CHUNLIN SONG

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University of Chinese Academy of Sciences
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EDUCATION

Sept. 2015 - Jun. 2019 (expected) Institute of Mountain Hazards and Environment, Chinese Academy of Sciences & University of Chinese Academy of Sciences

Ph.D. Candidate, Physical Geography, advisor: Prof. Genxu Wang

Dissertation Title: Riverine Carbon and Water Transport Processes under Multiple Scales of the Yangtze River Source Region

Nov. 2017 - Jan. 2019 Yale School of Forestry & Environmental Studies **Visiting PhD student**, advisor: Prof. Peter A. Raymond

Sept. 2013 - Aug. 2015 Institute of Mountain Hazards and Environment, Chinese Academy of Sciences & University of Chinese Academy of Sciences **Master student,** Physical Geography, advisor: Prof. Genxu Wang

Sept. 2009 - June 2013 College of Water Resources and Hydropower, Sichuan University Bachelor of Engineering, major in Hydrology and Water Resources Engineering.

Graduation Thesis: Research on Ecological Water Requirement of Flower Lake Core Area in the Zoige Wetland

Publications

Peer-reviewed Journal Papers

Chunlin Song, Genxu Wang, Guangsheng Liu, Tianxu Mao, Xiangyang Sun, Xiaopeng Chen. Stable isotope variations of precipitation and streamflow reveal the young water fraction of a permafrost watershed. *Hydrological Processes*, 2017: **31**(4), 935-947. DOI: 10.1002/hyp.11077.

Chunlin Song, Genxu Wang, Xiangyang Sun, Ruiying Chang, Tianxu Mao. Control factors and scale analysis of annual river water, sediments and carbon transport in China. *Scientific Reports* **6**, 25963; DOI: 10.1038/srep25963 (2016).

Chunlin Song, Xiangyang Sun, Genxu Wang. A study on precipitation stable isotopes characteristics and vapor sources of the subalpine Gongga Mountain, China. *Resources and Environment in the Yangtze Basin*, **24**(11), 1860-1869 (2015). (in Chinese with English Abstract)

Chunlin Song, Xiangyang Sun, Genxu Wang. A review on carbon and water interactions of forest ecosystem and its impact factors. *Chinese Journal of Applied Ecology*, **26**(9), 2891-2902 (2015). (in Chinese with English Abstract)

Papers in review/in revision

Chunlin Song, Genxu Wang, Tianxu Mao, Junchen Dai, Daqing Yang. Linkage between permafrost distribution and river runoff changes across the Arctic and the Tibetan Plateau. (in revision)

Chunlin Song, Genxu Wang, Tianxu Mao, Xiaopeng Chen, Kewei Huang, Xiangyang Sun, Zhaoyong Hu. Seasonal riverine export of dissolved carbon affected by active layer freeze-thaw cycles in the Qinghai-Tibet Plateau permafrost region. (in review)

Patents

SONG Chunlin, SUN Xiangyang, HU Zhaoyong, WANG Genxu. A vacuum porous core filter device. Chinese utility model patent (Issued No. ZL201520272366.4), 2015-09-16.

SONG Chunlin, WANG Genxu, SUN Xiangyang. A water surface greenhouse gas auto-sampler chamber. Chinese invention patent (Issued No. ZL201620140461.3), 2016-08-24.

PRESENTATIONS

Oral Presentations

Chunlin Song, Genxu Wang, Tianxu Mao. "Seasonal riverine export of dissolved carbon affected by active layer freeze-thaw cycles in headwater streams of the Qinghai-Tibet Plateau permafrost region". AGU Fall Meeting, New Orleans, USA. 12/13/2017.

Genxu Wang, **Chunlin Song** (speaker). "Mechanism of the surface runoff processes of a permafrost watershed in the Qinghai-Tibet plateau". The 2nd Asian Conference on Permafrost, Sapporo, Japan. 07/03/2017.

Chunlin Song, Tianxu Mao. "Carbon export and its control factors of Yangtze River source region". Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, Chengdu, China. 11/13/2016.

Chunlin Song. Invited to give a presentation about doctoral life to undergraduates at the mountain science summer school. Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, Chengdu, China. 07/21/2016.

Chunlin Song. "Theory and application of Meta-analysis". Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, Chengdu, China. 05/03/2016.

