

Proceedings of the
THIRD INTERNATIONAL CONGRESS
of the
INTERNATIONAL RADIATION
PROTECTION ASSOCIATION

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PREFACE

The Third International Congress of the International Radiation Protection Association (IRPA) was held in Washington, D.C., September 9-14, 1973, and was hosted by the Health Physics Society. Two previous Congresses were held in Rome, Italy, in September 1966 and Brighton, England, in May 1970.

The scientific program, consisting of 237 papers, was truly international in scope. Scientists and administrators of 33 countries from all corners of the world actively participated in the Congress. In addition to the scientific program, refresher courses were held as part of a continuing professional development program. Scientific tours, an exhibition of radiation protection equipment and services, and a lively social program completed the Congress activities. A modified rapporteur system of presentation was used, and a relatively few papers were given orally by individual authors. This system, not in great use in the United States, received some criticism. However, it does provide an efficient system of presenting in a limited time a large number of papers, with only the pertinent facts being offered by the rapporteur, thus saving the audience listening to details.

The Scientific Program Committee under chairmanship of Dr. Bo Lindell had a most difficult task in developing the technical program. Perhaps I am somewhat biased; however, I believe the committee did an outstanding job. At its first meeting in Budapest, Hungary, in May of 1972, the committee made the decision that all projection slides presented at the Congress would receive severe screening and inspection in order to prevent the presentation of poor slides and incomprehensible data. Some authors resented such an inspection procedure; however, I am certain that the audience appreciated the fact that the committee instituted this. Such a procedure should be an integral part of all scientific meetings.

The IRPA Executive Council agreed to allow publication of the Congress Proceedings after receiving a most welcome invitation from the U. S. Atomic Energy Commission to print the papers in two volumes at no cost to IRPA. The task of editing and working with the USAEC, of course, fell to the IRPA Publications Director, Dr. Walter S. Snyder, and his staff at the Oak Ridge National Laboratory. The publication of such an extensive body of scientific papers requires a tremendous amount of effort on the part of Dr. Snyder and his staff, and the IRPA Executive Council sincerely appreciates this effort. These Proceedings will provide a valuable record of the Congress and serve as a significant reference in the future.

The papers in these Proceedings are arranged by the sessions as specified by the Scientific Program Committee and as presented at the Congress. Unfortunately, it was impossible to include the rapporteur papers in this publication. Nevertheless, the Program Committee and the International Meeting Commission gratefully acknowledge the effort that went into the preparation and presentation of their reports. Only a few papers for various reasons could not be obtained for publication. I am sorry for those authors who will not have their papers published, after going to the effort of presenting their information at the Congress. The Editor and I both acknowledge with gratitude and express our thanks for the cooperation of the authors of the papers presented here.

At the IRPA General Assembly, we observed the passing of the Presidential Bell from Dr. W. G. Marley to the capable hands of Dr. Carlo Polvani. We all express our most grateful thanks to Gregg Marley for a job well done; to Carlo Polvani, we wish great success in leading IRPA these next three years. It was indeed gratifying to welcome to the fold of IRPA our most recent affiliated society--the Radiation Hygiene Section of the Scientific Society of Hygienists of the USSR. We also observed that IRPA now has a reasonable bank account and will wisely use its funds to support international and regional meetings and appropriate international organizations concerned with radiation protection. The Assembly also accepted the invitation of the Czechoslovak Society of Nuclear Medicine and Radiation Hygiene to hold the Fourth International Congress in 1976. We will be pleased to assist Dr. Vladislav Klener, the new Vice President for Congress Affairs, in preparing for that Congress.

Another outstanding event of the Congress was the first presentation of the Sievert Award to Dr. Bo Lindell of Sweden. Rolf M. Sievert was a giant in the field of radiation physics and protection and a gentleman. Bo Lindell is of the same mold and a most worthy recipient of the award. His lecture on the assessment of radiation risk was an outstanding contribution to the Congress.

The Congress would not have been a success without the financial contributions and assistance of many national and international groups and agencies. These are acknowledged on page of this volume. Also our deep appreciation is given to the scientific and technical exhibitors who gave us an opportunity to observe their equipment and learn of their services to our fields of endeavor. Due thanks is also given to the exhibitors for contributing to the financial success of our Congress.

It is an impossible task to thank personally each individual who worked hard and long, behind the scenes and at the forefront, to make the Congress the success that it was. To each of you, it was a pleasure for me to share in the effort and to work with so many fine people from so many lands.

Claire C. Palmiter
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FOREWORD BY THE EDITOR

The Editor hopes these Proceedings will be a useful summary of the Third International Congress. Every effort was made to hold authors to their allotted number of pages, and the compromises finally reached were related to the total number of pages for each category of papers. In a few instances, authors did arrange for use of supplementary pages originally assigned to another author from the same institution. No retyping has been done to achieve a uniform style, and thus the presentation of the material is due entirely to the authors. Some papers were withdrawn prior to the Congress, and some authors were unable or unwilling to deliver papers in time for inclusion in the Proceedings. The Table of Contents consists of the complete program as presented for the Congress. The reader may wish to contact individual authors for missing papers or for further details on the work presented here. The Editor wishes to acknowledge the work of James Hickey and Sally Stockstill who helped in the editorial work for these Proceedings.

Walter S. Snyder
Publications Director
IRPA

Oak Ridge, Tennessee
February 1974

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