

ADDRESS BY:

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Yugoslavia

Dear Colleagues, Ladies and Gentlemen,

I take great pleasure in having the honor to greet you in the name of the Scientific Organizing Committee of this symposium and to wish you successful work.

Permit me to greet, in the name of all participants, our distinguished guests who honored us by their presence. We have with us: professor Holmdahl, the Rector Magnificus of the Uppsala University and professor Kukkamäki, the president of the International Association of Geodesy, who is also an active participant of this meeting. I am also happy to greet the members of the Scientific Organizing Committee, of the IAU Commission 8 Working Group on Astronomical Refraction, of the IAG Special Study Group I.42 on Electromagnetic Wave Propagation and Refraction in the Earth's Atmosphere, and all invited speakers.

Another pleasant duty has fallen to me. In the name of all of you I would like to greet professor Tengström, the convenor and chairman of the Local Organizing Committee and to thank him for the work performed by him in the organizing of this meeting. He not only kindly accepted the organization but gave an immense contribution to the shaping of the profile of this meeting.

Professor Tengström was greatly aided in his work by: miss Ohlsson, secretary and treasurer, and the members of the Organizing Committee: messrs. Hodacs, Mårtensson, Eklund and O'Shaughnessy. To all of them we owe our sincere gratitude.

In planning of this symposium, we had two tasks in view: first, to summarize the results achieved in different fields and to stimulate thereby further researches and, second, by the exchange of views and experiences in the fields concerned to promote the knowledge of the refraction as an unique phenomenon. Thus, our task has been and continues to be: the analysis and the synthesis of the refractive influences. Even if the times were different it would be quite normal to proceed in this way.

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However, at a time like ours, these questions are getting particular importance. For once, both astrometry and geodesy are at a turning point of their development. By the introduction of a new, extra-atmospheric observing technique the accuracy of our measurements is being, or might substantially be, enhanced. This is not to say that the corresponding ground-based observations, in which refractive influences are an important factor, are to be, once and for all, discarded, but an increased accuracy of them is what is strongly demanded. We have reached the point where a better knowledge of the refractive influences is an imperative, a basic requirement if ground-based observations are to be, if not quite competitive, then at least complementary to the extra-atmospheric observations.

I believe I am not exaggerating by my emphasizing the importance of the knowledge of refractive influences, more exactly, of the atmospheric influences on the future development of geodesy and astrometry, as one may quite safely assume that ground-based geodesy and astrometry are not going to disappear at least in the near future. To what extent atmospheric influences will affect their results largely depends upon us. It is therefore our obligation to contribute, by our, as exact as possible, accounting for, reducing or eliminating those influences, to the increase of the accuracy of our measurements. It would be a good thing if no quotation would be made any longer of the wellknown Newcomb's statement about astronomical refraction from 1906: "There is no branch of practical astronomy on which so much has been written as on astronomical refraction, and which is still in so unsatisfactory state".

I certainly do not expect the aspired turn to be brought about exactly at this session. But I am certain that we are going, by our exchange of experiences, to contribute to the progress of these researches. I therefore sincerely regret, and I believe that all of you share this statement, that we do not have today with us some of the prominent researchers in this field. However, I am hopeful that through the proceedings of this symposium the contact with all interested will be maintained and that in this way the development of the investigations into refraction will be speeded up.

We are going to listen here on various refractive influences. It would be correct, however, to treat them as informations on the refraction as an unique phenomenon, bringing thereby the required synthesis into effect. I am confident that, in doing so, we are furthering our investigations. It is even of interest to examine the possibility of uniting corresponding working, e.g. study groups of refraction of the IAU and IAG into one sole body as an inter-union commission for researches into refraction.

It is my heartfelt wish that all of us, on closing this symposium, should be content with its work and that we will have clear picture as to the future of our investigations. Hoping for this, let me welcome you once again and wish you, besides a successful work, a pleasant stay in Uppsala. To our hosts once again our best thanks.