

RESEARCH AT THE MUSEUM.

**MUSEO
NAZIONALE
SCIENZA
E TECNOLOGIA
LEONARDO
DA VINCI**

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PARTNER



01

The Museum and research

The Museum was inaugurated in Milan in 1953, in the Renaissance-era building of the former Olivetan monastery of San Vittore, in the heart of the city.

Today, it is the largest science and technology museum in Italy and one of the most important ones in Europe.

The Museum documents and promotes the history and culture of science and technology for present and future generations. It aspires to foster relations and ideas and the development of knowledge.

For this reason, the Museum carries out research, on the one hand on educational methodologies and trends, and on the other on innovative approaches to interpretation, in collaboration with universities, institutions, and independent researchers.

The Centre for Research in Informal Education (CREI) and the Observatory on Scientific and Technological Heritage focus on such research, and stand at the service of the world of schools, museums, and other institutions.



Museum

research

heritage



02

New perspectives on history, science, technology and society

It is the task of technological-scientific museums to explore and experiment new narratives of science and technology, with growing attention to the transnational context, to the role of the different actors and agencies involved in the production of scientific and technological knowledge, and to the diffusion, use and adaptation of material devices.

Engagement in research is of fundamental importance for the Museum because it allows a more critical and historiographically updated interpretation of the artifacts in the collections, and to bring out their narrative potential. Research activity focuses on the history of science and technology, as well as other human sciences: history, sociology, philosophy, anthropology, political and economic studies.

Research is at the basis of the documentation and conservation of the collections, the acquisition of new materials, the planning of new exhibitions. A direct involvement in research is also the foundation for collaborations between Museum staff and external institutions, such as universities, other museums, and diverse communities of experts.

The aim is to stimulate the interest of scholars and the public in material culture, and to encourage them to participate in its development with the organization of meetings, events and collaborative projects.

03

The collections, the archive, the library

THE COLLECTIONS

18,000 artifacts tell stories of people and technologies, inventions, research, discoveries, and industrial and business contexts that have contributed to the transformation of our society and our environment over the last two centuries. A scientific and technological heritage of great interest that is unique in Italy, and a point of reference on the international level.

The Museum also holds art collections, mainly works from the late 19th and early 20th centuries, and the collection of interpretative models of drawings by Leonardo da Vinci, dating from the 1950s, which bear witness to the idea, under which the Museum was born, that culture is unitary in character.

Discover the collections in the **online catalog**.

Visit the Study collections in the storages by appointment: collezioni@museoscienza.it

THE ARCHIVE

The archive documents the conceptualization and birth of the Museum and its collections from the 1920s. It charts the broad context of Italian culture, research, and industry of the XXth Century, and of museology and scientific popularization.

In addition to the institution's archive, it gathers collections originating from the Consiglio Nazionale delle Ricerche, from other institutions and universities, companies, individuals, and from the City of Milan. It includes documents of noteworthy Italian inventors, such as Enrico Forlanini, Alessandro Cruto, and Piero Magni.

The photographic and audiovisual archive (200,000 artifacts) documents the Museum's collections and history, including the recovery of the Roman ships from Lake Nemi in 1928-32, and from other aggregated collections in the fields of exploration, aeronautics, and space. The archive conserves a collection from photographer Giovanni Battista Ganzini, as well as Marcella Pedone's entire photographic production.

Visit the **archive on line**, the website **Voci della Scienza**, and, by appointment, the archive itself: archivio@museoscienza.it

THE LIBRARY

Founded in 1943 as a resource for the future Museum, the Museum's library focuses on the history of science and technology, with 50,000 books and journals. The historic core is concentrated between the mid-19th century and the first half of the 20th century, while its 700 periodicals date back to the Center for consultation of Italian and foreign technological-scientific press, active in the Museum during the 1950s and 1960s. The library includes the Rare Books Collection a historical collection with 1,750 titles; the "Ugo Mursia" library of the sea, with 3,600 volumes; the Special Collections donated by leading figures in the Italian world of science and business, from the 1950s to today (Savorgnan di Brazzà, Bruno Parisi, Francesco Mauro, Cesare De Amici); and the collection dedicated to Leonardo da Vinci.

Access the **online catalog**.

