PREFACE

Reliability and consistency of data is an essential requirement of hydrological monitoring programmes for water resources planning and management. There is an increasing need felt for expanding the hydrological monitoring activity to collect data on more and more parameters, even from remote areas and, at the same time, to improve the reliability as well as efficiency of the monitoring sensors and systems. This calls for updating the present techniques used for data collection, storage and transmission.

With a view to discuss the present status, and future requirements of instrumentation in the field of hydrology, a two day National Workshop on Advances in Hydrological Instrumentation was organised by the National Institute of Hydrology at Roorkee during October 25-26, 1994. The technical programme of the workshop was organised in the following four sessions:

- 1. Emerging Trends in Hydrological Instrumentation
- 2. Data Acquisition and Transmission
- 3. Hydrological Instrumentation for Real-time Monitoring
- Advanced Techniques for Hydrological Measurements

A total of 49 technical papers were submitted by different authors from various organisations, out of which 40 papers were presented and discussed during the workshop, including technical write-ups about the products developed/marketed by private entrepreneurs. After scrutiny, 25 papers were shortlisted for inclusion in the workshop proceedings.

I am indeed indebted to Dr S M Seth, Director, National of Hydrology, for mooting the idea of publishing the Proceedings of the national workshop through a professional publishing house, for wider coverage. I am grateful to Dr K S Ramasastri, Scientist F, National Institute of Hydrology, for his continued guidance and encouragement.

Roorkee January 1997 V C Goyal Organising Secretary