

Congratulations to this year's IMO Prize laureate: Dr Qin Dahe, WCRP/CliC scientist

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Photo: China Daily.

Dr Qin Dahe from China won this year's prestigious International Meteorological Organization (IMO) Prize for his achievements in cryosphere and climate research, and for promoting international cooperation in meteorology. The IMO Prize is the highest award conferred by the World Meteorological Organization (WMO).

Born in 1947 in Lanzhou, Gansu Province, Qin Dahe studied at the Lanzhou Institute of Glaciology and Geocryology, and later at the Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences (CAS). From 2003 to 2007 he was the Director of the China Meteorological Administration (CMA), and served as Permanent Representative of China with the WMO.

Dr Qin was involved in the preparation of IPCC scientific assessment reports. During the recently published Fourth IPCC Assessment Report (2007), Dr Qin was the co-Chair of Working Group I, which coordinated the most comprehensive and up-to-date scientific assessment of past, present and future climate change.

In 1989, he was a member of the International Cross South Pole Expedition and became the first Chinese reaching the South Pole. Back home, Dr Qin published the first of a series of ground-breaking articles on the past Antarctic climate using evidence from ice core records. Several expeditions to the Antarctic followed as part of the subsequent International Trans-Antarctic Scientific Expedition programme; this programme is still ongoing.

The international cryospheric research community coordinated by the WCRP Climate and Cryosphere (CliC) project drew the world's attention to the role of the cryosphere in global climate and the rapid environmental changes in the Earth's snow- and ice-covered regions.

Dr Qin's strong expertise in cryosphere-climate interactions has long been well received by the international scientific community. He is a member of the WCRP/CliC Scientific Steering Group and Chair of the Chinese National Committee on Climate and Cryosphere (CNC-CliC) Scientific Steering Group. The CNC-CliC is comprised of researchers from 18 national institutions distributed among eight divisions including the Chinese Academy of Sciences, China Meteorological Administration, and several universities. It was on Dr Qin's invitation that the CliC First Science Conference was held at CMA in Beijing, China, April 2005, followed by an Asia-focussed CliC-Symposium on the State and Fate of Asian Cryosphere which took place in Lanzhou, China, October 2007.

In February 2008, CNC-CliC, after 7 years of intensive research coordination, launched Phase 2 of their activities, which is expected to "strengthen research on climate and cryosphere in China, explore various aspects of advanced and innovative research concepts, and encourage international cooperation" (CliC flyer, issued 28 February 2008).

China has also been very active during the International Polar Year (IPY) 2007-2008, being involved in 35 IPY projects, 21 of these with strong linkages to WCRP and the Scientific Committee on Antarctic Research (SCAR), a co-sponsor of WCRP/CliC. The international IPY

project No. 313 for example, refers to the Programme of Antarctic Nova Disciplines Aspects (PANDA) which was initiated by the Chinese. PANDA focuses on the central plateau of the Antarctic ice sheet known as Dome A. About thirty observation systems for glaciology, oceanography, geology, geophysics, Sun-Earth physics, atmospheric science and astronomy are being installed during IPY along a section crossing Dome A to observe and monitor changes to the environment of Antarctica, in particular, changes to ice mass balance and its contribution to global sea level.

A recently launched new initiative at the CAS Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI) in Lanzhou on the Dynamic Processes of China's Cryosphere, and the Mechanisms behind its Impact on Climate, Hydrology and Ecology, is headed by Dr Qin. With the support of the Chinese National Basic Research Programme, the budgetary funding of about US\$ 1.7 million for its first two years' implementation, the study will focus on the impact of changes in the Chinese cryosphere on regional and global climate, environmental degradation, and water availability. The study is a major contribution to research on the present and future state of the global cryosphere coordinated by WCRP/CliC.

In 2006, the communities of WCRP and the other three partners of the Earth System Science Partnership (ESSP) met at the Second Open Science Conference in Beijing, China, following an invitation by Dr Qin, at that time Director of the China Meteorological Administration. The Conference reviewed the state of knowledge of global environmental change. The four-day event with plenary and parallel sessions addressed the questions: how do regions cope with the consequences of natural and human-driven changes to the Earth's environment, what future changes they can expect, and what the nature of those changes will be. The over 900 conference participants resolved to mobilise their knowledge for action, in order to provide society with the scientific information needed to support sustainable development. During this Conference, the Monsoon Asia Integrated Regional Study (MAIRS) was launched, to address interactions between humans and the environment in Monsoon Asia.

Dr Qin is a member of the WCRP Review Panel chaired by Dr James Baker and coordinated by the International Council for Science, ICSU, which reviewed WCRP performance and activities by collecting stakeholders' answers to a comprehensive poll around the question "what do you get out of supporting WCRP that you would not have gained if the programme did not exist?". The final report of this review is expected in September 2008. [C Arndt]

Links & references

CAS <http://www.cas.ac.cn/>

CliC <http://clic.npolar.no>

CliC flyer (2008) http://wcrp.wmo.int/documents/CliC_CNCnewsflash_Feb2008.pdf

CMA <http://www.cma.gov.cn/>

ESSP <http://www.essp.org>

IPY <http://www.ipy.org>

MAIRS <http://www.mairs-essp.org/>

PANDA <http://classic.ipy.org/development/eoi/proposal-details.php?id=313>

WMO <http://www.wmo.int>

WMO Press Release http://www.wmo.int/pages/mediacentre/press_releases/pr_820_en.html