

## Preface

The proposal for a special SCOPE project on the global biogeochemical cycles of elements was initiated at the Paris SCOPE meeting in 1973. By the time of the Moscow meeting of this committee in 1974 it had become apparent that such a project had the support of many National SCOPE Committees and the Executive Committee decided to include a project on 'Biogeochemical Cycles' in the scientific programme of SCOPE (Kovda and La Rivière, 1976).

In December, 1975 the Swedish SCOPE Committee with financial support from the Royal Swedish Academy of Sciences, UNEP, and Shell sponsored the first international SCOPE workshop on biogeochemical cycles at Friiberghs Herrgård, Örsundsbro, Sweden. The proceedings of this workshop entitled *Nitrogen, Phosphorus and Sulphur—Global Cycles*, edited by B. H. Svensson and R. Söderlund was published as SCOPE Report 7, *Ecological Bulletin*, 22 in 1976. Soon after the publication of this report it became clear that a more detailed treatment of the sulphur cycle, dealing especially with the physical, chemical, and biological processes involved and providing more reliable estimates of the sulphur reservoirs and fluxes of anthropogenic and natural origin, was required.

In May 1977 at the Paris meeting of the SCOPE Executive Committee, Professor M. V. Ivanov, on behalf of the Soviet National SCOPE Committee, put forward a proposal to continue work on the synthesis of data on the global biogeochemical sulphur cycle. This initiative was seconded by the Executive Committee and later the same year by an open meeting of SCOPE in London. A working group of Soviet scientists consisting of D. I. Grigoryan, V. A. Grinenko, M. V. Ivanov, A. Yu Lein, A. A. Migdisov, A. L. Rabinovich, A. B. Ronov, A. G. Rozanov, A. G. Ryaboshapko, and I. I. Volkov was set up to plan the project. As they had been engaged in a study of the specific processes involved in the global biogeochemical sulphur cycle for many years, they agreed to the proposal to produce a monograph on this topic, but declined to prepare a review of reviews or to collect a series of articles written by individual experts. They decided instead to concentrate on an analysis of the

primary analytical data they had collected for this cycle and to prepare a monograph with all chapters written to fit a common plan.

In April 1978 members of the Soviet working group met with representatives of the Swedish National SCOPE Committee in Stockholm to discuss the draft composition of the monograph and immediately afterwards work on the project commenced.

The approach was approved by the SCOPE Executive Committee at its meeting in Pushchino, USSR, in May 1978 and an International Advisory Committee consisting of J. R. Freney, P. Goldsmith, M. V. Ivanov, W. E. Krumbein, J. W. M. La Rivière, J. O. Nriagu, T. A. Rafter, and H. Rodhe were appointed to oversee the project.

In August 1979 a meeting of the International Advisory Committee was held in Canberra and a preliminary report on the project was presented by Professor Ivanov. This was followed in October 1979 by an international workshop in Pushchino, USSR, convened by SCOPE, UNEP, and the USSR Academy of Sciences. Scientists from 17 countries (see List of Participants) met to discuss the material which had been prepared. The present monograph has been written taking account of the comments, criticisms, and suggestions for improvement there offered. The workshop nominated an editorial board consisting of M. V. Ivanov, J. R. Freney, I. E. Galbally, V. N. Kudiyarov, T. A. Rafter, H. Rodhe, Yu I. Sorokin, and P. A. Trudinger to prepare the monograph for publication and invited Drs. J. R. Freney and C. H. Williams to prepare a chapter on 'The sulphur cycle in soil' to complete the overall cycle.

In conclusion, it should be pointed out that the organizational activity of SCOPE on global biogeochemical cycles has led to an intensification of work in this field in various countries, the production of a series of monographs, and increased discussion of these problems at international symposia.

On behalf of the authors and editorial committee we wish to thank all the scientists who participated in the discussions at the workshop, SCOPE, UNEP, and the USSR Academy of Sciences for financial assistance, the latter body for its hospitality during the workshop and editorial board meeting, and members of the Institute of Biochemistry and Physiology of Micro-organisms of the USSR Academy of Sciences who assisted with the organization of the workshop and the translation of the various forms of the monograph. We also wish to thank the other scientists who assisted in various ways with the improvement of the text. Special thanks are due to the project bibliographer, Miss D. I. Grigoryan, to the translator and project manager Mr V. D. Gorokhov, and to Professor T. Munn for reviewing the monograph and making numerous helpful comments which have improved the readability of this volume.

Kovda, V., and La Rivière, J. W. M. (1976) Preamble. In: Svensson, B. H., and Söderlund, R. (eds), Nitrogen, Phosphorus and Sulphur—Global Cycles, Scope Report 7, *Ecol. Bull.*, **22**, 9.

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