



## Science and the Future of Mankind

### Jubilee Plenary Session



Preface to the Proceedings. This volume contains the proceedings of two meetings of the Pontifical Academy of Sciences: the workshop of 12-14 November 1999 on 'Science for man and man for science' and the Jubilee plenary session of 10-13 November 2000 on 'Science and the future of mankind'. The two meetings dealt with very similar subjects, indeed the first was intended to prepare the ground for the second, and it is for this reason that we have decided to publish them in a single volume. Both these meetings addressed two topics which the Academy had been subjecting to debate for some time. On the one hand, there is the original relationship that the human being has with science, which, as the work of man, should always be at the service of human development. On the other, there is science, which, even when it deals with topics which are not specifically human has, and expresses, an idea of man, and this is something which we should strive to be aware of – that is to say: what does contemporary science say about the human being? One may think here, for example, of the important 'mind and body problem' on which the Academy has produced more than one publication.

The first topic, 'Science for man and man for science', was the subject of the workshop of 12-14 November 1999. The first part of this topic, 'Science for man', was discussed in detail by the recent World Conference on Science. In its final declaration on 'science and the use of scientific formula', this topic was expressed by the conference with the formula: 'science for knowledge; knowledge for progress', which included 'science for peace', 'science for development' and 'science in society and science for society'. The Pontifical Academy of Sciences believes that we must explore the ways in which science can help in developing and promoting the specifically human dimension of man, society, and the environment. At the same time, the Academy believes

that we should also discuss the ways in which, in contrary fashion, in certain situations, science can be responsible for a decline in the quality of life, as happens in particular in the case of damage done to the environment, the consequences of the invention and use of sophisticated weapons, etc. The second part of this topic, 'man for science', involved identifying the impact of recent scientific discoveries and advances on our vision of man, both directly and indirectly. This question bore upon the topic addressed by the Jubilee plenary session of 10-13 November 2000: 'Science and the future of mankind'. With a strong interdisciplinary approach and papers given by experts from different regions of the world, this meeting explored how science conditions the life of contemporary man. From physics to biology, and from the earth sciences to chemistry, leading scholars addressed themselves to the ways in which science is shaping and will shape the future of mankind. In addition, in the context of the Jubilee Year 2000, the Pontifical Academy could not but refer to that ultimate horizon which begins on the outer frontiers of science. From philosophy to theology, from cosmology and theology to a new natural theology, from the Messianic ideal to the progress of science, and from the North to the South of the globe, the various speakers sought to illustrate the relationship between science and the deepest direction of man. In covering these two topics, this volume thus presents a rather complete picture of the realities and the challenges which mankind now faces at the beginning of the third millennium. It does this in the belief that, as observed by the encyclical *Fides et Ratio*, every advance of science wherever it may take place, does not close the horizon of transcendence to man, and that the fullness of faith leads man to knowledge of science, as is demonstrated by the fact that modern science was born during the Christian era with the assimilation of the message of freedom brought by Christ.

This preface would certainly not be complete without an expression of gratitude to the President, Prof. N. Cabibbo, the Council, and the Academicians who gave papers at, took part in, and thus made possible, these meetings. The Pontifical Academy of Sciences also deeply grateful to the Holy Father John Paul II who not only follows and supports its activities with great interest and care, as is demonstrated by his Address to the Jubilee plenary session which is published in this volume, but also is convinced that today more than ever before a new alliance between Science and Faith can help to purify faith and open science to the salvation of man.

+ Marcelo Sánchez Sorondo