RADIOECOLOGY


EDITED BY

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DIVISION OF BIOLOGY AND MEDICINE
U. S. ATOMIC ENERGY COMMISSION
WASHINGTON, D.C.

PUBLISHED JOINTLY BY

REINHOLD PUBLISHING CORPORATION
NEW YORK
AND
FOREWORD

During the period September 10-15, 1961, the First National Symposium on Radioecology was held at Colorado State University, Fort Collins, Colorado. The Symposium was conducted under the auspices of the American Institute of Biological Sciences and sponsored by the Division of Biology and Medicine of the U. S. Atomic Energy Commission in cooperation with the Institute of Environmental Biology at Colorado State University.

As early as October, 1959, the need for and the feasibility of conducting such a meeting were discussed. A tentative program was organized and session chairmen selected. The chairmen were asked to search for participants and report as to the desirability of conducting such a meeting. The immediate response was so overwhelming and the momentum so great that this Symposium of a large number of papers resulted. There was in our minds great concern that such a large meeting would not fulfill the objective of the meeting, which was to integrate the current information in the new field of radioecology, or radiation ecology, as it is called by some. The high caliber of the papers presented and the enthusiasm of the participants left little doubt that the meeting was a success.

The success of this Symposium is largely the result of the active cooperation of session chairmen to whom we offer our appreciation for contributing many hours of their time. Gratitude is also expressed for the efforts of the AIBS staff. Finally, we wish to acknowledge the helpfulness of the many faculty members and other staff at Colorado State University.

Symposium Organizing Committee
John R. Olive, Chairman
Vincent Schultz
PREFACE

The editing of the following manuscripts has been a distinct pleasure, not only because of the material presented, but also because of the active cooperation of authors who condescended to follow the whims of the editors.

Further, we wish to acknowledge the enormous contribution from librarians and secretaries. Their effort has assisted us immensely in editing these proceedings. We are particularly indebted to Sarah Womack and Phyllis Horman.

Our guiding policy has been that the data and methods be presented in such a fashion that readers would be able to draw their own conclusions from these presentations. As a result, we strongly requested that a measure of variation and sample size be associated with all averages derived from the author's data and that conclusions resulting from statistical analyses be accompanied by descriptions of statistical procedures and results of the statistical tests, e.g., a complete analysis of variance table.

Except in a very few cases abbreviations were not used. We felt that such a procedure would assist non-radiocologists and foreign translators in reading the manuscripts.

Following submission of the manuscripts for editing, we requested that, where possible, issue numbers be included in the individual references. Because of the lateness of this decision on our part it was impossible to obtain all issue numbers. We acknowledge the effort expended by authors in fulfilling our request.

We hope that this modest beginning will inspire students to enter the challenging new field of radioecology and current radioecologists to fill some of the many obvious gaps in our knowledge of the fate and effect of radionuclides in man's environment.

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May, 1963
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