

## Preface

The XIV International Symposium “Atmospheric and Ocean Optics. Atmospheric Physics” was held from June 24 to 30, 2007 in the region of Maksimikha (Republic of Buryatia) in the Sports-Sanitary camp “Rovesnik” of the East-Siberian State Technological University on the coast of Baikal Lake 230 km away from Ulan Ude in accordance with the “List of the international, all-Russian, and regional scientific and scientific-technical meetings, conferences, symposia, congresses, seminars, and schools,” approved by the Presidium of the Siberian Branch of RAS.

The Symposium organizers were the Institute of Atmospheric Optics SB RAS (Tomsk), Institute of Solar-Terrestrial Physics SB RAS (Irkutsk), Department of the Physical Problems at the Presidium of Buryatia Scientific Center SB RAS (Ulan Ude), and the East-Siberian State Technological University (Ulan Ude). The Symposium co-chairmen were Academician G.A. Zherebtsov and Doctor of physical-mathematical sciences G.G. Matvienko. The Chairmen of the Symposium Organization Committee was Doctor of physical-mathematical sciences V.A. Banakh, the secretary – candidate of physical-mathematical sciences O.V. Tikhomirova.

Within the framework of the Symposium, four Conferences were held:

- A. Molecular spectroscopy and atmospheric radiation processes.**
- B. Propagation of radiation in the atmosphere and ocean.**
- C. Study of the atmosphere and ocean by the optical methods.**
- D. Atmospheric physics.**

The Symposium welcomed 177 participants (56 of them in the age not exceeding 33 years) from 16 cities of Russia, as well as from Germany, Poland, Belarus, Mongolia, France, Turkey, Switzerland, and Sweden. The participants presented 358 reports, including 19 plenary and invited ones, as well as 131 oral and 208 poster reports.

The Symposium was supported by the Siberian Branch of the Russian Academy of Sciences, the Russian Foundation for Basic Research, Federal Agency for Science and Innovations, Optical Society of America (OSA), and International Society Advancing and International Society of Optical Engineering (SPIE). This support favored the successful work of the Symposium, timely publication of its Theses and the Proceedings (Proceedings of SPIE) in English in the electronic form. This financial support also helped to Organization Committee to partly cover the expenses for participation of 32 young scientists, as well as scientists from the Institute of Solar-Terrestrial Physics, Department of the Physical Problems at the Presidium of the Buryatia Scientific Center SB RAS, Institute of Atmospheric Optics SB RAS, and other organizations.

In addition to the Symposium Proceedings, published in the SPIE digital library, the Symposium materials were used to prepare the special issue of *Atmospheric and Oceanic Optics*, where the works were published, corresponding to the journal topics, as well other papers concerning the study of the ionosphere, sensing of the underlying surface, and other research directions performing at the BSC SB RAS and East-Siberian State Technological University, on which basis the Symposium was held.

*Doctor of Physical and Mathematical Sciences,  
Chairman of the Symposium Organization Committee, V.A. Banakh*