

RIO DE JANEIRO CHARTER ON THE HERITAGE OF SCIENCE AND TECHNOLOGY¹

1. CONSIDERING that science has a great influence on the development of society, enabling transformations in our daily lives by expanding human knowledge about nature;
2. CONSIDERING that scientific progress has enabled technological developments, with the production of new machines and scientific principles, bringing about transformations in the conditions of production in the social world;
3. CONSIDERING that article 216 of the Federal Constitution of 1988, which defines Brazilian cultural heritage as being constituted of tangible and intangible property, taken individually or together, bearing references to the identity, actions and memory of the different groups that have formed Brazilian society, including *scientific*, artistic and *technological* creations (item III);
4. CONSIDERING that since the emergence of heritage charters, starting with the Athens Charter (1931), scientific heritage has been referenced, and the protection of “monuments of artistic, historic or *scientific* interest belonging to the different countries” has been espoused;
5. CONSIDERING that the first article of the Paris Recommendation (1964) puts forward a definition of cultural property and lists “*scientific* collections” amongst the types of heritage to be preserved by nations;
6. CONSIDERING that the 15th General Conference of UNESCO (1968) defines immovable property, in article 1, item a, as “archaeological and historic or scientific sites, structures or other features of historic, *scientific*, artistic or architectural value”, while article III, item b, mentions the need for adequate budgets for the protection of immovable *scientific* heritage;
7. CONSIDERING that the Paris Convention (1970) lists “property relating to history, including the history of *science and technology* and military and social history, to

¹This document was written on the initiative of the participants of the 4th International Seminar on Material Culture and Cultural Heritage of Science and Technology (IV Seminário Internacional Cultura Material e Patrimônio da Ciência e Tecnologia; <http://www.mast.br/ivspct/inicio.html>), held at Museu de Astronomia e Ciências Afins from 5 to 8 December 2016. A draft prepared by Bruno Melo de Araújo, Emanuela Sousa Ribeiro and Marcus Granato was submitted to the participants for evaluation and suggestions, which were incorporated into the text after due analysis, resulting in this **Rio de Janeiro Charter on Science and Technology Heritage**.

the life of national leaders, thinkers, scientists and artists and to events of national importance” amongst the types of cultural property to be protected;

8. CONSIDERING that the Paris Convention (1970) lists “rare manuscripts and incunabula, old books, documents and publications of special interest (historical, artistic, *scientific*, literary, etc.) singly or in collections” amongst the types of cultural property to be protected;
9. CONSIDERING that the 17th General Conference of UNESCO (1972) presents a definition of what may be regarded as cultural heritage: monuments: architectural works, works of monumental sculpture and painting, elements or structures of archaeological nature, inscriptions, cave dwellings and combinations of features of outstanding universal value from the point of view of history, art or *science*. Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or integration with the landscape, are of outstanding universal value from the point of view of history, art or *science*. Sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the point of view of history, art or *science*;
10. CONSIDERING that article 1 of the Burra Charter, Australia (1980), defines cultural significance as aesthetic, historic, *scientific* or cultural value and stresses the need for preserving the *scientific* legacy for future generations;
11. CONSIDERING that government authorities, with the collaboration of society, must promote and protect Brazilian cultural heritage, and that science and technology heritage is an integral part of such heritage, its preservation should be undertaken jointly by civil society and the State;
12. CONSIDERING that responsibility for actions related to the preservation of the heritage of Brazilian Science and Technology is an attribute of the Ministry of Culture, as set forth in Decree 8.837 of 17 August 2016;
13. CONSIDERING that the Brazilian national heritage protection agency, Instituto do Patrimônio Histórico e Artístico Nacional, has no inscription book dedicated to science and technology and that cultural property of this nature, when listed, is inscribed on the books of “Historical” heritage or of “Archaeological, Ethnographic and Landscape” heritage (the same being the case on a state and municipal level);

14. RECOGNISING that a large proportion of the items that could integrate the heritage of Science and Technology have already been lost and those that still exist are at a high risk of disappearing,

Professionals and institutions hereby publicly attest to the importance of this heritage, setting forth guidelines to contribute to the development of policies for its safeguard.

