

PREFACE

A comprehensive study of aerosol properties needed for an understanding of the role of atmospheric particles in variation of the global climate and their effect on geo- and biospheric processes is a very complicated problem.

A great number of sources and drains, interconnection of global and local factors determining appearance and transformation of aerosol particles call for long-term observations, improvements in instrumentation and measurement techniques as well as the progress of mathematical models and laboratory experiment.

These problems cannot be solved without joining forces of scientists of various specialities and the performance of observations in different geographic points.

The rate of progress, results, and effectiveness of work in solving the integrated problems depend in many respects on correct choice of short- and long-term investigation goals, co-ordinated actions of all participants, as well as timely and efficient exchange of the information extracted.

In other words, a sophisticated planning of any integrated scientific programme and efficient control when realized determine its progress.

Aerosol investigations made in our country, including those made in Siberian Branch of the Russian Academy of Sciences, have a long and worthy history. The numerous aerosol problems under study fit naturally into international, national, and regional programmes. Among these projects such programmes should be noted firstly as the World Programme of Research of Climate (WPRC), the International Geosphere-Biosphere Programme (IGBP), the International Global Aerosol Programme (IGAP), the National Programme "Global Variations in the Environment and Climate", the Regional Superprogramme "Siberia", etc.

At the same time it is apparent that possible climatic and geo- and biospheric variations are more pronounced at a regional level. Hence their studies should be organized in context of the corresponding programme. It has been just these ideas that have initiated the project "Aerosols of Siberia", whose first results are described in this issue.

The present issue of the journal incorporate the material of the international working group "Siberian Haze-2", whose workshop was held in Novosibirsk on September 14-19, 1993 (unfortunately, the papers of foreign participants of the project had not been available before this issue's preparation. These papers will be published in our journal later).

The editor of this issue tried to keep the spirit of discussions typical for participants of that working group. So all of the papers submitted were included in this issue without close critique. Naturally, there are some ideas and conclusions which are of preliminary, hypothetical, and even debatable nature. It is for the readers to pass judgement on the advisability of this approach.

Giving the journal papers for thematic issue, Editorial Board of the "Atmospheric and Oceanic Optics" hope to make a contribution to strengthening the relations between the scientists of our country and foreign colleagues. We also hope that this project will attract interest resulting in active cooperation of different specialists.

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