The Forum on History of Science and Technology for Cultural Communication

面向文化传播的科学技术史

国际学术论坛

April 16, 2022, Beijing

CONFERENCE HANDBOOK

北京科技大学
70 周年校庆 | 70th ANNIVERSARY
University of Science and Technology Beijing

北京科技大学
University of Science & Technology Beijing
科技史与文化遗产研究院
Institute for Cultural Heritage and History of Science & Technology

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北京科技大学
70 周年校庆 | 70th ANNIVERSARY
University of Science and Technology Beijing

CONTENTS

Forum Information

The Forum on History of Science and Technology for Cultural Communication is launched to celebrate the 70th Anniversary of University of Science and Technology Beijing. Globally renowned scholars and experts in the field of history of science and technology and science communication are invited for speech.

As Sciences and Humanities become more closely connected in the new epoch, the discipline of the history of science and technology assumes its significance in bridging the two broad areas. We face shared problems, including understanding education in the history of science and technology and cultural communication, how to transform academic accomplishments of the discipline into materials for science communication, and how to improve public literacy of scientific cultures. The invited speakers will offer fascinating discussions on themes of scientific cultures, science communication, science and science communication, history of science and technology, mutual learning between different civilizations of sciences, etc.

Venue:

Hall No.6, 3rd Floor, Tiangong Building B, University of Science and Technology Beijing, China

Time:

April 16th, 2022. 10:00–18:00 (GMT +8)

Language:

English and Chinese with oral translation

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Forum Agenda

Opening

Session 1: Scientific Culture and Traditional Culture

Session 2: History of Science and Technology and Science Communication

Session 3: Scientists and Science Communication

Session 4: Constructing the Discipline of History of Science and Technology

Session 5: Case Studies on Communications of History of Science and Technology

Session 6: Cross-Referencing Scientific Civilizations

Closure

Opening (10:00–10:30)
Chair: **FENG Qiang** Director of the Office of International Affairs , University of Science and Technology Beijing (CHINA)
Opening Address: **DAI Jinggang** Vice–Chancellor, University of Science and Technology Beijing (CHINA)
Convener Speech: **QIAN Wei** University of Science and Technology Beijing (CHINA)
Photo Time
Session 1: Scientific Culture and Traditional Culture **(10:30–11:30)**
Chair: **QIAN Wei** University of Science and Technology Beijing (CHINA)
Bernard Schiele University of Quebec at Montreal (CANADA) Science and Society: Two Sides of the Same Coin
SUN Xiaochun University of Chinese Academy of Sciences (CHINA) On Chinese Traditional Culture and its Influence on Nurturing Contemporary Scientific Culture
ZHANG Meifang University of Science and Technology Beijing (CHINA) Scientific Literacy and Traditional Culture: On the debate of *Benchmark for Scientific Literacy of Chinese Citizens*
Session 2: History of Science and Technology and Science Communication **(11:30–12:30)**
Chair: **QIAN Wei** University of Science and Technology Beijing (CHINA)
Gauhar Raza Council of Scientific and Industrial Research (INDIA) Cultural Dimensions of Science Communication
JIANG Xiaoyuan Shanghai Jiaotong University (CHINA) Safari Beyond the Border: Suggestions to Young Scholars in History of Science and Technology
LIU Bing Tsinghua University (CHINA) Historiography of Science and Science Communication
Lunch **(12:30–13:00)**
Session 3: Scientists and Science Communication **(13:00–14:00)**
Chair: **ZHANG Meifang** University of Science and Technology Beijing (CHINA)

