# International Symposium on Changing Cryosphere, Water Availability and Sustainable Development in Central Asia

# First Announcement and Call for Abstracts

**First Circular** 

Urumqi, China
October 10-12, 2011

# Sponsored by

Chinese Academy of Sciences (CAS)
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# Co-sponsored by

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## Background

Central Asia is an extremely arid region and contains several larger plateaus and deserts. The river drainages in Central Asia are unique, the ecosystems are complex and diverse, but also extremely fragile. These harsh conditions lead to the poor developments of local economies. But Central Asia exhibits the most vast cryospheric system at its latitude of northern hemisphere, and stores enormous water resources. However, global climate change during the last decades of the 20th century has led to significant changes in the cryosphere of Central Asia, with diminished water resources, altered hydrological cycles, and growing environmental problems. Hence, water availability and quality are the most pressing issues for sustainable development in Central Asia

Currently, a number of joint projects and individual initiatives in different regions and countries are being carried out to study the changing climate and cryosphere, which can exert a significant influence on water resources and sustainable development, especially in Central Asia. However, there is a lack of coordination and cooperation between projects, resulting in lost synergies. As for the cryosphere, it's time for us to integrate all the results about its changes, obtained by the various methodological approaches including field studies, numerical modeling and space based technologies, and to assess its impacts.

### **Objectives**

This international symposium aims to -to strengthen cooperation especially amongst experts working in the Central Asian countries;

- to establish a baseline for the condition and trend of Central Asia's cryosphere:
- to quantify the influences of cryospheric changes on water resources, environment, and sustainable development;
  - to outline measure to adaptive to cryospheric changes;
  - to provide a platform to discuss methodological approaches;
  - to define research needs and priorities.

# **Main Topics**

The suggested topics include:

- 1. The climate and climate change in Central Asia
- 2. The condition and trend of cryosphere in Central Asia
- 3. The role of changing cryosphere in the hydrological cycle and water resources
- 4. The response of ecosystems to cryospheric and consequent hydrologic change
- 5. The impact of changing cryosphere on development trajectories.
- 6. Integrated management of water resources under a changing cryosphere/climate
- 7. Networked monitoring and data management
- 8. Research needs and priorities



Scientists, managers, students as well as representatives of governments, media and funding organizations, who have researched or are interested in cryospheric sciences, climate change, hydrology, ecology and sociology are invited to the conference to share research results and to discuss sustainable development in Central Asia. The official language of the symposium will be English.

#### ABSTRACT DEADLINE

April 30, 2011. The CAREERI web site for abstract submission will be open by March 1, 2011. Other related deadlines will be highlighted by May 1, 2011 in the second circular.

#### Scientific Steering and Editorial Committee

Chairman: Qin Dahe (CAREERI, CAS, China) Member: to be announced in the 2nd circular

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#### **Post-Conference Excursions**

Line 1: Urumqi Glacier No. 1 of eastern Tian Shan, China (one day)

Line 2: Fukang station----Tianchi Lake (one day)

The exact excursion contents will be provided in the 2nd Circular.

# **Abstract Submission Form and Address**

#### Submission address:

Please submit your abstract to xieaih@lzb.ac.cn and tobias.bolch@geo.uzh.ch at the same time. The online submission address will be informed after the conference website is opened.

#### Submission form:

□Oral presentation	□Poster presentation (A0 size)	□Other
Scientific topic		
Title of presentation		
Author (s) and their affiliations (mailing address,telephone,fax, e-mail		
Abstract (400 words)		



