

## Book Review

**Nuclear Meteorology (Yadernaya Meteorologiya).** Proceedings of the All-Union Conference on Nuclear Meteorology held at Obninsk, 23-28 June 1969. Edited by K. P. Makhon'ko and S. G. Malakhov. Gidrometeorizdat, Moskva, 1971, 1972 (Translated by Israel Program of Scientific Translations, Jerusalem, 1974, by A. Baruck and H. Olaru). vii and 380 pp. \$32.00.

The rather broad title, *Nuclear Meteorology*, implies to U.S. readers a book that would discuss atmospheric diffusion and contamination on various scales, from many source configurations, and would include many related subjects such as deposition and precipitation scavenging. Readers expecting such a general treatment, along the lines of that found in the U.S. Atomic Energy Commission publication *Meteorology and Atomic Energy 1968*, USAEC-TID-24190, will be disappointed in this book, although there is much valuable material for the specialist in the synoptic and global-scale problems of atmospheric radioactivity generated by weapons tests.

*Nuclear Meteorology* contains the more than 50 papers read at the Soviet Conference at Obninsk, June 23-28, 1969. This conference was organized around the following six sessions:

1. global pollution of the atmosphere and fallout of nuclear blast products
2. accumulation of radioactive products of nuclear blasts on the underlying surface
3. radioactive particles during nuclear bursts in the troposphere
4. processes of atmospheric scavenging
5. natural radioactivity of the atmosphere
6. equipment and methods for the study of radioactive contamination in the environment.

The content and range of the book can be fairly taken from these session titles, and they clearly show the narrow, specific focus of the meeting.

Western specialists in this subject have had the benefit of the proceedings of the more recent *International Symposium on Atmospheric Trace Constituents and Atmospheric Circulation* (*J. Geophysical Research*, Vol. 75, Nos. 9, 12, 15, and 18), which covered much the same areas, as well as the volume *Precipitation Scavenging* (1970), which reported the USAEC symposium on this subject (USAEC, Conf-700601). Thus *Nuclear Meteorology*, in the translated edition, comes rather late in the game, an unfortunate but unavoidable feature of the translation process.

In summary this book is primarily for specialists in atmospheric contamination problems and research related to nuclear weapons tests, an area in which there has been no lack of information available to western scientists. Researchers interested in specific papers and topics covered will find *Nuclear Meteorology* of value, at least from the bibliographic point of view. Others may be disappointed to find that its contents are much more narrowly delimited than its title implies.

F. A. Gifford

Director

Atmospheric Turbulence and Diffusion Laboratory  
National Oceanic and Atmospheric Administration  
Oak Ridge, Tennessee

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*About the Reviewer: Frank Gifford is director of the Atmospheric Turbulence and Diffusion Laboratory, a part of the National Oceanic and Atmospheric Administration, U.S. Department of Commerce, located in Oak Ridge. Dr. Gifford completed his graduate studies at Pennsylvania State University and is experienced in meteorology through service to commercial airlines and to the U.S. Weather Bureau. He has served the U.S. Atomic Energy Commission as a member of its Advisory Committee on Reactor Safeguards. His interests are in atmospheric turbulence and diffusion, air pollution, and the meteorology of other planets.*