DEFINITION

1. Science and Technology Heritage constitutes the tangible and intangible legacy of the scientific and technological knowledge produced by humankind in all areas of knowledge that relates to the dynamics of science, technology development and teaching, and to the memory and action of individuals in spaces for the production of scientific knowledge. Such property, in its historicity, can be transformed and is selectively attributed with values, significance and meanings, enabling its emergence as property of cultural value.
2. Science and Technology Heritage includes artefacts, human constructions and natural landscapes, sites for the observation of the night sky, astronomical and geophysical observatories, weather stations, agronomy research centres, laboratories, museums, including botanic gardens and zoos, and places used for or built with the purpose of hosting experiments, conserving scientific collections, fostering learning and the exchange of ideas, and developing and producing instruments, machines and processes related to technological advancement, both public and private.
3. Science and technology objects of cultural significance are understood as being scientific collections from all areas of knowledge (health, humanities, engineering, exact sciences, life sciences, artistic languages, communication and information), scientific instruments of all kinds, machines and assemblies, laboratory notebooks, field notebooks, books, photographs and other kinds of document, both public and private, related to the development of scientific and technological knowledge.
4. Intangible science and technology heritage includes the dynamics developed for the practice of science and the development of technology in laboratories, teaching and research practices, scientific know-how and others.
5. Science and Technology Heritage interfaces with several other kinds of heritage, such as industrial, rail, archaeological, paleontological, teaching and others. These

areas of convergence reveal the breadth of scientific culture in contemporary society, reinforcing the need for its recognition and preservation.

OBJECTIVES

1. To contribute to the preservation of Science and Technology Heritage in Brazil;
2. To stimulate debate about Science and Technology Heritage in education and research institutions and museums;
3. To encourage the creation of public policies on municipal, state and federal level for the identification, preservation and communication of Science and Technology Heritage;
4. To promote a culture of preserving cultural property from the area of science and technology that is open to multiple perspectives, meanings, significances and values attributed by the different groups that form the field of science and technology, presenting the guidelines of this Charter;
5. To promote a science culture, bringing about the dissemination and communication of Science and Technology Heritage through research.

GUIDELINES

1. To promote networked practices at different administrative levels and entities, both public and private, whose institutional powers involve listing, conserving and communicating cultural property and the development of programmes and projects particularly related to Science and Technology Heritage;
2. To promote policies for the in-situ preservation of Science and Technology Heritage;
3. To promote the involvement of society in the preservation of Science and Technology Heritage, adopting dialogical and participative processes in the implementation of the guidelines contained in this Charter;
4. To develop tools for the formal institutional recognition of the existence of sets of objects and collections – such as inventories, heritage lists, directives, regulations, etc. –for the entities responsible for safeguarding such collections;

5. To encourage the prior evaluation, by education and research establishments, of any material property to be disposed of so that items of cultural value can be identified for permanent preservation directly under their care or at preservation institutions;
6. To support education and research institutions, museums, libraries and archives that engage in the identification, preservation and communication of Science and Technology Heritage;
7. To encourage the creation of permanent sources of public funding for the safeguard of Science and Technology Heritage at education, research and preservation institutions;
8. To promote forums for debate about the preservation and communication of Science and Technology Heritage;
9. To acknowledge the potential of Science and Technology Heritage for the communication of science and promotion of a science culture amongst a wider public;
10. To encourage the capacity building of professionals to work in the preservation, documentation and communication of Science and Technology Heritage;
11. To prevent the reconstitution of objects or reuse of parts of objects that would create a false historical perception, prioritising the original qualities of science and technology objects;
12. To promote and divulge specialised methods for the conservation, documentation and communication of Science and Technology Heritage.

Rio de Janeiro, 09 May 2017