

LANCANG-MEKONG NEWSLETTER

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Project Title:

Climate Change and Water Resources in Great Rivers Region in Southeast and South Asia

Principal Investigator:

Deliang CHEN, University of Gothenburg, Sweden

Junguo LIU, Southern University of Science and Technology, China

Participating Institutions:

Southern University of Science and Technology

Institute of Tibetan Plateau Research, CAS

Institute of Atmospheric Physics, CAS

Institute of Geographic Sciences and Natural Resources Research, CAS

Beijing Normal University

University of Gothenburg

Project Period:

March 2018 – February 2023



**“Climate Change and Water Resources
in Great River Regions in Southeast and South Asia”**

Project Office

09 March

International Symposium on Water Security and Climate Change

Hosts:

Southern University of Science and Technology, China
University of Gothenburg, Sweden

On March 9-10 world well-known scholars came together to discuss major issues related to international water security under continuing climate change. The symposium aimed at ensuring water security in China and its neighbours, particularly Southeast and South Asian countries. Experts from multiple interdisciplinary research fields came to SUSTech to discuss the impacts of climate change on water resources utilization.

International Symposium on Water Security and Climate Change



09 March

The symposium was started by welcome speech of Prof. Chunmiao Zheng, SUSTech Vice Provost and Founding Dean of the School of Environmental Science and Engineering. Following him Prof. Youkuan Zhang current dean of School of Environmental Science and Engineering gave his welcome talk.



Then, there were a series of highly intelligent speeches during the symposium, including
Alexander J.B. Zehnder from the Nanyang Technological University (Singapore) talked about the challenges of water security and the regional differences in water consumption;
Steven Gorelick from the Stanford University (USA) explained arsenic pollution in Southeast Asian aquifers that is a serious safety problem for local groundwater use;



09 March

Deliang Chen from the University of Gothenburg (Sweden) talked about the current limitations of climate models, and how the new high-precision WRF models have improved water vapor transport simulations over the Qinghai-Tibetan Plateau;

Dennis P. Lettenmaier from the American Academy of Engineering spoke convincingly of the strong relationship between extreme floods and water vapor transport, and how soil moisture influences flood generation processes;

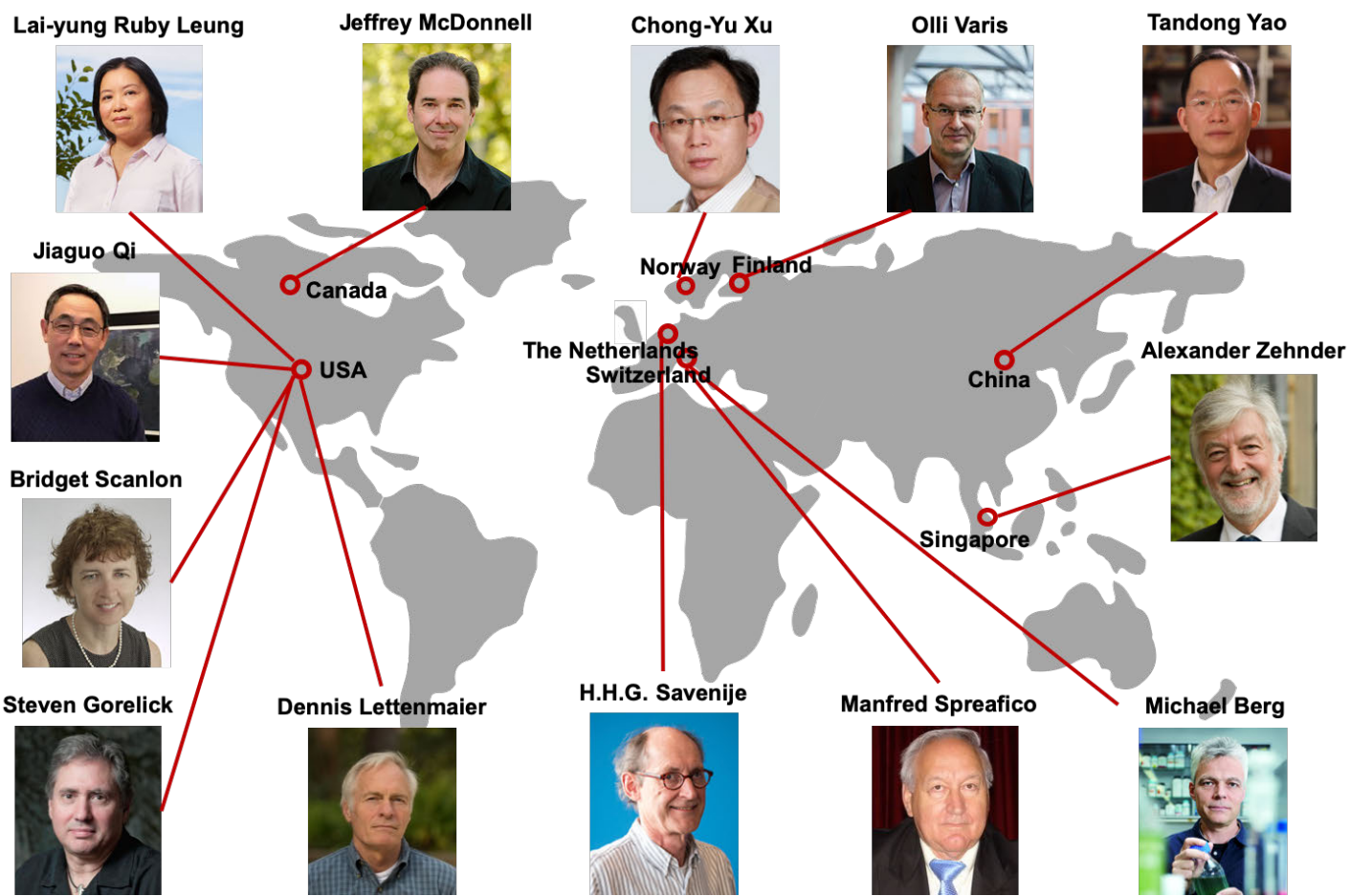
Jeffrey J. McDonnell from the Royal Canadian Academy of Sciences explained that the water balance of ecosystems at the basin scale requires a new water management approach;