WANG Zuoyue California State Polytechnic University, Pomona (USA) Transnational History and Science Diplomacy: Chinese American Scientists as Transcultural Communicators
REN Fujun China Association for Science and Technology / University of Science and Technology Beijing (CHINA) The Evolution of the Image of Chinese Scientists
ZHOU Cheng Peking University (CHINA) Constructing scientific culture in the Internet Age: Historical lessons from the first discovery of a virus
Session 4: Constructing the Discipline of History of Science and Technology (14:00–15:00)
Chair: **ZHANG Meifang** University of Science and Technology Beijing (CHINA)
ZHANG Baichun Institute for History of Natural Sciences, Chinese Academy of Sciences (CHINA) The Popularization of Research Achievements in History of Science and Technology
GUO Shirong Inner Mongolia Normal University (CHINA) On the Discipline Development of the History of Mathematics in China
ZHANG Li Peking University (CHINA) For cultural communication: what can the history of science and technology do? What did it do?
Tea Break (15:00–15:30)
Session 5: Case Studies on Communications of History of Science and Technology (15:30–16:30)
Chair: **CHEN Kunlong** University of Science and Technology Beijing (CHINA)
Efthymios Nicolaidis National Hellenic Research Foundation (GREECE) Communicating research on the Antikythera Mechanism.
FUNG Kam-Wing The University of Hong Kong (CHINA) Geomagnetic Observation in Hong Kong, 1836–1941
Michel Claessens Free University of Brussels (BELGIUM) The Emergence of Nuclear Fusion, a Challenge for Scientific and Cultural Communications

Session 6: Cross-Referencing Scientific Civilizations (16:30–17:30)
Chair: **CHEN Kunlong** University of Science and Technology Beijing (CHINA)
Francesca Bray University of Edinburgh (UK) Seeds of change? History of farming and politics of knowledge
SHI Yunli University of Science and Technology of China (CHINA) History of Science and the Mutual-Dissemination of the Science Culture between the Eastern and Western Civilizations
MEI Jianjun The Needham Research Institute (UK) The Purpose and Significance of Mutual Learning among Civilizations
Closure (17:30–18:00)
Chair: **REN Fujun** China Association for Science and Technology / University of Science and Technology Beijing (CHINA)
Conclusion: **QIAN Wei** University of Science and Technology Beijing (CHINA)

Abstract of Presentation

Science and Society: Two Sides of the Same Coin

Bernard Schiele (University of Quebec at Montreal, Canada)

Although “science” as we today understand it is of recent origin, science, technics, and society, i.e., technical mastery, remain today as linked as they were in the past. This conference, drawing upon examples from the human past, the transformations of the 15th to 18th centuries, the Industrial Revolution, and the ongoing revolution catalyzed by the development of technoscience will show that the evolution of societies is indissociable from technical mastery, at first, and scientific mastery, later, and of the impact, they can in turn exercise upon their environment. This is why we must think in terms of sociotechnical coevolution, society overdetermining fields of possible knowledge and the application of knowledge influencing societies and their aspirations. This dynamic accelerated during the 20th century to the point that the future of societies cannot be projected without simultaneously apprehending technoscientific development — technoscientific development being both a set of productive forces and an axiological horizon. However, this ever-closer linkage generates contradictions, and we shall conclude by pointing out those which seem the most acute。

On Chinese Traditional Culture and its Influence on Nurturing Contemporary Scientific Culture

SUN Xiaochun (University of Chinese Academy of Sciences, China)

Chinese traditional culture is significant for nurturing contemporary scientific culture. In order to establish the scientific culture fully in China, we need to consider how to relate the current scientific spirit with our past. There are misunderstandings of traditional culture. The most important among them is that there was no science in old China and no scientific ethos. Nevertheless, to review Neolithic times, the Chinese civilization is full of high achievements. According to Levi-Strauss' comments on civilizations since Neolithic Age, Chinese civilization has been marked high. The progressive development in China brought achievements in astronomy, agriculture and technology. In the talk, astronomy in the Han dynasty is taken as a case study; it illustrates paradigms of old Chinese sciences. I also explore imperial scientists' methods of investigation based on Zhang Heng and Zhu Xi and address the impacts of Confuscianism on Chinese science through case studies on seismographs and Su Song's water-powered astronomical clock. These cases prove that scientific ethos was not absent in Chinese traditional culture.

To establish a valid scientific civilization nowadays, traditional culture can be a support and inspiration. Traditional culture also illuminates different modes of thinking, scientific culture itself is in demand for diversity. Diversity is encouraged in scientific ethos. In this vein, Chinese traditional culture is beneficial for nurturing contemporary scientific culture. It is not to avoid studying Western civilization or learning modern scientific spirits. I propose integrating the two, which paves the way to nurturing scientific culture.