The library is open from Tuesday to Friday, from 9.00am to 4.00pm, by appointment: biblioteca@museoscienza.it





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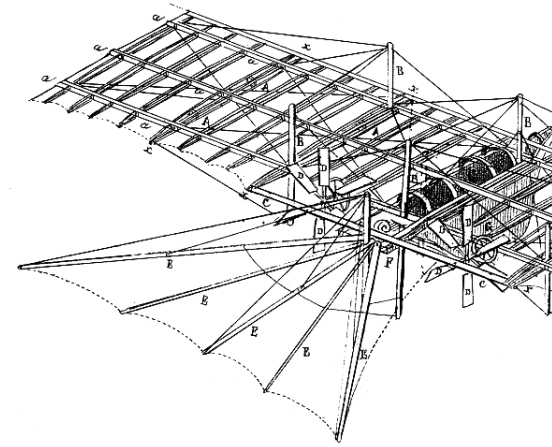
Building a common memory

The Museum collects artifacts to document the processes of scientific and technological research, the production and use of material devices in our society, in the past and in our day. Most of these objects are preserved in the Museum's storages, as Study Collections, and contribute to building a public memory that will remain a legacy for future generations.

If you wish to make a donation you can write to:
collezioni@museoscienza.it

The Museum is member of the European group for the safeguarding of contemporary techno-scientific heritage, coordinated by the Musée des arts et métiers, the Science Museum and the Deutsches Museum.

Acquisitions are regulated in accordance with need for protection, coherency with existing collections, and the development of new areas of research.



05

Projects, conferences, events

The Museum promotes research for the documentation and conservation of collections, the development of new exhibitions, conferences, workshops, publications, and other activities for the public.

Just a few examples:

The cycle of seminars *Studiare il futuro già accaduto* (Studying the already passed future), on climate and Man-environment relationship, inspired the exhibition *Confluence* for the Milan Triennale's XXI International Exhibition, in collaboration with the universities of Milan.

The international conference *Le transizioni nella storia dell'energia* (Transitions in Energy History) took stock of the current state of the art and of future perspectives of historical research on energy transitions, in collaboration with the Sapienza University of Rome and the EDF Foundation.

Based on the study and restoration of the CISE 1950 Cockcroft-Walton for the exhibition *Extreme. Searching for Particles*, director Francesco Clerici produced the ethnographic documentary film *Handle with Care. The Story of an Object*, with the participation of machine users, restorers, and historians.

Among the highlights of the collections, the *Olivetti Elea 9003* transistor mainframe computer console, dating from 1957-59 and designed by Ettore Sottsass, has been the subject of study and a restoration process open to the public with events organised in collaboration with the Associazione Archivio Storico Olivetti of Ivrea.

The restoration of *The Red Tent* used by Umberto Nobile in the polar expedition of 1928 was the occasion for organizing the conference *La spedizione del dirigibile Italia e la ricerca scientifica in Artico* (The Expedition of the Airship Italia and Scientific Research in the Arctic), in collaboration with the CNR (Consiglio Nazionale delle Ricerche).





restoration

collections

conservation

The renovation of the *exhibition dedicated to steel* has made it possible to recover and study some machines important for the history of the steel industry, in collaboration with the industry sector (the *Mannesmann* perforating rolling mill for seamless tubes, from 1885; the indirect-arc electric furnace by *Ernesto Stassano*, from 1898; and the *Continuus-Properti* casting system for strips, rods, and wires, from 1949).

As part of the project to renew the Museum's historic exhibition dedicated to Leonardo da Vinci, archival research led to the conference and exhibition *Leonardo 1939. La costruzione di un mito* (Leonardo 1939. The Construction of a Myth), with the proceedings being published in collaboration with the University of Bologna, and the exhibition *Leonardo da Vinci Parade*.

To spread knowledge about mathematician Maria Gaetana Agnesi in commemoration of the 300th anniversary of her birth, the Museum organized the *CULT NIGHT XVIII sec. edition, featuring Maria Gaetana Agnesi* with night tours, music, workshops, and a theatrically staged meeting, with Massimo Mazzotti of the University of California, Berkeley.

The Museum will host the 2019 international conference for *SHOT* (Society for the History of Technology).

