

## Welcome addresses

**BENITO RIGHETTI**

*S&T Attaché – Italian Embassy*

As a Scientific Attaché at the Italian Embassy, I am in duty of promoting the bilateral Cupertino between Italy and Hungary in Science and Technology. Today we will see demonstrated how advanced technologies can contribute to enhancement of cultural heritage.

First let me address a warm thank to the very representative authorities who are honouring our meeting: H.E. the Ambassador of Italy P.G. Spinelli, the State Secretary of the Ministry of Cultural Heritage, Mrs Erika Koncz, The Director General of the Hungarian National Museum, Dr. Tibor Kovács who made available for us this wonderful venue.

Let's give a glance to the technologies which will be matter of the symposium: laser beam, X-ray spectroscopy, neutron beam diffraction, ion beam, X-ray digital radiography, ancient DNA analysis, synchrotron light, luminescence, etc. Right a few years ago the use of these technologies was limited to carry on basic research or theoretical investigations. A remarkable step has been made in a few years toward the employment of these technologies in supporting innovation in many sectors: today their application will be shown in non-destructive archaeometric studies and intervention for the preservation and enhancement of Cultural Heritage.

Italy and Hungary are both depository of an extraordinary wealth of Cultural Heritage recognised and envied world-wide. It implies, on the other side, high costs for conservation and preservation; in fact, masterpieces of art and artefacts easily undergo, mainly in our modern times, degradation processes triggered by environmental pollution as well as human negligence and destruction.

Public administrators must be more involved and aware of the new means which are made available by science and advanced technologies. On the other side, experts and scientists gathered here could pave the way to policy makers in undertaking the best strategies of interventions for preserving masterpieces of arts and artefacts of our ancestors.

It will be our duty and the duty of the Italian Embassy in Budapest to help strengthening the bilateral Cupertino which is already on way between Italy and Hungary and promote new intergovernmental projects.

**PAOLO GUIDO SPINELLI**

*H.E. the Ambassador of Italy*

The Italian Embassy in Budapest, within its promotional activity for scientific and technological co-operation between Italy and Hungary, has initiated a series of scientific and cultural events illustrating the role which Hungary played in Europe, not least by a celebration of the nation's archaeological and architectural heritage.

On this topic, Italy has a consolidated and long since partnership with Central-Eastern European Countries, mainly with Hungary, for their common cultural roots and unique Cultural Heritage which must be preserved for future generations. Italy and Hungary, in fact, more than other Countries, have the need and duty to preserve this unique Cultural Heritage which belongs to the entire humanity.

The integral connection between science and culture is something strongly felt by the scientists and scholars of both countries; and this has nourished closed and detailed Cupertino, including Cupertino among archaeologists, art historians and architects as it is documented by the many common projects which are already on way between the two countries.

The experts and scientists gathered together in this magnificent ceremonial room of the prestigious Hungarian National Museum will surely pave the way to policy makers in undertaking the best strategies of interventions for preserving masterpieces of arts and artefacts of our ancestors.

In offering my heartfelt thanks to the Hungarian and Italian scholars and researchers who made this major cultural encounter possible, I must also record my satisfaction at the support given by our Embassy in Budapest to an event which clearly illustrates how deeply-rooted are the relations, at this moment in history, between the Italian and Hungarian cultures, not the least in the conservation of the artistic and architectural heritage in Budapest.

On remarking again the high cultural and scientific value of this symposium, I wish you an enjoyable stay and profitable work.

Paolo Guido Spinelli

*Ambassador of the Republic of Italy*

ERIKA KONCZ

*State Secretary, Ministry of Cultural Heritage*

First of all, let me greet all the participants of the Conference in the name of the Ministry of Cultural Heritage, and I would like to render my thanks in particular to the two partner Institutions who took part in the organisation of this event: the Italian Embassy (personally, to H.E. the Ambassador Paolo Guido Spinelli, and to the Scientific Attaché Mr. Benito Righetti), and to the Hungarian National Museum (respectively to the Director, Dr. Tibor Kovács).

Since Hungary's accession to the European Union, the number of international scientific conferences has proliferated, but, as far as I know, on this topic this is going to be the first assembly.

It is a real pleasure for me that Hungary's partner will be exactly Italy in this occasion, because Italy can boast of a great experience in the protection of historic monuments and in the archaeological excavation, elaboration and preservation techniques.

It is well known, that the first archaeological and historic-monument excavations in Italy were initiated by the Princes of the Medici Family, already in the XVI<sup>th</sup> Century; and during the past centuries Italy has turned out to be a real world-power in the protection of historic-heritage and regarding the scientific methods and technologies that are used in this field.

At the same time, it is less popular that since the XIX<sup>th</sup> Century also the Hungarian scientists, archaeologists and art historians had joined to this work. Perhaps it is enough to recall to the memories the 'great name' of Torma Károly, excellent researcher of the Roman heritages of Pannonia, university professor and the founder of The Museum of Aquincum, who is also acknowledged in Italy; his tomb is in Anzio, Italy. From the XX<sup>th</sup> Century, thanks to the foundation of the Hungarian Academy in Rome, the researches had received a severe institutional background and the Academy still carries a very important role in the assistance of our cultural connections.

Regarding the topic of today's Conference, we have to start from the fact that the material part of cultural heritage including national monuments, archaeological sites and artefacts/findings, had accumulated in a large quantity and represent a great value, but they are also finite/restricted, because their formation had happened in the past - which is already closed down- and they can not be produced again as originals.



It is an important feature as well, that the visual information and the sensible context that accompany the 'touchable', '3 dimensional' objects have the same documentary value, and if we 'work out' their meaning they can enrich our scientific knowledge.

However, both the monuments, archaeological sites and artefacts, but even more the accompaniments mentioned after –at least because of their material nature and their age – are extremely vulnerable and temporal/caduceus; their maintenance and preservation for our descendants requires a continuous fight against the laws of nature, physics and chemistry. In addition, many times the research and the scientific examination itself can also expose its subjects to a real danger: although the archaeological excavation can explore indispensable information, the major part of the research processes damages and endangers the monuments.

Because of this, we have to try to invent and use methods, that not only furnish information in bigger quantity and quality, but also reduces the risk of damaging the examined objects and phenomenon. In the same way, we have to find techniques and solutions, by means of which we can fight against the destructive effects of time more successfully and preserve better the discussed monuments. In this battle, the archaeology, the museology, and some natural sciences such as physics, chemistry and the modern technology are allies.

Well, the participants of this Conference are illustrious representatives of this two sides from both countries; their presence is the warranty of common results and process. Let me wish you good luck to this work, and encourage all of you to consider this occasion as the starting point and a station of a process, that will lead to a real Cupertino, that involves institutions and experts.