

Preface of Volume 311

This book is the outcome of the second *International Symposium on Methodology in Hydrology*, held at Hohai University, Nanjing, China, 30 October–1 November 2005. The State Key Laboratory of Hydrology, Water Resources and Hydraulic Engineering, at Hohai University, the State Key Laboratory of Water Resources and Hydropower Engineering Sciences at Wuhan University, Nanjing Hydraulic Research Institute and the Bureau of Hydrology, Ministry of Water Resources (MWR) China, jointly organized this second symposium. The International Association of Hydrological Sciences (IAHS), the National Natural Science Foundation of China, the International Training and Research Center on Hydrology, Water Resources and Environment, at the UNESCO Disaster Prevention Research Institute, Kyoto University, and MEXT Special Coordination Funds for Promoting Science and Technology, Japan, were the main sponsors of the event. The first *Symposium on Methodology in Hydrology* was held at Hohai University, Nanjing, China, 2–5 April 1988.

The 27 October 2005, just three days before the opening ceremony of this symposium, was the 90th anniversary of the foundation of Hohai University. Also, 11 July 2005 was the 600th anniversary of the great voyages of Admiral Zheng Ho, who was a great navigator in world history. His first voyage was 87 years earlier than Columbus's sailing to the New Continent (North America). Admiral Zheng Ho's seven voyages made great contributions to cultural and economic exchanges between China and other countries. This book is dedicated to the 90th anniversary of Hohai University and the 600th anniversary of the great voyages of Admiral Zheng Ho.

The symposium provided a platform for participants to present their state-of-the-art research achievements, exchange their experiences and discuss new opportunities and challenges in hydrology. This volume contains a selection of the papers that were presented orally during the symposium in Nanjing, and therefore provides an overview of research in hydrological theories and practices at the beginning of the 21st century. The Academic Committee of the International Symposium on Methodology in Hydrology reviewed all the submitted papers, and finally agreed that 97 papers should be published in this proceedings volume; they are grouped into five sections as follows:

- Hydrological Modelling and Flood Forecasting
- Stochastic Hydrology
- Water Quality Modelling and Analysis
- Water Resources Management and Water Economy
- Interdisciplinary Hydrology

The symposium opening keynote paper *Selected problems of at-site flood frequency analysis* by Prof. Witold G. Strupczewski (Water Resources Department, Institute of Geophysics, Polish Academy of Sciences) is included here in the Stochastic Hydrology section. The keynote paper *Hydro-meteorological monitoring and operational hydro-systems for flood management in China* presented by Prof. Jianyun Zhang, Deputy Director of the Bureau of Hydrology, MWR, China, is reproduced in the section on

Hydrological Modelling and Flood Forecasting. Dr Pierre Hubert from France (the Secretary General of IAHS), Prof. Vijay P. Singh, Editor-in-Chief of the ASCE *Journal of Hydrologic Engineering* (Dept of Civil and Environmental Engineering, Louisiana State University, USA), and Prof. Zhongbo Yu (Dept of Geoscience, University of Nevada Las Vegas, USA) also presented keynote presentations but, unfortunately, it has not been possible to include them in this publication.

During the symposium a general consensus was reached that significant hydrological research will continue at a rapid rate and that communication and collaboration among hydrologists and water professionals across the world should be strengthened further. Both Hohai University and many of the participants agreed that such symposia should be more frequent in the future, with a possible target for the next meeting being 2009 in Nanjing.

The editors would like to thank the many people who have helped to produce this volume, including the members of the Academic Committee of the International Symposium on Methodology in Hydrology who reviewed all the submitted papers, Assoc. Professor Wen Wang and Dr Fei Yuan who revised some papers and formatted papers, Mr Qing Liu who kept track of the papers as they were received. Last but not least, the support of Dr Cate Gardner and those who have made contributions to the publication at IAHS in Wallingford is highly appreciated.

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Dujiang Weir *Located in Dujiangyan City, 59 km west of Chengdu in Sichuan Province of China, the Dujiang Weir is an ancient water project famous all over the world. The Shu Prefecture leader Li Bing built the weir in 256 BC during the Warring States Period (475–221 BC). During the centuries since it has played an important role in water supply and flood prevention, and is a paradigm within the history of water resources construction in China. On the basis of hydrological theory and other sciences, this weir is able to discharge flood-water in the rainy season, to supply water for agricultural production, human and ecological uses, and also to solve the sedimentation problem effectively. The Dujiang Weir attests to the wisdom and ability of Chinese ancestors. The cover photographs show the weir.*