Scientific Literacy and Traditional Culture: On the debate of Benchmark for Scientific Literacy of Chinese Citizens

ZHANG Meifang (University of Science and Technology Beijing, China)

The study investigates the Benchmark for Scientific Literacy of Chinese Citizens. The background of issuing the Benchmark, its procedure, and its contents are analyzed; the key for analysis revolves around the huge debate triggered by the Benchmark on Chinese internet. The debate can be traced to historical discussions in China regarding the relationship between science and humanity, the boundary of science, and the goals for science education. We recognize that in the anxiety for modernization since 1840s in China, the gap between science and humanity studies persists, and scientism still dominates the dialogue. Instead, we value pluralism in science and scientific literacy and emphasize locality as a framework for understanding and assessing traditional Chinese knowledge and practices. We propose that good science education aims to eliminate scientism, enriching public understanding of the history of science, the culture, and philosophy of science.

Cultural Dimensions of Science Communication

Gauhar Raza (Council of Scientific and Industrial Research, India)

Culture, like democracy, is a hazy notion and scholars have not yet arrived at any universally accepted definition. It has been described in many ways, for example, a simple definition by anthropologist Clifford Geertz who said "culture is the stories we tell ourselves about ourselves" to complex ones such as "it is a group's shared collective system through which the group's collective values, attitudes, beliefs, customs, and thought are understood. It is an emergent property of the member's social interaction and a determinant of how group members communicate" [1].

In an article, Gustav Jahoda examines a whole host of definitions of culture and again comes to a conclusion '[i]t is concluded (with Alfred Lang) that there can be no generally agreed definition of culture'[2]. Without embarking on a long-convoluted debate, this presentation, in the first part, looks at culture as a construct of many subcultures, including culture of science.

In the second section, we propose that what was known as 'natural philosophy' and later termed 'science', has increasingly expressed itself through sub-disciplines, which have their own distinct language, jargon, practices, epistemology, and ways of validating the generated knowledge. The compartmentalization of sub-disciplines has led to the loss of meaning attributed to 'science' until the 19th century. Despite major contributions by scholars like Thomas Kuhn and Karl Popper, the definition of science has also eluded universally acceptable circumscription. However, the sub-culture of any science discipline prevalent in any society cuts across all national, social, or cultural boundaries.

In the third part, the presentation touches upon the interaction of peoples' culture and culture of science and argues that without understanding the peoples' thought structures which are shaped by cultural processes, meaningful and effective science communication cannot be achieved. It is also argued that science communication, like any other communication, is cultural and social.

[1]Thomas Kuhn, (first published in 1962) The Structure of Scientific Revolutions — 50th Anniversary Edition: 50th Anniversary Edition (2012)
[2]Popper, K., 1963. Conjectures and refutations. 1st ed. London: Routledge & Kegan Paul.
[3]Raza G., et al. (2002). Public, Science, and Cultural Distance, Science Communication.

Safari Beyond the Border: Suggestions to Young Scholars in History of Science and Technology

JIANG Xiaoyuan (Shanghai Jiaotong University, China)

History of Science and Technology is a small transdisciplinary field. It does not hold a clear boundary; it is with very limited research resources in comparison with those matured classic disciplines. The academic training in the field covers at least two broad areas, that is, natural science and history. In concern of this, I integrate my team's research cases in recent years to argue that transdisciplinary research is a promising and prospering orientation for the history of science and technology.

Historiography of Science and Science Communication

LIU Bing (Tsinghua University, China)

In contemporary science communication or popularization, topics and materials from the history of science have become key for new science communication, both in ideas and practices. In order to use the history of science in science communication, it concerns how to understand such histories of science and how to appropriately use the history of science in science communication. These concerns are closely related to the historiography of science. For practitioners of science communication, understanding the historiography of science is a must. Only in this way can they effectively and intelligibly incorporate the history of science into their practices.

Transnational History and Science Diplomacy: Chinese American Scientists as Transcultural Communicators

WANG Zuoyue (California State Polytechnic University, Pomona, USA)

Transnational history and the history of science, technology, and diplomacy are two exciting developments in the field of history of science and technology. This talk examines how these approaches have emerged and evolved in recent years, how they compare and connect with each other, and how their insights could help us understand the experiences of Chinese American scientists who utilized their transcultural background to play the roles of communicators and mediators in international and regional tensions in the late 20th century.

