

Transport and Chemical Transformation of Pollutants in the Troposphere

Series editors: Peter Borrell, Patricia M. Borrell, Tomislav Cvitaš,
Kerry Kelly and Wolfgang Seiler



Transport and Chemical Transformation
of Pollutants in the Troposphere

Volume 3

Chemical Processes in Atmospheric Oxidation

Laboratory Studies of Chemistry
Related to Tropospheric Ozone

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and Wolfgang Seiler

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Foreword by the Series Editors

EUROTRAC is the European co-ordinated research project, within the EUREKA initiative, studying the transport and chemical transformation of pollutants in the troposphere. The project has achieved a remarkable scientific success since its start in 1988, contributing substantially both to the scientific progress in this field and to the improvement of the scientific basis for environmental management in Europe. EUROTRAC, which at its peak comprised some 250 research groups organised into 14 subprojects, brought together international groups of scientists to work on problems directly related to the transport and chemical transformation of trace substances in the troposphere. In doing so, it helped to harness the resources of the participating countries to gain a better understanding of the trans-boundary, interdisciplinary environmental problems which beset us in Europe.

The scientific results of EUROTRAC are summarised in this report which consists of ten volumes.

Volume 1 provides a general overview of the scientific results, prepared by the Scientific Steering Committee (SSC) and the International Scientific Secretariat (ISS) of EUROTRAC, together with brief summaries of the work of the fourteen individual subprojects prepared by the respective subproject coordinators.

Volumes 2 to 9 comprise detailed overviews of the subproject achievements, each prepared by the respective subproject coordinator and steering group, together with summaries of the work of the participating research groups prepared by the principal investigators. Each volume also includes a full list of the scientific publications from the subproject.

The final volume, 10, is the complete report of the Application Project, which was set up in 1993 to assimilate the scientific results from EUROTRAC and present them in a condensed form so that they are suitable for use by those responsible for environmental planning and management in Europe. It illustrates how a scientific project such as EUROTRAC can contribute practically to providing the scientific consensus necessary for the development of a coherent atmospheric environmental policy for Europe.

A multi-volume work such as this has many contributors and we, as general editors, would like to express our thanks to all of them: to the subproject coordinators who have borne the brunt of the scientific co-ordination and who have contributed so much to the success of the project and the quality of this report; to the principal investigators who have carried out so much high-quality scientific work; to the members of the International Executive Committee (IEC) and the SSC for their enthusiastic encouragement and support of EUROTRAC; to the

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participating governments in EUROTRAC, and in particular the German Government (BMBF) for funding, not only the research, but also the ISS publication activities; and finally to Mr. Christian Witschell and his colleagues at Springer Verlag for providing the opportunity to publish the results in a way which will bring them to the notice of a large audience.

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Preface by the LACTOZ steering group

The LACTOZ project has been co-ordinated successively by R. Anthony Cox, Karl-Heinz Becker and Georges Le Bras. This report has been prepared by the Steering Committee of LACTOZ with contributions from I. Barnes and R.P. Wayne. The support of the European Commission for co-ordination of the project and the personal involvement of Heinz Ott and Giovanni Angeletti are gratefully acknowledged.

In Chapter 2 of the report describing the scientific results, when the work of an author, whose individual contribution can be found in a later chapter of this book, is mentioned, the appropriate chapter and section numbers have been provided. However when an author's name appears with a year it refers to a EUROTRAC final report.

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