

## WELCOME ADDRESS

by

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Mr. Vice President of the Royal Swedish Academy of Sciences, Mr. President of the Italian Council of Research, dear guests, ladies and gentlemen,

At official level, the scientific contact between Swedish and Italian scientists, among the National Academies of the two Countries dates back to about two hundred years ago and much earlier at level of personal contacts. Being here is therefore not a novel initiative, but the continuation of a century-old cooperation. Hence, we are here today to open the second edition of the Swedish-Italian Symposium on new materials, held this time in Italy (today in Rome and from tomorrow until next Saturday in Ischia near Naples), after the successful first edition, two years ago in Sweden at Pitea.

I recall with pleasure the role played by our Academy of the Forty in the development and continuation of contacts between Swedish and Italian science. The Academy of the Forty was founded in 1782 intending to be the national Academy of Sciences of Italy, hence constituted at its beginning, exclusively by Italians. Very soon however, we realized how foreign participation was essential to the level of scientific information, and to the role of Academies in a world already longing for cultural identities non restricted within political limits. Only four years since its foundation, in 1786, the Academy of the Forty appointed its first twelve foreign members, selected so as to ensure maximum contact with foreign science representatives. One of the first twelve foreign members of the Academy of the Forty was a Swede, the famous chemist Karl Wilhelm Scheele, appointed member of the Italian Academy in 1786, the very year of his untimely death. He was succeeded, as a member of the Academy of the Forty, few years later, by Berzelius, one of the most impressive personalities in Swedish and European science and life of the early 800, and subsequently by several other scientists. The mutual participation in our Academy lasts until present days.

Swedish-Italian scientific cooperation was further revived and strengthened in recent years, part through a cooperation agreement between the Royal Swe-

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dish Academy of Sciences and the Forty signed a few years ago, due to a large extent to the efforts of our past President professor Marini Bettòlo, who is unfortunately seriously ill and cannot be here today, and part through the activity of the Italian Council of Research and of its Finalized Project on Special Materials, which extends its research well beyond national activity, striving for the establishment of international contacts in several countries, where technology and development are advanced at the highest level.

Therefore, after the first, and successful, joint Swedish-Italian Meeting in Pitea, we begin the second symposium of the series which is devoted to "New materials: trends and prospects", with a more ample and extended selection of themes for reports, comparisons, and discussions.

The number of participants has been increased, the choice of subjects offers consequently a more systematic possibility both for an overview of the state of art of materials science in both Countries, and for detailed, deep substantial evaluation of the selected topics.

The adopted formula, for this symposium, matches exactly the first Symposium held in Sweden in 1992. The opening meeting is in the capital city of the host Country, the actual works will be continued in a relatively secluded part of Italy, namely on the island of Ischia, south of Rome in the Tyrrhenian sea. We shall not be able to show you in Ischia the suggestive scenery of Northern Sweden, as you did in Pitea, we shall try to respond with the charm of one of the less known, but not of the less beautiful, islands of the Mediterranean sea.

The contents of this symposium deserve some more comments. Science is constantly improving. Targets and choice of goals are today continuously changing. Chemistry is evolving in several directions. One of the most significant ones is materials chemistry, a field to which increasing attention is being paid also by physics, technology and engineering. Chemistry has been often blamed in the recent decades for being the source of unnatural, polluting, subtly or violently harmful substances; now however we are on the way of re-evaluating chemistry as a possible source of materials, both old materials, with improved properties and manageability, and new materials of outstanding, and until recently unthinkable useful properties. Chemistry has often been not actually blamed, but noted for putting excessive weight on fundamental aspects, often useless and sometimes even abstruse. Now, chemistry is called to give its contribution, and it is an essential one, to synthesis, modification and treatment of materials which are first of all useful to man and apt to improve his quality of life. The expanding role of biomaterials is a highly significant example in this direction.

Chemistry has often been blamed in the past for being or being chiefly used as an aid to industry, for its money-making scopes, with little or no consideration for possible additional benefits to mankind, and with little or no regard to harmful aspects, waste of resources and pollution hazards. Modern materials science is however now operating in a quite different scenario, where

governments, common people and industrial production have been warned and are well aware of past errors, and of the necessity of exploiting human and natural resources with the primary aim at the welfare of humanity, to which scientific skill is called to contribute in an essential manner. Profit is obviously not excluded in such a modern view of the role of science and technology, it continues to be one of the reasons of utility and satisfaction for those who are engaged in the field of production and engineering of materials, but its achievement has to be now continuously checked, guided and limited by compliance with basic requisites of human and social utility. The choice of the three main sections of the simposium, that is biomaterials, metallic materials and surface properties of materials, seems to me well representative of the complex role materials science is expected to play in the life of modern man.

I renew my hearty welcome to the Swedish participants and to all scientists who will contribute to the works of this symposium. Allow me to remember that most of the steering and organizational activity of this meeting has been done by the "CNR project for special materials in advanced technologies" directed by dr. Battistoni who is our host here. A special thank is due to dr. Sergio Dellonte, the Scientific Attaché of the Italian Embassy in Stockholm, who acts since years as an excellent, efficient and competent link between Swedish and Italian research activities.

Thanks are also due to the staff who has spared no efforts for the success of the organization, Mrs. Ilaria Bencini of the CNR and Mrs. Francesca Vasta for the Academy of the Forty.

I wish all of you a pleasant stay in Rome and in Ischia, together with fruitful discussions and useful outputs from the Second Joint Swedish-Italian Symposium on new materials.