The Evolution of the Image of Chinese Scientists

REN Fujun (China Association for Science and Technology/ University of Science and Technology Beijing, China)

My presentation gives the whole story of the evolving process and status quo of the public image of the Chinese scientists. I always hold that constructing a good public image of scientists is not only the primary target of publicity work but also a necessary part of the advancement of science and technology. So, by telling the story, I also picked up the key factors about how to effectively tell good stories of scientists. I hope my work can serve as a reference to the study on how to build a good public image for scientists.

Constructing scientific culture in the Internet Age: Historical lessons from the first discovery of a virus

ZHOU Cheng (Peking University, China)

This paper examines how scientists from various periods, countries, and disciplines worked together to identify the tobacco mosaic virus, which is a rod-shaped protein—RNA complex. The process by which that came about was one of persistent and reflective collective learning. Examination of this history reveals that under conditions in which repeated experiments were unable to be properly performed, and no adequate queries from within the scientific community or communications among scientists were available, highly uncertain novel phenomena were susceptible to inaccurate interpretations and predictions. In view of that, it is suggested that only by encouraging queries within the scientific community and embracing alternative opinions can differences in scientific understanding be calibrated to increase the number of fundamental scientific and technological innovations. Only by promoting academic democracy and establishing dialogue on the basis of equality can we prevent substantial deviations in scientific understanding proposed by scientific authorities from inhibiting scientific development. With respect to China, this paper holds that, in the age of the internet and the dawning era of 5G, Chinese scientists ought to recognize and confront the limitations of scientific research, examine the cumulative nature of scientific understanding in a more general way, establish a dialogue mechanism among researchers on the basis of equality, allow for the inherent error-correction mechanism within the scientific community, and actively take part in the construction of scientific culture.

The Popularization of Research Achievements in History of Science and Technology

ZHANG Baichun, CHEN Pu (Chinese Academy of Sciences, China)

Understanding the history of science and technology is an effective way for the public to gain a better understanding of science and technology, as well as to propagate science and culture and convey science and humanity. Experts in the history of science and technology must popularize their findings and make the history of science and technology more accessible to the general public. In fact, many popular books on the history of science and technology already exist. For example, The History of Ancient Chinese Science and Technology that Walking into the Palace and its English translation can be considered an abbreviated version of the 26-volume History of Chinese Science and Technology series. The full Collection of Chinese Traditional Crafts, which consists of 20 volumes, has been edited for public reading. Some scholars released popular books on how many inventions in ancient China. The Institute for the History of Natural Sciences, the Chinese Academy of Sciences, compiled the Important Scientific and Technological Inventions in Ancient China, as well as a wall chart with 88 inventions. The book has spawned a variety of popularized history books, exhibitions, and even RAP videos, in addition to being translated into various languages. The results of the above popularization efforts have yielded positive societal outcomes and were rewarded.

On the Discipline Development of the History of Mathematics in China

GUO Shirong (Inner Mongolia Normal University, China)

Scientific research plays an important role in discipline construction and is one of its key elements. Therefore, it should be a feasible angle of view to think and study the discipline construction. The core of scientific research lies in what problems to pay attention to, choose and solve, and what theories and methods to use. There are common and popular main problems, main theories, and main methods in any subject. And after a certain period of time, they have gradually undergone some important changes in an invisible form, forming a new popular problem domain and theoretical domain or forming a new trend, which is the "invisible" influence and role of the discipline community on the discipline construction. The essence of discipline construction lies in planning and guidance, reflecting the needs and requirements of social development. It is one of the main factors promoting the formation of "public trend".

Since this century, the study of the history of mathematics has undergone obvious changes in China, showing some overall trends. From the perspective of the proportion of researchers and research branches, the proportion of the history of traditional mathematics in China has gradually decreased, but the history of mathematics in Japan and Korea has been strengthened relatively; The proportion of the history of western modern mathematics and that in the 20th century's China is gradually increasing; At the same time, it also extends its research field to the history of Arabic mathematics and the history of Indian mathematics. On the other hand, foreign scholars' research on the history of Chinese mathematics is more active than ever before. In this presentation we attempt to analyze such changes and their impact on the construction of the discipline of history.