EXPERIENCE

Professor Peter A. Raymond, Yale School of Forestry & Environmental Studies

Nov.2017 - Jan. 2019

Visiting Assistant in Research: Lab work, data collection, data analysis and results interpretation for great Arctic rivers aged carbon export and global inland water methane emission studies

Professor Genxu Wang, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences

July 2015-Present

Research Assistant: Preliminary study, field work, sampling campaign, data logging, sample analysis and data analysis for project "Three-River Headwaters Region Runoff Generation, Changing Mechanisms, and Permafrost Ecohydrological Processes Modelling".

Professor Genxu Wang, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences

July 2014-Sept. 2017

Research Assistant: Field work, sampling campaign, data logging, sample analysis and data analysis for project "The ecological processes of the cryosphere change and its impact on carbon cycle".

Assistant Professor Xiangyang Sun, Institute of Mountain Hazards and Environment, Chinese
Academy of Sciences
Aug. 2014-June 2015

Research Assistant: Field work, water sampling campaign, sample analysis and data analysis for project "Seasonal Variations and Impact Factors of Organic Carbon Export in Small Alpine Forest Watershed".

Assistant Professor Xiangyang Sun and Ruiying Chang, Institute of Mountain Hazards and Environment, Chinese Academy of Sciences

Summer 2013 and Summer 2014

Science Research Volunteer: Soil and plant sampling along elevation gradient in Mount Gongga, field equipment installation and maintenance, and related lab work at Alpine Ecosystem Observation and Experiment Station of Mount Gongga for two projects: "Water-carbon Interactions and Spatial-temporal Mechanisms of Dark Coniferous Forest Ecosystem in Southwest China" and "Mountain Forest Water-use Efficiency along Elevation Gradient in East Slope of Mount Gongga".

Institute of Mountain Hazards and Environment, Chinese Academy of Sciences & University of Chinese Academy of Sciences Sept. 2013-June 2015

Leader of the Master Program Class: In charge of financial affairs and organise class or institute events.

College of Water Resources and Hydropower, Sichuan University

Summer 2012

Engineering Internship: Comprehensively visit and learn about hydrologic and water resources engineering at Zipingpu Reservoir, Dujiangyan Project, and E'mei Mountain, Sichuan, China.

Sichuan University Library

Sept. 2009-June 2011

Library Service Volunteer: Provide services for the readers and organise library events at Sichuan University Library.

Awards & Honors

China Scholarship Council Fellowship for Joint Ph.D. Training Program, 2017 (\$24,000)

Pacemaker of Merit Student Award, 2017 (1%)

National Scholarship for Doctoral Students, 2016 (6%, \(\frac{1}{2}\)30,000)

First Prize of the IMHE Academic Award, 2016 (10%, \forall 14,500)

Second Prize of the Director Scholarship of the Chengdu Branch of the Chinese Academy of Sciences, 2015 (1.7%, \frac{\dagger}{1,000})

National Scholarship for Master Students, 2014 (3%, \(\frac{4}{20}, 000 \))

First Prize of the IMHE Academic Award, 2014 (6%, ¥12,000)

Merit Student Award of the University of Chinese Academy of Sciences, 2014, 2015, & 2016 (15%)

Sichuan University Excellent Graduation Thesis Award, 2013 (5%)

PROFESSIONAL TRAINING

May 2018 The Geo-Computation and Environmental Analysis Workshop. Yale Center for Research Computing.

Apr. 2016 Meta-analysis Workshop in Ecology and Conservation. Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences.

May 2014 Development of Data Acquisition and Flux Observation Technology Training Conference. TRUWEL TECHNOLOGY, Beijing.

SKILLS

Equipment: vario TOC select TOC/TNb Analyser; Los Gatos Research DLT-100 Liquid Water Isotope Analyser; Eddy Covariance Systems; Campbell Scientific CR1000 dataloggers; LI-8150 Soil

CO₂ Flux System; Cryogenic carbon purification from water samples; Thermo MAT 253 Stable Isotope Analyser; Potassium persulfate method and TC/EA for DOC isotope analysis

Experimental: Working knowledge in many field works related to hydrology and ecology

Computer: R, ArcGIS, EndNote, Adobe Photoshop, Adobe Illustrator, AutoCAD, HTML & CSS, GitHub

Language: Chinese (native speaker), English (6.5 in IELTS), German (beginner)

REFERENCES

Genxu Wang

Professor of Institute of Mountain Hazards and Environment, Chinese Academy of Sciences.

Email: wanggx@imde.ac.cn

Peter A. Raymond

Yale School of Forestry and Environmental Studies

Xiangyang Sun

Associate Professor of Institute of Mountain Hazards and Environment, Chinese Academy of Sciences. Email: sunxiangyang@imde.ac.cn.

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