## **FOREWORD**

The XXI<sup>st</sup> Conference of the Danubian Countries on Hydrological Forecasting and Hydrological Bases of Water Management is the continuation of the useful exchange of knowledge between experts of all the Danube riparian countries. This tradition of common meetings commenced in Budapest in 1961.

City of Bucharest and Romanian hydrologists have the honor to welcome and host the hydrologists of the Danubian countries for the third time. Romania was the third country hosting a common Conference 37 years ago in 1965. This meeting is really a piece of history nowadays and we will not meet many colleagues, who took part at that Conference, among us here. The second meeting in Bucharest was the XI<sup>th</sup> Conference in 1982 and this meeting 20 years ago many of us may have in their memories.

At the XX<sup>th</sup> Conference of the Danubian Countries on the Hydrological Forecasting and the Hydrological Bases for Water Management that has been held in Bratislava in September 2000, the Romanian National Committee for the IHP has engaged to organize the XXI<sup>st</sup> Conference in Bucharest, between 2 and 6 September 2002. The organization of the Conference was discussed at all the follow-up meetings of the Danubian Countries representatives (Deggendorf 2001, Zagreb 2002).

The Conference is organized by the Romanian National Committee for the International Hydrological Program of UNESCO and the National Institute of Meteorology and Hydrology-Bucharest jointly with International Hydrological Program (IHP) UNESCO, UNESCO Venice Office-Regional Office for Science and Technology for Europe, World Meteorological Organization and International Association of Hydrological Sciences.

Organization of the Conference would not be possible without the close collaboration of many institution and individuals in Romania and other Member countries of the regional cooperation of the Danube countries in hydrology.

I am very glad that all the main hydrological institutions in Romania took part in the organization of the Conference.

It was also the great honor for the organizers to work under the auspices of: The Ministry of Water and Environmental Protection The Ministry of Foreign Affairs.

The Danube Cooperation Process jointly initiated by Austria and Romania involves all 13 countries of the Danube region, and benefits from support of the European Commission and the Stability Pact for South Eastern Europe. Besides political dialogue, the cooperation process will also comprise the following areas: sustainable economic development, navigation, tourism, environment, culture, etc.

On 27<sup>th</sup> May 2002 a launching conference was held in Vienna where the Danube Cooperation Process was formally introduced. At this Conference ministers of foreign affairs of all Danube countries have adopted the "Declaration on the Establishment of the Danube Cooperation Process" to intensify and to

develop multi-dimensional relations among the countries in the Danube River Basin.

The Conference takes place after a very important event occurred in Europe: the floods in Germany, the Czech Republic, Slovakia, Austria, Hungary, etc. Romania also facing severe meteorological phenomena and many flash floods in the hill and mountain area. These hydrometeorological phenomena put to the test the high flood warning, forecast and population alarming systems.

The emergence of improved models provide an opportunity to a better and comprehensive understanding of the hydrological cycle over broad domains and in near-real time. In this regard, the Conference topics match to the objectives of the focal area 2.2 of the IHP-VI Plan namely "International River Basins and Aquifers".

The Conference papers are presented in six groups corresponding to the topics of the  $XXI^{\underline{st}}$  Conference:

- 1. Hydrological forecasting (34 papers from 12 countries)
- 2. Echo-hydrological processes (5 papers from 3 countries)
- 3. Erosion, sediment transport and sedimentation (9 papers from 7 countries)
- 4. Water quality (16 papers from 6 countries)
- 5. Water resources management (47 papers from 12 countries)
- 6. Meteorological inputs in hydrological forecast models (8 papers from 6 countries)

The scientific aspects of the Conference were guided by both International and Local Scientific Committees (topics, enlistment and review of the papers).

It is my pleasure to thank to their members for their efforts and contribution to preparation of the proceedings of the Conference.

The Organizing Committee of the Conference did the great deal of work with organization of the Conference, and I am sure they have prepared all the necessary conditions for a good and successful scientific meeting.

It is also my pleasure to acknowledge the financial support of the following partners the organization of the Conference:

- -UNESCO Venice Office-Regional Office for Science and Technology for Europe
  - -The Ministry of Water and Environmental Protection
  - -The Ministry of Foreign Affairs.
  - -The National Company "Romanian Waters"

The Conference of Danubian Countries remains-as ever-ideally and uniquely placed alongside its regional partners, to ensure an evolving and vital contribution to environmental governance and sustainable development in the Danube basin.

Florin STADIU,

Chairman of the Romanian NC IHP UNESCO