For cultural communication: what can the history of science and technology do? What did it do?

ZHANG Li (Peking University, China)

Summarize and review the experience of how to more effectively integrate the research results of the history of Chinese modern science and technology with the dissemination of public culture. It is proposed that researchers in the history of science and technology should fulfill their social responsibility, that is, to contribute their personal academic research to the construction of cultures of science.

Communicating research on the Antikythera Mechanism.

Efthymios Nicolaidis (National Hellenic Research Foundation, Greece)

Since 1902, researchers from all over the world are trying to decrypt the secrets of the Antikythera Mechanism. Research boosted after 2005 when the most sophisticated methods of archaeometry imaging were used by an international interdisciplinary team. In 2010, the National Hellenic Research Foundation organized an exhibition, which evolved to comprise the most recent updates, in order to communicate to the public the results of the research on the Mechanism. The exhibition presents the history of the discovery of the Mechanism, the history of more than a century of research to decrypt it, describes its functioning, presents the inscriptions written on the Mechanism, presents the astronomy and the calendar that the Mechanism is based on, the technological challenges that its maker had to solve, and the legacy of the Mechanism. By presenting all these interdisciplinary aspects of the research on the Mechanism, we aim at communicating to the many public aspects of the history of science and technology and also astronomy and archaeology. Indeed, excepting ancient Greek astronomy and technology used to build the Mechanism, the public becomes familiar with ancient navigation and trade, the calendric question, the dating methods of ancient objects, the apparent motion of the celestial bodies and, last but not least, the astronomical clocks of the European Renaissance.

Geomagnetic Observation in Hong Kong, 1836–1941

Fung Kam-Wing (University of Hongkong, China)

Geomagnetic observation on the global scale is necessary since seafaring requires the compass for navigation while the value of magnetic declination changes with venue and time of observation. With the support of prominent geographer Alexander von Humboldt (1769–1859), mathematicians Carl Friedrich Gauss (1777–1855) and Wilhelm Eduard Weber (1804–1891) founded the Göttingen Magnetic Union, first geomagnetic observation network in the world, in 1834 and started modern geomagnetic observation grounded in the absolute observation of the three geomagnetic elements (i.e., declination, inclination, and horizontal intensity). In 1836, von Humboldt wrote to Prince Augustus Frederick (Duke of Sussex, 1773–1843), President of the Royal Society, and suggested a large-scale geomagnetic observation in British colonies; hence geomagnetic observation was globalized. This paper will analyze the geomagnetic observation in the region of Hong Kong from 1841 to 1941.

The Emergence of Nuclear Fusion, a Challenge for Scientific and Cultural Communications

Michel Claessens (Free University of Brussels, Belgium)

The presentation will review the development of nuclear fusion energy and, in particular, the history of the international ITER project (International Thermonuclear Experimental Reactor). ITER is an experimental fusion reactor in construction in the South of France. The project is funded by 33 countries (China, the European Union, India, Japan, Korea, Russia, and the United States). Fusion energy, which fuels the sun and the stars, could become a new energy source on Earth — "safe, clean and using abundant fuel." ITER is a major scientific and technological challenge, but it is also a challenge for communication. Furthermore, it is widely accepted that the general public is an active player in research and innovation. The presentation will present some initiatives for communicating this cutting-edge technology project. ITER is also a challenge for cross-cultural communications. The ITER Organization has a thousand staff from 33 countries, each bringing with them their language, culture, traditions, working habits, and, for most of them, their family. Although cultural diversity can promote creativity in a work environment, it is a source of complexity.

Seeds of change? History of Farming, Politics of Knowledge

Francesca Bray (University of Edinburgh, UK)

When it comes to cultural communication, today decolonial studies provide the framework for most historians of science and technology working in Western institutions. STS (Science and Technology Studies) sought to democratize both the narratives and the practices of science and technology in modern societies, and to undermine their hierarchies of expertise, by integrating users into knowledge production and policy-making. Post-colonial historians demonstrated the agency of colonial subjects in co-producing the scientific and technological regimes of modernity. Decolonial studies offer a step further in the project for epistemological justice, disentangling alternative worldviews and logics that have been effaced from the modern capitalistic mainstream, taking their potential seriously, and restoring histories and ownership of knowledge to formerly excluded groups. Accountability to and collaboration with the community concerned is integral to the decolonial methods and agenda, with consequences for methodology and communication. My talk outlines how decolonial approaches transform the relationship between local and global publics and academic research in the case of the history of agriculture, with a particular focus on seeds. I conclude by asking whether heritage programmes like the GIAHS (Globally Important Agricultural Heritage Sites), in which China plays a leading role, can be considered as belonging to the decolonial project.

