河流泥沙国际学术讨论会论文集

1980 年 3 月 24 — 29 日

中 国　　北 京

中国水利学会主编

第 2 卷

PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON RIVER SEDIMENTATION

MARCH 24-29, 1980

BEIJING, CHINA

EDITED BY THE CHINESE SOCIETY OF HYDRAULIC ENGINEERING

VOLUME 2

光华出版社

Guang Hua Press

河流泥沙国际学术讨论会论文集

1980 年 3 月 24 — 29 日

中 国　　北 京

中 国 水 利 学 会 主 编

第 1 卷

PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON RIVER SEDIMENTATION

MARCH 24-29, 1980

BEIJING CHINA

EDITED BY THE CHINESE SOCIETY OF HYDRAULIC ENGINEERING

VOLUME 1

光 华 出 版 社

Guanghua Press

河流泥沙国际学术讨论会论文集

1980 年 3 月 24 — 29 日

中 国　　北 京

中 国 水 利 学 会 主 编

第 2 卷

PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON RIVER SEDIMENTATION

MARCH 24-29, 1980

BEIJING CHINA

EDITED BY THE CHINESE SOCIETY OF HYDRAULIC ENGINEERING

VOLUME 2

光 华 出 版 社

Guanghua Press

前　　言

近若干年来，河流泥沙问题受到各方面的重视，曾连续举行多次国际性的学术会议。1973年1月在泰国曼谷举行了国际河流力学讨论会，同年5月加拿大国家科委水文学分组召开了河床过程及泥沙运动的学术会议，印度在1973年1月及今年3月也分别举办了冲积河流水力学及冲积河流问题的学术讨论会。今年3月在北京召开的河流泥沙国际学术讨论会，还是新中国成立以来的第一次。这次讨论会是由中国水利学会和国际水文计划中国委员会共同组织发起的，并得到了联合国教科文组织的支持。我们很高兴能够有机会在国际会议上报告我们在这个领域中所取得的成就，我们也衷心欢迎外国的同行们向我们介绍他们的经验，它使我们学习到了很多东西。

这次会议所选定的五个专题反映了河流泥沙问题的五个重要方面。中国学者们针对中国河流的特点，提出了高含沙水流的运动机理，游荡和分汊河流在河型上的巨大差别，以及水库的长期使用库容等问题，对于外国的朋友们来说可能都是比较生疏的，这些概念的提出丰富了河流泥沙问题的内容。外国学者们介绍的全沙输沙理论，不稳定流的模拟，以及河口海岸地区淤泥的特性等，也都反映了当代泥沙研究的重要方向。这些相互之间的接触和交流无疑地将会促进我们的共同事业。

这本论文集的出版标志着中外泥沙科学家友好往来的开始。我们预祝今后这种合作将会得到更大的发展，泥沙科学将会以更快的步伐迅速前进。

钱　　宁

（中国水利学会泥沙专业委员会副主任）

1980年5月于北京清华园

Preface

Great attention has been paid to the river sedimentation problem and in recent years several international meetings have been organized by various agencies. An International Symposium on River Mechanics took place in January 1973 in Bangkok, Thailand. In May of the same year the Subcommittee on Hydrology of the National Research Council, Canada sponsored a meeting on Fluvial Processes and Sedimentation at the University of Alberta. Seminars on the Hydraulics of Alluvial Streams and Alluvial River Problems were held in India in January 1973 and March 1980 respectively. The International Symposium on River Sedimentation held in Beijing from March 24 to 29, 1980 was the first international meeting organized by the Chinese Society of Hydraulic Engineering since the founding of New China. This Symposium was jointly sponsored by the Chinese Society of Hydraulic Engineering and the Chinese National Committee for the IHP and with the support of UNESCO. We are pleased to have had a chance to present our achievements in this field, and we welcome heartily the opportunity to learn much from the experiences of our foreign colleages.

The five themes selected for this Symposium represent the five important phases of the river sedimentation problems. Some of the concepts introduced by the Chinese scholars, based on the specific characteristics of rivers in China, such as the mechanics of hyperconcentrated flow, the long-term capacity of reservoirs, and the enormous differences between the channel patterns of braided and wandering streams, may perhaps be of special interest to our friends abroad. The introduction of these new concepts greatly enriches the content of river sedimentation engineering. On the other hand, topics such as the transport theory of total load, the simulation of unsteady flow, and the behavior of mud in estuaries and along sea coasts as discussed by our foreign guests represent some of the main trends of research in our time. Such contacts and technical exchanges between scientists from different countries will undoubtedly promote our mutual understanding and common enterprise.

The publication of the Proceedings of the Symosium marks the beginning of friendly exchanges between Chinese and foreign scholars and engineers. We are looking forward to a rapid development of such cooperation and a great advance in our fields of common interest.

Qian Ning (Ning Chien)
Vice-Chairman of Sedimentation Committee
Chinese Society of Hydraulic Engineering
Qinghuayuan, Beijing, China
May 26, 1980

目　　录

第一卷

第二卷

Contents

VOLUME 1

VOLUME 2