

## 科学学上海倡议

这是全球科学学的一个重要时刻。

近几年，许多国家开始重新重视科学学。一批专门资助科学学的项目相继设立；众多科学学的论坛和会议陆续出现；多个专门研究科学学的新机构宣布成立。

科学学是关于科学（此处代指广义的科学与技术）的科学，致力于研究科学和科学活动的发展规律，进而促进科技政策的制订、科研管理的改进，以及科技与社会的和谐发展。

近期科学学的快速发展，凸显了人们在当前的时代背景下，对于解答科学是什么、发展什么样的科学、怎么样发展科学、谁来发展科学等一系列问题广泛而深度的关切。

新时期科学学的重新崛起，首先归因于科学技术的变革和新研究方法的开发。新一代信息技术、能源、材料与生物技术的深度融合，推动了新一轮科技变革加速发展，并且催生了新的科学范式、科研组织模式；科研活动日益数据化，加之人工智能发展日新月异，正推动新的科学学方法论出现。

新时期科学学的重新崛起，还源于科学与外部环境之间的交互更加复杂。科学与政治、经济、文化等领域越来越复杂的关联，引发了一系列新的问题，这些新问题迫切需要科学学来回答。

上海是中国科学学的重要始发地。1980年，上海市科学学研究所成立，成为中国最早成立的科学学研究所，也一直是中国科学学的研究重镇。今天，由上海市科学学研究所举办的科学学会议，提供了一个非常重要的重新审视科学学的契机。科学学自上世纪兴起，在不断经历分化和整合之后，如今正进入新的跃升期，借此机会，我们与参会嘉宾联合发出：

- 发展与与时俱进的科学学。全球正面临新一轮科技革命和产业变革，发展能够用于解释、加速和规范科技发展的科学学，是当今科学学的重要职责。



- 发展咨政益世的科学学。充分发挥科学学支撑决策的任务使命，支撑决策者在推动科技创新发展时遵循科学规律，更加有效地提升科技创新效能，为人类社会带来更大福祉。
- 发展合作共享的科学学。科学知识是人类共享的知识，科学事业是人类共同的事业，因此，发展科学学以促进各国广泛参与和深入交流至关重要。我们呼吁更充分的开放共享，呼吁更深入的国际合作。

科学学从诞生之时起，就是跨学科、跨领域、跨文化的研究，是科学家与决策者共同推动的研究，我们呼吁政府、科技界、产业界、智库界等所有的相关方，携手构建全球科学学共同体，共同推动科学学快速创新发展。

科学学的明天会更好！

2024 年 5 月 30 日

上海

## Shanghai Declaration on Science of Science

Our world is at a crucial moment for the Science of Science.

In recent years, Science of Science has gained renewed governmental attention, leading to specialized funding programs, numerous forums and conferences, as well as new institutions, focused on Science of Science research.

The Science of Science is a discipline about science (tech & science). It is dedicated to exploring the developmental laws of science and scientific activities, thereby facilitating the formulation of science and technology policies, improving research management, and fostering the harmonious development of science, technology, and society.

The recent rapid advancement of Science of Science reflects widespread and deep-seated concerns in the current societal context, and provokes fundamental questions such as what constitutes science, what kinds of science should be prioritized, how science should be developed, and who should be responsible for scientific development.

The resurgence of Science of Science in the present era is primarily attributed to the transformation of science and technology and the development of new research methods. The deep integration of next-generation information technology, energy sources, materials, and biotechnology has propelled a new round of technological transformation, giving rise to new scientific paradigms and organizational models for research. With research activities becoming increasingly data-driven and the rapid advancements in artificial intelligence, new methodological approaches in the Science of Science are emerging.

The resurgence of Science of Science in the new era also stems from the increasingly intricate interactions between science and the external environment. The escalating complexity of the connections between science and fields such as politics, economics, culture, and security give rise to new challenges. These emerging challenges urgently require the discipline of Science of Science to address them.

Shanghai has long been a significant home for the Science of Science in China. In 1980, the Shanghai Institute for Science of Science was established as the first institute specialized in the study of this discipline, since then, Shanghai has been a leading center for Science of Science research in China. Today, this Science of Science conference hosted by the

Shanghai Institute for Science of Science gives us a crucial opportunity for a comprehensive reassessment of our research agenda. As the Science of Science has evolved since its emergence in the last century, it is currently entering a new phase of rapid advancement. In light of this opportunity, we, together with the conference participants, issue the following declaration:

- Develop a Science of Science that advances with the time: Globally, we are witnessing a new wave of technological revolution and industrial transformation. Developing a Science of Science capable of explaining, accelerating, and governing technological development has become a pivotal responsibility of the modern Science of Science.
- Develop a Science of Science that provides value to policy and society: Science of Science should fulfill its mission to support decision-making, enabling decision-makers to adhere to scientific principles in promoting technological innovation, thereby enhancing the effectiveness of innovation on science and technology, and benefiting human society more comprehensively.
- Develop a Science of Science that is characterized by collaboration and sharing: Scientific knowledge is shared globally, and scientific endeavor is a collective human pursuit. Therefore, developing Science of Science to facilitate broad participation and deep exchange among nations is crucial. We advocate for enhanced open sharing and encourage increased international exchanges and deep cooperation.
- Since its inception, the Science of Science has been a multidisciplinary, interdisciplinary, and international field of study driven collaboratively by scientists and decision-makers. We call upon governments, the scientific community, academia, think tanks, industry, and all relevant stakeholders to join hands in building a community for the Science of Science, collectively promoting its rapid and robust development around the world.

Tomorrow holds a brighter future for the Science of Science.

May 30, 2024  
Shanghai