History of Science and the Mutual-Dissemination of the Science Culture between the Eastern and Western Civilizations

SHI Yunli (University of Science and Technology of China, China)

The development of science requires and, in the meantime wrought a pertinent science culture, which is a factor very important in the understanding of the corresponding science. In most cases, however, scientific knowledge in dissemination is dissociated from science culture, which can handicap the proper process of transmission, understanding, reception, and further development of the science itself. History of science, in a great sense, is the induction and abstraction of the cultural background and idiosyncrasy of a science and therefore becomes an important medium for the dissemination of scientific culture. This is particularly true in the grand transcultural context as the transmission of science between the East and West.

The Purpose and Significance of Mutual Learning among Civilizations

MEI Jianjun (The Needham Research Institute, UK)

What is the purpose and significance of mutual learning among civilizations? Is it to compare the strengths and weaknesses of different civilizations? In this talk, I shall revisit Needham's ideas on "Science and Society in East and West" in his book "The Grand Titration", and try to answer these two questions in the light of relevant recent research work. I shall also discuss the significance of a comparative, cross-cultural approach in expanding horizons in the history of science and technology.

Invited Speakers and Chairs of Sessions

Francesca Bray

Francesca Bray, Emerita Professor of Social Anthropology at the University of Edinburgh, is a historian of science, technology, and medicine in East Asia, specializing in gender and technology, the politics of historiography, and the history of agriculture and food. Recent books include Technology, Gender and History in Imperial China, Rice: Global Networks and New Histories, and a co-authored book, Moving Crops and the Scales of History (forthcoming 2022).

CHEN Kunlong

CHEN Kunlong teaches archaeomaterials and conservation at the University of Science and Technology Beijing. His research interest is the technological study of archaeological inorganic materials, especially for understanding ancient metalwork concerning the analytical methodology of archaeological materials, primary copper smelting, technical characteristics of regional Bronze Age cultures, and early use of iron/steel in China.

Michel Claessens

Michel Claessens holds a Ph.D. from Brussels' University. His background is in physical chemistry and science journalism. He joined the European Commission in 1994, where he was acting Head of the Communication Unit in the Research Directorate-General, spokesperson for research, editor-in-chief of the research eu magazine, and in charge of the science and technology Eurobarometers until 2010. In April 2011, Michel became Head of Communication and External Relations at the ITER Organization in Cadarache (France). From 2016 to 2021, he was in charge of ITER policy and communication in the European Commission's Directorate-General for Energy. His latest books, 'ITER, The Giant Fusion Reactor' and 'The Science and Politics of Covid-19' have been published by Springer. He is currently developing an international project on science culture.

FENG Qiang

FENG Qiang, Professor at University of Science and Technology Beijing (USTB), Director of Office of International Affairs at USTB. He is in charge of State Key Laboratory for Advanced Metals and Materials. As a director for various research projects, such as high-temperature alloy investigation, platform-building for material genome initiatives, etc., Prof. FENG specializes in single crystal superalloy.

Fung Kam-Wing

Fung Kam-Wing, Professor Fung Kam-Wing earned his D.Litt. from Kyoto University and has been serving as a research academic at a number of institutions, such as Research Fellow and Visiting Professor at the Institute for Research in Humanities, Kyoto University, Japan; Visiting Research Professor at Center of Excellence, Kansai University, Osaka, Japan; Visiting Scholar, Academia Sinica, Taiwan; Senior Research Fellow at Asian Division, Library of Congress, U.S.A. He is currently a Fellow at Hong Kong Institute for the Humanities and Social Sciences, University of Hong Kong; Visiting Professor, Hong Kong Polytechnic University.

