

October 14, 2004

IGCP Secretariat, Division of Earth Sciences  
UNESCO, 1 rue Miollis  
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The new proposal "Global Study of Karst Aquifers and Water Resources" is strongly supported by members of the US National Committee for IUGS. The proposed work, which includes investigators from many nations and many professional organizations, fits perfectly into the framework of the IGCP.

We feel that the IGCP is the finest program in the IUGS and has an excellent record of bringing investigators together to address important geological/ecological problems. The issue of water resources in karst terrains is one that requires interdisciplinary cooperation across international boundaries.

Our committee hopes that you will fund this work.

Sincerely,

Grant Heiken (Chair), for the  
US National Committee for IUGS  
Board on International Scientific Organizations  
The US National Academies  
Washington, DC



## China National Committee for International Geological Correlation Programme

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Dr. F. Wolfgang Eder  
Director, Division of Earth Sciences  
UNESCO, SC/GEO  
1, rue Mollis  
F-75732 Paris Cedex 15  
France

September 23, 2004

Dear Dr. Wolfgang Eder,

This is to submit the proposal for a new IGCP Project entitled " Global Study of Karst Aquifers and Water Resources" made by Dr. Chris Groves (USA) and Prof. Yuan Daoxian, Institute of karst Geology, Chinese academy of Geological Sciences (CAGS) and others.

It is estimated that about 25% of the world's population obtains drinking water supplies from vulnerable karst aquifers. During the past decades, a lot of work has been done on karst hydrogeology, but the exploration, assessment, exploitation and protection of karst water resources are still challenges for people living in karst regions of the world. Carbonate rock diagenesis, geological structures, topography, climate and hydrology, vegetation and human activities may all make the flow and qualities of groundwater in karst aquifers varied. International cooperation under the framework of IGCP on the study of karst water resources may do great help to the better understanding and management of karst aquifers of the world.

About one-third of China's territory is underlain by karstified carbonate rocks, and among them 907,000km<sup>2</sup> are exposed. The latter concentrates in the southwest part of the country, where the intensive karstification and Cenozoic uplift made the leakage of surface water a big problem. Millions of inhabitants are still suffering from shortage of water although the annual precipitation there is usually more than 1000mm. On the other hand, there are 2836 underground streams with a total length of 13, 919km, and mean discharge of 1.482m<sup>3</sup>/s. In the next decades, China will do every effort for the exploitation and protection of these rich karst water resources to meet the need of Western Development. Accordingly, the newly proposed IGCP Project will not only be of benefit to the karst regions in China but also have international significance at large.

The international karst community enjoys nice teamwork through the operation of the 3 previous IGCP projects (IGCP-299, 379, 448) in the past 15 years. It has been backed continuously by the karst-related international organizations including the Karst Commission of the International Association of Hydrogeologists (IAH), the Karst Commission of the International Geographical Union (IGU), and the Union of International Speleology (UIS). With Prof. Yuan Diaoxian as leader of IWG, these 3 IGCP projects have also got strong financial support from the Chinese government. They have resulted not only in academic achievements but also practical social benefits.

In view of the importance of the new project and the accomplishments made by Prof. Yuan and his team, we would like, on behalf of the China National Committee for IGCP to express our full support to the new proposal and recommend it to the IGCP Scientific Board. We believe that Dr.Chris Groves, Prof. Yuan and his team are highly qualified for the new IGCP project.

We would be very grateful if our recommendation is taken into consideration.

Best regards,

Sincerely Yours

Prof. Liu Dunyi

Chairman

China National Committee for IGCP

Prof. Dong Shuwen

Secretary General

China National Committee for IGCP



## UNION INTERNATIONALE DE SPELEOLOGIE

### Commission d'Hydrogéologie karstique et de Spéléogénèse Commission on Karst Hydrogeology and Speleogenesis

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On the name of the Commission on Karst Hydrogeology and Speleogenesis of the Union International of Speleology I'd like to express support to the proposal for a new International Geological Correlation Program Project "Global Study of Karst Aquifers and Water Resources", initiated by Dr. Chris Groves, Prof. Yuan Daoxian, Dr. Bartolome Andreo-Navarro and Prof. Heather Viles. The project will address the core problem of karst studies, which has important theoretical and applied implications. Approval of this project would help to foster international cooperation in the field, and the UIS KHS Commission (130 members from 24 nations) would be interested to take part in activities under the project.

