li J, Liu X, Chetelat B, Wang B, Wang F, 2010, Assessment of the sources of nitrate in the Changjiang River, China using a nitrogen and oxygen isotopic approach., *Environmental Science and Technology*, 44: 1573-1578,.
- (17) Tao F-X, Liu C-Q, Li S-L, 2009, Source and flux of POC in two subtropical karstic tributaries with contrasting land use practice in the Yangtze River Basin., *Applied Geochemistry*, 24: 2102-2112,.
- (18) Li S-L, Calmels D, Han G, Gaillardet J, Liu C-Q, 2008, Sulfuric acid as an agent of carbonate weathering constrained by  $\delta^{13}C_{DIC}$ : Examples from Southwest China., *Earth and Planetary Science Letters*, 170: 189-199,.
- (19) Li S-L, Liu C-Q, Lang Y-C, Tao F, Zhao Z, Zhou Z, 2008, Stable carbon isotope biogeochemistry and anthropogenic impacts on karst ground water, Zunyi, Southwest China., *Aquatic Geochemistry*, 14: 211-221,.
- (20) Liu C-Q, Lang Y-C, Satake H, Wu J, Li S-L, 2008, Identification of Anthropogenic and Natural Inputs of Sulfate and Chloride into the Karstic Ground Water of Guiyang, SW China: Combined  $\delta^{37}Cl$  and  $\delta^{34}S$  Approach., *Environmental Science and Technology*, 42: 5421-5427,.
- (21) Chetelat B, Liu C-Q, Zhao ZQ, Wang QL, Li S-L, Li J, Wang BL, 2008, Geochemistry of the dissolved load of the Changjiang Basin rivers: Anthropogenic impacts and chemical weathering., *Geochimica et Cosmochimica Acta*, 72: 4254-4277,.
- (22) Liu C-Q, Li S-L, Lang Y-C, and Xiao H-Y, 2006, Using  $\delta^{15}N$  and  $\delta^{18}O$  values to identify nitrate sources in karst ground water, Guiyang, Southwest China., *Environmental Science and Technology*, 40: 6928-6933,.
- (23) Lang Y-C, Liu C-Q, Zhao Z-Q, Li S-L, Han G-L, 2006, Geochemistry of surface and ground water in Guiyang, China: Water/rock interaction and pollution in a karst hydrological system., *Applied Geochemistry*, 21: 887-903,.
- (24) Li S-L, Liu C-Q, Tao F-X, Lang Y-C, Han G, 2005, Carbon biogeochemistry of ground water, Guiyang, Southwest China., *Ground Water*, 43: 494-499,.