CHEN Kunlong

GUO Shirong, Professor at Inner Mongolia Normal University. He is titled as Excellent Researcher in various national and provincial programs. He specializes in the history of Chinese mathematics, ethnic history of science and technology, science communications between China and abroad, and the history of astronomy. He publishes widely and commits as a reviewer in Mathematics Reviews. He is a guest professor at Yonsei University in South Korea and The Needham Research Institute in Cambridge. At the same time, he serves as a council member of the National Society for History of Mathematics and director of the Chinese Society for Ethnic Minorities' History of Science and Technology.

JANG Xiaoyuan

JIANG Xiaoyuan, Professor at Shanghai Jiaotong University, the first Dean of the School of History of Science and Scientific Culture. Graduated from Astrophysics at Nanjing University in 1982, later from the Chinese Academy of Science in 1988, the first doctor in History of Astronomy. He became a professor at the Chinese Academy of Science in 1994 and established the first department of history of science in China at Shanghai Jiaotong University in 1999. He published more than 100 volumes of work and more than 200 academic papers and set up personal columns in the newspaper, addressing books, cinemas, and culture widely. Xinhua News Agency reported him three times globally with a reputation domestically and abroad.

LIU Bing

LIU Bing, Professor in History of Science at the University of Tsinghua, director of the Research Center for Science Communication and Popularization at Tsinghua University and CAST, Council member of Society for Chinese History of Science and Technology, Vice Head of Chinese Society for Book Review. He researches the history of science, philosophy, science, and cultural communication. Publications include volumes of monographs, essay collections, and trade books on science popularization, such as A History of Superconductivity; and translated publications and edited scientists' biographies.

MEI Jianjun

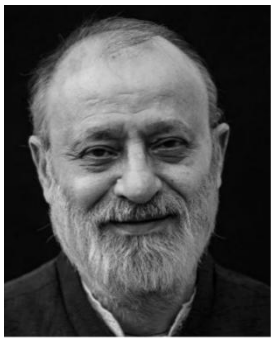
MEI Jianjun,Director of Needham Research Institute since 2013, a professor at the University of Science and Technology Beijing (USTB). Before his current position, he was the Head of the Research Institute of Metallurgy and Material Science at USTB. He specialized in the history of metallurgical technology, China–West communications, scientific archaeology, etc. Dr. MEI graduated in physical chemistry in metallurgy from the Beijing University of Iron and Steel Technology, a master from the University of Science and Technology China, and a doctorate from Cambridge University. He was a visiting scholar in Needham Research Institute, the Archaeology Department at Cambridge University, National Museum in Tokyo, and University College London.

Efthymios Nicolaidis

Efthymios Nicolaidis, Director of the History, Philosophy, and Didactics of Science and Technology Programme of the National Hellenic Research Foundation (www.updatess.gr). Born in Athens in 1954, they studied physics and the history of science in France. Main publications on the history of astronomy, the relations between science and religion, the history of science in Byzantium and the Ottoman Empire, and the spread of Modern European science. President of the International Union of the History and Philosophy of Science (2013–2017), Honorary Permanent Secretary of the International Academy of the History of Science/. Prize Chaire Blaise Pascal (France) 2013.

QIAN Wei

QIAN Wei, Professor and Dean of the Institute for Cultural Heritage and History of Science & Technology at the University of Science and Technology Beijing. He is a member of the Scholarship Committee on History of Science and Technology of the State Council, the Vice–Chairperson of the Chinese Society for History of Science and Technology, a member of the Standing Committee of the Chinese Association for Science of Science and Science Policy, and Director of the Committee for the Conservation of the Industrial Heritage at China Association for Preservation Technology of Cultural Relics. He specializes in historical metallurgy, Industrial Heritage, science, technology, and society.



Gauhar Raza

Gauhar Raza, former Chief Scientist of CSIR and Professor of ACSIR. He has worked on science communication, cultural distance model, and scientific temper for the past 40 years. His recent report 'Pulse of The Pandemic' focuses on the public perception generated during the pandemic and how scientific hegemony was reaffirmed as opposed to myths, superstitions, and conspiracy theories.

REN Fujun

Fujun Ren, Professor at the National Academy of Innovation Strategy of China Association for Science and Technology (CAST), a part-time professor at the University of Science and Technology Beijing, and vice president of China Science and Technology Journalism Society. He has published over 100 papers and more than 20 books, headed over 20 national class projects, and won multiple ministerial and provincial-level science and technology awards and several national patents. Over the years, Dr. Ren has advised more than 50 master- and doctor-level graduate students and post-doctoral students.

