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Preface

The majority of this book was written in 1983–84 while the senior author was a Visiting Scientist at Oak Ridge National Laboratory (ORNL) in Oak Ridge, Tennessee. We believe that the approach to the problem of acid deposition effects on soils and waters developed during this collaboration contains elements that are significantly different from most prior work in this area. Some of the material and the software used in the development of these concepts stem from earlier individual efforts of the authors. However, what we believe to be the more significant concepts concerning the processes by which alkalinity may be developed in acid soil solutions, and by which acid deposition may contribute to the loss of this alkalinity, were the result of this collaboration.

The ultimate usefulness of these concepts in understanding and dealing with various aspects of the problems associated with acid deposition cannot be adequately gauged at the present time. They must first withstand tests of consistency with available observation, and of direct experimentation. It is our hope that dissemination through this book will facilitate this process within the scientific community.

The authors wish to thank the administration of the Environmental Science Division at ORNL, and the College of Agricultural Sciences at Colorado State University for their support in arranging this collaboration. We also wish to express our appreciation for the financial support provided by EPA.

Personal thanks are due to Dr. Jerry Olson of ORNL who originally suggested that the material might be appropriate for publication in the Ecological

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J.O. Reuss
D.W. Johnson

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