Recent publications

E.Canadelli, M.Beretta, L.Ronzon, *Behind the Exhibit. Displaying Science and Technology at World's Fairs and Museums in the Twentieth Century*, Smithsonian Institution Scholarly Press 2019;

E.Canadelli, M.Beretta, C.Giorgione, *Leonardo 1939. La costruzione di un mito*, 2019;

C.Giorgione, Catalogo mostra "Leonardo da Vinci. La scienza prima della scienza", Arte'm - L'Erma di Bretschneider, 2019;

M.Cappellina, S.Casonato, L.Reduzzi, *Conservation of the operator console of the Olivetti Elea 9003 computer (1959) at the Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci of Milan*, in *Visions. Innovation in technology and conservation of the modern*, Munich 2019;

E.Canadelli, S.Casonato, *1960–1962. The international science film exhibition at the Museo Nazionale della Scienza e della Tecnica "Leonardo da Vinci" in Milan: The engineer's solution to the problem of bridging museum, science, and cinema*, in *Public Understanding of Science*, 2018;

G.Paoloni, R.Reali, L.Ronzon, *I "primati" della scienza. Documentare ed esporre scienza e tecnica tra fascismo e dopoguerra*, Hoepli 2018;

L.Tasselli, *Le Transizioni nella storia dell'energia*, in *Lettera matematica Pristem-Bocconi*, Springer 2018;

C.Oliva, M.Iezzi, L.Ronzon, *La Tenda Rossa: un restauro problematico. Seta degradata in un manufatto tridimensionale*, in *Lo stato dell'Arte 14*, IGIC 2016;

E.Canadelli, *Le macchine dell'«ingegnere umanista». Il progetto museale di Guido Ucelli tra Fascismo e Dopoguerra*, in *Physis* 2016;

I.E.Tabacco, L.Tasselli, *Studiare il futuro già accaduto. Un progetto esplorativo su uomo, ambiente, cultura*, 2015, pubblicazione online museoscienza.org;

C.Giorgione, *Leonardo e il disegno di macchine*, in P.C.Marani, M.T.Fiorio, *Leonardo da Vinci. 1452-1519. Il Disegno del mondo*, Skira 2015.



publications

library



07

The portal

www.archividellascienza.org



PORTAL FOR THE ARCHIVES OF SCIENCE AND TECHNOLOGY IN ITALY

Technological-scientific documentation constitutes a considerable part of the Italian archival heritage. It includes not only materials from the Middle Ages and early modern age, but also from before and after Unification, with special reference to the roles played by the scientific and technological communities in the construction of the national identity and of the unitary state.

Bringing together over 30 years of inventories, studies and research on this documentation, the Accademia Nazionale delle Scienze detta dei XL, in collaboration with the Museum, set up the Portal for the Archives of Science and Technology in Italy. The Portal, developed in collaboration with ICAR (Central Institute for Archives) makes it possible to:

- find over 1,500 collections of scientific research institutions, and personal papers of scientists, held in over 200 institutes throughout Italy, with information on content, chronological details, research tools, and accessibility;
- read stories on the people and institutions who played a fundamental role in the history of science in Italy. These stories are useful for understanding the contribution of the Italian research system not only to scientific progress understood as a supranational competitive enterprise, but also to the social and economic development of the country;
- consult a wealth of bibliographic resources, curated by the Museo Galileo in Florence, which offers the possibility of exploring new perspectives for research and reflection;
- learn more about best archival practices, with a view to encourage scientific communities and individual researchers to safeguard not only their own documentation, but also the material produced by their organizations, public and private;
- signal and propose archival collections for inclusion in the portal, and the result of research work for publication.

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How to carry out research with the Museum

The Museum offers many opportunities for collaboration, especially for the study of collections, the development of exhibition projects, the preservation of scientific and technological heritage and museological research.

Students can carry out internships, prepare theses at undergraduate and graduate level (PhD and master degrees) under the joint supervision of their own university professoriate and Museum staff.

We encourage in particular theses addressing the theme of material culture from a variety of disciplinary perspectives and in different historical contexts – in the past as well as the present.

We are already benefiting from collaborations with cultural organizations, educational institutions at all levels, communities of experts and individual researchers, and we are keen to develop them further.

The Museum welcomes proposals from companies and individuals who would like to support research on themes of common interest by offering grants and scholarships, especially (but not exclusively) in favour of undergraduate and graduate students, and young post-graduates.

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