

## Preface

In June 25–29 of 2001, the Institute of Atmospheric Optics SB RAS and the Institute of Solar-Terrestrial Physics held the eighth Joint International Symposium “Atmospheric and Ocean Optics. Atmospheric Physics” in Irkutsk. Sixty three research groups from 23 Russian cities, as well as from the U.S.A., France, Spain, Austria, China, Poland, Belarus, and Ukraine were represented at the Symposium. A total of 125 oral and about 300 poster papers were presented, twelve scientists from the U.S.A., Spain, Belarus, and Russia gave invited talks.

The Symposium was supported by the Russian Foundation for Basic Research, the International Society for Optical Engineering (SPIE), the Optical Society of America (OSA), and the European Office of Aerospace Research and Development (EOARD). This support made it possible to publish the proceedings of Symposium in English (*Proceedings of SPIE 4678*). Thanks to the RFBR Grant No. 01–05–74033, the Organizing Committee partially reimbursed travel expenses for thirty participants, thirteen of whom are young scientists from different cities all over the Russian Federation.

The Symposium program included the following sessions:

*in atmospheric and ocean optics:*

- molecular spectroscopy and radiative processes in the atmosphere,
- optical radiation propagation in the atmosphere and ocean,
- optical researches of the atmosphere and ocean,

*in atmospheric physics:*

- physical processes and phenomena in the Earth’s thermosphere and ionosphere,
- structure and dynamics of the middle atmosphere,
- dynamics of the atmosphere and climate in the Asian region.

Along with the proceedings published by SPIE, some papers that correspond to the scope of the *Atmospheric and Oceanic Optics* journal are published in this issue.

*Chairman of the Organizing Committee,  
Professor V.A. Banakh*