Chongyu Xu from the University of Oslo (Norway) examined the need to remodel the water cycle processes based on environmental modifications in response to climate change;

Junguo Liu from SUSTech (China) illustrates that integrating human-made grey infrastructure with nature-based green infrastructure is a key to offset such water shortages.



International Advisory Board of the Project



International Advisory Board

Name	Organization
Alexander J.B. Zehnder	Nanyang Technological University, Singapore
Tandong Yao	Institute of Tibetan Plateau Research, CAS, China
Hubert Savenije	Delft University of Technology, the Netherlands
Steven Gorelick	Stanford University, USA
Jeffrey McDonnell	University of Saskatchewan, Canada
Dennis Lettenmaier	University of California, Los Angeles, USA
Bridget Scanlon	The University of Texas at Austin, USA
Lai-yung Ruby Leung	Pacific Northwest National Laboratory, USA
Chong-Yu Xu	University of Oslo, Norway
Manfred Spreafico	Swiss Agency for Development and Cooperation, Switzerland
Jiaguo Qi	Michigan State University, USA
Olli Varis	Aalto University, Finland
Michael Berg	Swiss Federal Institute of Aquatic Science and Technology (Eawag), Switzerland

Project Workshop

The project workshop on Climate Change and Water Resources in the Great Rivers Regions in Southeast and South Asia was held on 10 March. Project members presented their ongoing results.

In the morning, Prof. Deliang Chen gave a talk regarding the Third Pole Environment and CAS-A project. He introduced the project, research questions and the key challenges. After his speech, the international advisory board gave instructive comments on the scientific and implication aspects of the project.



Then Prof. Junguo Liu talked about climate and water resources in the Lancang-Mekong River Basin. He gave an overview of the project. International advisory board actively involved after his speech while they open up some key challenges regarding the implications of the project and the way this project is going to solve water issues in the region.



Other participants from different institutions actively involved in the presentations and present their latest achievements regarding the project and how they can contribute to the project.

Xuejie Gao (Institute of Atmospheric Physics, CAS), Qingyun Duan (Beijing Normal University, China), Lei Zheng (Institute of Geographic Sciences and Natural Resources Research, CAS, China), Aifang Chen (University of Gothenburg, Sweden), Wei Qi (SUSTech), Ganquan Mao (SUSTech), Zifeng Wang (SUSTech), Ying Meng (SUSTech), Masoud Irannezhad (SUSTech), Lanlan Guo (Beijing Normal University, China), Lian Feng (SUSTech), Haiyan Fang (Institute of Geographic Sciences and Natural Resources Research, CAS, China), Luke Gibson (SUSTech), Yan Zheng (SUSTech), Benjamin Bostick (Columbia University, USA), Jiantao Qiao (Guangdong Institute of Eco-environmental Science and Technology, China) and Zhenzhong Zeng (Princeton University, USA). Lectures were organized based on the impacts of climate change on water resources and its interactions with water food nexus in great river regions.



Contact Us



The Contact Information:

Address:

School of Environmental Science and Engineering, Southern University of Science and Technology, Shenzhen, P.R. China

Phone: 0755-88018012

Email: liujg@sustc.edu.cn

Web: <http://www.lancang-mekong.net>

