OPENING ADDRESSES

Dear Colleagues,

It is a great pleasure and honor for me to invite you on the occasion of the IAU Colloquium *International Cooperation in Dissemination of the Astronomical Data* to the Central (Pulkovo) Astronomical Observatory of the Russian Academy of Sciences.

This distinguished gathering of experts in the vast field of modern methods for archiving and managing almost infinite astronomical data files of everlasting value will doubtlessly make a considerable and important contribution to success in the present and future research in astronomy.

All of us are witnesses of a great technological, even psychological upturn that occurs in the everyday astronomical practice. The small but the most powerful handy devices known as desktop, laptop, or even palmtop PCs, have rendered a tedious calculating work and stressing search in the card-file or book-form catalogs to a pure pleasure and raised an admiration for those brilliant minds that have invented such a kind of hard- and software. The networks of all kinds and sorts – Internet, Bitnet, World Wide Web, etc. – have realized ancient dreams of a Man to fly with thought all over the world communicating with other human beings.

But ... don't forget that the most real and valuable communication is the live one, when one can see the face and the eyes of his (or her) partner, listen to his voice as large as life, and the only opportunity for this is to stay together. And this just occurs at the colloquium like ours! So, let me heartily welcome you to the Pulkovo Observatory.

Victor K. Abalakin

Director of the Pulkovo Observatory,
Chairman of the Local Organizing Committee

Ladies and Gentlemen,

It is a great pleasure for me to inaugurate this conference and I would thank you all for being so numerous in responding to our invitation. We are lucky to be able to meet together in a prestigious observatory only a stone's throw from a town which in the 18th century saw the creation of an academy which rapidly attracted the outstanding scholars of that time, notably Daniel and Nicolas Bernouilli as well as Leonard Euler.

The collection of data and their organization so, that others may make use of them, is an activity in astronomy that dates back to antiquity. To think that the first star catalog was compiled by Hipparchus! Since that time, and until very recently, progress has been related with increase in the size of catalogs and the accuracy of the data they contained. However, for the last twenty years we have seen a radical change in this domain.

Two factors would seem to characterize this change. First, it is the extraordinary growth in the amount of observational data, the development in space astrophysics being largely responsible for this explosion. Second – and for me this is the principal factor – there is the development of computers, together with the extension of networks for information exchange.

The evolution of the Astronomical Data Center in Strasbourg, created in 1972, is a good illustration of my remarks. Furthermore, this evolution also demonstrates the capacity, not only of the Center astronomers but also of the associated centers and of their users, to master and even to anticipate technological progress.

In the course of my career, I have devoted a lot of time to these problems, but I have been also preoccupied with the publication of the results of astronomical research in *Astronomy & Astrophysics*. The growth of publications is a relatively old problem, while the advent of computers in the publishing world is new. Advance in this domain has been amazing, and I think that it has led to a new outlook, or perhaps rather to a completely different conception, of interpreting just what a publication represents.

Our commission has not been immune to these changes. Some of the senior members may recollect knowing it as the IAU Commission on Abstracts and Bibliography until 1967 and then the Commission

on Documentation up to 1970. In 1970, the Executive Committee decided to form a Working Group on Astronomical Data, to be linked to Commission 5, and this Working Group held its first meeting in 1973 at the Sydney General Assembly. The Commission underwent yet another change of name in 1976 – the Commission on Documentation and Astronomical Data – which has since remained unchanged. During the last General Assembly at The Hague, we decided to create a Working Group on Information Handling, chaired by our colleague A. G. Hearn. He was one of the two IAU delegates at the ICSU/UNESCO conference on “Electronic Publishing in Science” in late February and he is responsible for presenting a review paper to us on this subject. I would just like to follow up with a few brief remarks.

We are awaiting the arrival of more rapid electronic means for publication of our research work and we think that this would be an amelioration. It should certainly be a big improvement compared with the present situation. I would like to remind you that Galileo made the first astronomical observations in January and February of 1610 and that he published his results in the *Sidereus Nuncius* in March of the same year!

Let us now take a look towards the future. I would like to pick out just two of the numerous problems with which we shall be confronted. The first one concerns electronic archives. It is important to define a policy to ensure the achieving of science in electronic formats. In particular, we need guidelines for the maintenance, the eligibility and the accessibility of archives. The second problem is the accessibility to the data for scientists in developing countries. It is our concern to ensure that the gap between these countries and ours should not increase due to new technological development.

In conclusion, I hope that this colloquium will provide the opportunity for us to be aware of the revolution that is taking place in the field of the diffusion of scientific data. I also hope that this colloquium will engender fruitful scientific and friendly contacts. Finally, I would like to thank the Local Organizing Committee for ensuring the very best conditions for these days when we are here together.

Bernard Hauck

Co-chairman of the Scientific Organizing Committee