Bernard Schiele

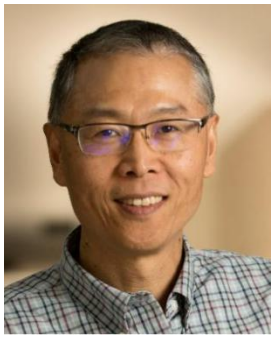
BERNARD SCHIELE, Professor of Communications in the Faculty of Communication at the University of Quebec at Montreal (Canada). He teaches and lectures frequently in North America, Europe, and Asia. He has been working for a number of years on the socio–dissemination of S&T. He is a member of several national and international committees and is a regular consultant on scientific culture matters to government bodies and public organizations. Among other books he has recently published recently with Toss Gascoigne and other scholars Communicating Science, A global Perspective, Science Culture in a Diverse World: Knowing, Sharing, Caring with Xuan Liu and Martin Bauer ; and Le musée dans la société [The Museum in Society].

SHI Yunli

SHI Yunli, Professor in the Department for the History of Science and Scientific Archaeology, Executive Dean of the School of Humanities and Social Sciences at the University of Science and Technology of China. He is the Vice Director of the Chinese Society for History of Science and Technology, a member of the Scholarship Committee on History of Science and Technology of State Council, member of the Steering Committee on Higher Education of History at the Ministry of Education, and President of International Association of East Asian Science, Technology and Medicine. He specializes in astronomy and physics, history of science communication between China and abroad, history of scientific thoughts, and archaeology of astronomy.

SUN Xiaochun

SUN Xiaochun, Professor and Dean of the School of Humanities at the University of Chinese Academy of Sciences, Fellow of the International Academy of the History of Science. He obtained a doctorate degree in Science History from Chinese Academy of Sciences and Pennsylvania University in the USA. He is a Pioneer in philosophy and social sciences from a State Talents Program, Director of Chinese Society for History of Science and Technology.



WANG Zuoyue

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ZHANG Li

ZHANG Li, Professor of the Department of History of Science, Technology, and Medicine of Peking University, the Deputy Director of the CAST-PKU (Joint) Institute for Science Culture, and the vice president of the Chinese Society for the History of Science and Technology. For more than ten years, she has served as the chief expert of the "Data Collection Project for the Academic Growth of Scientists" of the CAST. The children's picture books about the story of Chinese scientists edited by her won the Gold Award for popular science books (2020).

ZHANG Meifang

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Institute for Cultural Heritage and History of Science & Technology

The Institute for Cultural Heritage and History of Science & Technology at University of Science and Technology Beijing (USTB) was founded in 2014 with five major research focuses, Historical Metallurgy and Materials, Traditional Handcraft, Industrial Heritage, Conservation of Cultural Heritage, Science, Technology, and Society. Two research centers are housed within the Institute: the State Administration for Cultural Heritage Key Scientific Research Base for Archaeometallurgy and the Research Center for Science, Technology, and Civilization. Currently, the Institute has a Ph.D. program in History of Science and Technology, an MSc program in History of Science and Technology, and an MA program in Cultural Relics and Museology. The Institute also hosts postdoctoral researchers and visiting scholars.

USTB is one of the pioneers in China conducting research on the history of science and technology. As early as 1974, the university had organized an editorial team for the book A History of Metallurgy in China. Over the next forty years, this team conducted extensive research on the history of metallurgy and materials in China and gradually evolved into the Institute as it exists today. In 2007, the discipline (major) history of science and technology in USTB was selected as a first-level National Key Discipline. The 2008 and 2012 China Discipline Rankings (CDR) ranked USTB in first place in China in the discipline of the history of science and technology. In 2017, the discipline was inducted into the National Double-First Class University Plan and received an "A+" record in the CDR.

We aim to conduct cross-disciplinary cutting-edge research in the fields of archaeology, history of science and technology, and conservation of cultural heritage. We also actively support international collaborations, academic publications, sharing of academic resources, and various kinds of social services in heritage management and economic development.

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