Best regards,

Dr. Alexander Klimchouk,  
President, UIS KHS Commission  
Vice-President, UIS  
Senior Scientist, Institute of Geological Sciences of the Ukrainian Academy of Sciences

Friday, 08 October 2004

Dr Heather A Viles  
Reader in Geomorphology  
University of Oxford  
Mansfield Road, Oxford, OX1 3TB

Dear Dr Viles,

## PROPOSAL TO IGCP FOR AN INTERNATIONAL COOPERATIVE STUDY OF KARST WATER RESOURCES

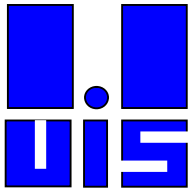
The new proposal to IGCP for an International Cooperative Study of Karst Water Resources is especially timely, and a very appropriate follow-up to Project 448, World Correlation of Karst Geology and Relevant Ecosystems.

Water from karstic aquifers is used by a large number of people throughout the world, but is very vulnerable to pollution from increased urbanisation and intensive agriculture. Water has a very short residence time in karstic aquifers, usually only a few days, and thus has very little opportunity for improvement in water quality from the soil-water interaction that is possible in normal aquifers. Urbanisation may not only increase pollution levels, but may also result in acid waters that can lead to dissolution of limestone wallrock and significant modification of flow paths in aquifers. These problems require urgent attention, especially in areas where karst water resources are linked to urban poverty, as in parts of China.

I am very happy to express my strong support for this project and for its relevance to social as well as scientific needs.

Yours sincerely,

Prof. J.R.Cann FRS,  
Chair, External Relations Committee  
School of Earth Sciences, University of Leeds, Leeds LS2 9JT



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To: IGCP Secretariat, Division of Earth Sciences

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c/o Dr. Chris Groves

Hoffman Environmental Research Institute, Department of Geography and Geology

Western Kentucky University, Bowling Green, Kentucky 42101 USA

14<sup>th</sup> October 2004

Support letter for the proposal for a new International Geological Correlation Program

Project Global Study of Karst Aquifers and Water Resources

Dear Colleagues,

The new project on Global Study of Karst Aquifers and Water Resources is of great interest for most members of our UIS commission and they will join this important and timely project. The proposal has good argumentation. Its leaders are well known and have excellent reputation amongst the karst hydrogeology community. Prof. Yuan Daoxian and Dr. Chris Groves did excellent job running the previous karst IGCP projects 299, 379 and 448. I was heading Bulgarian working group of all these projects and I was delighted to work with them. So I am sure that new proposal will be well administered and will produce valuable results of great impact on the geological sciences and on the life of people in karst regions. So I highly recommend you to approve this project and ensure you in its support by both members of the UIS Commission of Physical Chemistry and Hydrogeology of Karst and of Bulgarian working group of IGCP 448.

Sincerely,

Yavor Shopov, B.A., M.Sc., PhD, FRSB

President of UIS Commission of Physical Chemistry and Hydrogeology of Karst,

leader of Bulgarian working group of IGCP 448

From: David Drew  
Subject: IGCP Endorsement  
Date: Mon, 11 Oct 2004 10:54:58 +0100  
To: "Chris Groves" <chris.groves@wku.edu>

<MessagePart/IGCP%20karst%20water/55-H.txt>  
<MessagePart/IGCP%20karst%20water/55-P.txt>

Dear Chris,

I believe that the proposed new IGCP project "Global Study of Karst Aquifers and Water Resources" to be fully in accordance with the interests and aims of the Karst Commission of the International Association of Hydrogeologists and therefore is supported by the Commission.

David Drew  
Co-Chair I.A.H. Karst Commission