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978-0-521-02810-3 - Science International: A History of the International Council of Scientific Unions

Frank Greenaway

Frontmatter

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Science International is the first history of a worldwide organisation of scientists, now involving thousands of participants, which was started a century ago when a few visionaries founded the International Association of Academies (1899–1919). This was succeeded by an International Research Council (1919–1931), which, in 1931, became the International Council of Scientific Unions (ICSU). The initiative to have an international arena for scientists survived two global wars, as well as immense political, economic, and social change in the 20th century. This history describes how national scientific academies as well as International Unions of scientists from specific disciplines learned to work together. From these alliances sprang great co-operative projects such as the International Geophysical Year and the International Biological Programme. Today ICSU is a global scientific organisation directed to the study of the entire planet and prospects for the human race. This detailed account will appeal to researchers in the history of science who are interested in the organisational aspects of science in the 20th century, and to professional scientists working in the service of science on a national or international level.

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A black and white reproduction of a water colour painting of the Hôtel de Noailles, ICSU's International Secretariat in Paris.

By Professor Keiji Higuchi of Japan

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Top The beginning of the International Association of Academies. An international gathering of European academic men of science. Wiesbaden 9 October, 1899. (back) Lieben, Schuster, Dyck, Armstrong, Leo (middle) von Sicherer, Windisch, Rücker, Bowditch, Wislicenus, Famitzin, Moissan, von Lang, Ehlers (front) Darboux, Auwers, Newcomb, von Zittel, Gomperz, Mussafrá

Bottom A mature ICSU: a 1985 gathering at Schloss Ringberg: pure and applied science, industry, all the continents, men and women.

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Foreword

In 1990 the Executive Board of the International Council of Scientific Unions decided that the 60th anniversary of the inception of ICSU in its present form should be marked by the publication of a history. It was clear that a substantial work could not be prepared in time for publication in 1991, so Lars Ernster, a former Secretary-General, was invited to prepare a commemorative issue of the ICSU magazine *Science International* which appeared in September 1991. Frank Greenaway, a former officer of the Science Museum London and former Secretary-General of the IUHPS, was then invited to take on the major task of writing a book.

The Board believes that this first attempt at writing a history of ICSU is not only a valuable contribution to the history of science, but also an important instrument for explaining what ICSU is and does to those working in ICSU and to those working with ICSU.

The Executive Board offered all possible help, but wished that the final text should be the work of one hand, a personal view. ICSU is highly indebted to Frank Greenaway for the way he interpreted and executed his task, always seeking to maintain high standards with respect to historical accuracy and readability. Thanks are further due to Maurits la Rivière who was asked by the Board to oversee the project, and to L J Cohen, J-C Pecker, and G F White, whom the Board asked to read the final draft and to comment on it.

(J C I Dooge, President)

Preface

Our subject is really the betterment of the human condition, but our material is individual scientists choosing to work together and trying to take science beyond the limitations of individual effort. The number of scientists in the world, acting in many ways, increased greatly in the 20th century. Of them an influential few (relatively few but amounting to some thousands) took part in the events set out here which have involved members of a distinctive type of international organisation. Two words occur repeatedly in these pages: *Academy* and *Union*. Each has been used many times to label a voluntary gathering of men and women of like interests. The Academies discussed here do not always bear that word in their titles, but all represent the scientific communities of individual nations, men and women of several callings working together to give the people of the national communities to which each owes his or her way of life a single scientific voice. Groups of scientists all over the world, of a single disciplinary commitment, have devised ways of working together regardless of their personal national affiliation, the international communities they have developed using the title of Union. Such Unions can exist independently, but what we are concerned with here is the way the Unions, through the International Council of Scientific Unions, have developed a way of working with each other and with the national academies. Most of the increasing number of personal participants have been occupants of academic posts, in universities and research institutes, but they have been men and women whose interests lay well beyond the individual pursuit of abstract knowledge. The base of their involvement has been that they have cared for the effective sharing of new knowledge, within a particular discipline and, more important, between disciplines. The peak of their involvement is their concern, not always expressed or felt, for the common future of humankind, which has meant that they have created lines of communication, not only with each other, but also with the world of politics and economics. This book has to begin long before the present form of ICSU and must deal with its predecessor bodies, the International Association of Academies and the International Research Council. Indeed, as the story begins some of the nations and their scientific academies did not exist. We can therefore only go as far as the present position and hold back from speculation. So much is seen to have changed that it would be unwise to predict what might happen next.

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Viviane Quirke (Oxford University) acted as Research Assistant for some sections. Parts of the text were read by Brigitte Schroeder-Gudehus (University of Montreal), William Shea (McGill University), Peter Sabine (formerly Deputy Director, British Geological Survey, who commented on geological matters, R J W Keay (formerly Executive Secretary, the Royal Society of London) who commented on biological and administrative matters. There were many conversations and much correspondence with, among others, D G Chisman, Phyllis Glaeser, Roger Hahn, Philip Hemily, Eric Kupferberg, Nicholas Kurti, Sir James Lighthill, J J McCarthy, Henry Metzger, Sir Frederick Warner, Peter Warren, E Barton Worthington, John Ziman.

From beginning to end, Professor J W M la Rivière (formerly Secretary-General of ICSU) watched and sustained all the work on the book. Many of his suggestions, often substantial, found their way into the text, as did many other suggestions by the learned professional staff of Cambridge University Press.

Above all, thanks are due to the permanent staff, past and present, of ICSU itself, who have never failed in their support over text content and the mechanics of getting words onto paper. It was useful at many points to be in touch with F W G Baker, former Executive Secretary of ICSU. In the early stages, M L Millward took a lead, which on his leaving ICSU, passed to Mrs P ('Tish') Bahmani Fard, who then kept in constant touch with all aspects of the work. Throughout, no author could have been better supported than by Julia Marton-Lefèvre, Executive Director of ICSU, to work with whom, and her colleagues, has been a privilege.