

Translation



CSET CENTER *for* SECURITY *and*
EMERGING TECHNOLOGY

The following document is the newest (December 2021) amended version of the PRC "Law on the Progress of Science and Technology." The law regulates how Chinese technology-related industrial policies operate and how state guidance funds for S&T are run, stipulates punishments for those who embezzle S&T funds, and so on. This latest version also puts Xi Jinping's stamp on the law by including a number of political formulations associated with his rule.

Title

Law of the People's Republic of China on Progress of Science and Technology
中华人民共和国科学技术进步法

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PRC National People's Congress (NPC; 全国人民代表大会; 全国人大)

Source

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The Chinese source text is available online at:

<http://www.npc.gov.cn/npc/c30834/202112/1f4abe22e8ba49198acdf239889f822c.shtml>

An archived version of the Chinese source text is available online at: <https://perma.cc/KCL3-YZL6>.

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Law of the People's Republic of China on Progress of Science and Technology

(Adopted at the 2nd Meeting of the Standing Committee of the Eighth National People's Congress on July 2, 1993; revised for the first time at the 31st Meeting of the Standing Committee of the Tenth National People's Congress of the People's Republic of China on December 29, 2007;¹ revised for the second time at the 32nd Meeting of the Standing Committee of the Thirteenth National People's Congress on December 24, 2021)

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¹ Translator's note: The 2021 amended version of the Law of the *People's Republic of China on Progress of Science and Technology* differs substantially from the previous amended version of 2007. For an English translation of the 2007 version, see: <https://perma.cc/72DS-9ERQ>.

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Chapter I General Provisions

Article 1 This Law is enacted in accordance with the Constitution for the purposes of comprehensively promoting scientific and technological (S&T) progress, maximizing the role of science and technology as the number-one productive force (第一生产力), of innovation as the number-one driving force (第一动力), and of talent as the number-one resource (第一资源), promoting the conversion of S&T achievements into practical productive forces, prompting S&T innovation to support and lead economic and social development, and building a modernized socialist country in an all-round way.

Article 2 The total leadership of the Chinese Communist Party over the cause of science and technology shall be adhered to.

The State shall adhere to the new concept of development (新发展理念) and the core position of S&T innovation in the big picture of the nation's modernization drive, take S&T self-reliance (自立自强) as the strategic support for national development, implement the Strategy of Rejuvenating China through Science and Education, the Talent Powerhouse² Strategy, and the Innovation-Driven Development Strategy, follow the path of independent innovation (自主创新) with Chinese characteristics, and transform China into an S&T powerhouse.

Article 3 The work on S&T progress shall be oriented to the cutting edge of world S&T, the main battlefield—namely, the economy—the major needs of the state, and the life and health of the public, and serve the promotion of economic and social development, the safeguarding of national security, and the promotion of the sustainable development of humanity.

The State shall encourage S&T research and development (R&D), and promote the application of science and technology to innovate and improve traditional industries

² Translator's note: This translation renders the Chinese word 强国 qiángguó—which literally means "strong nation"—in English as "powerhouse," as in the phrase "talent powerhouse" (人才强国). For a more thorough discussion in English of the Chinese word qiángguó, see: <https://www.newamerica.org/cybersecurity-initiative/digichina/blog/lexicon-wangluo-qiangguo/>.

and develop high-tech industries and social undertakings, support the achievement of goals of reaching a carbon emission peak and carbon neutrality, boost the generation of new development momentum, and achieve high-quality development.

Article 4 The State shall improve the efficient, coordinated, and open national innovation system, coordinate S&T innovation and institutional innovation, improve the new structure for leveraging national capabilities (新型举国体制) under the conditions of the socialist market economy, maximize the decisive role of the market in allocating innovation resources, better bring the role of the government into play, optimize the allocation of S&T resources, improve the efficiency of resource utilization, promote close cooperation among various innovators, the orderly flow of innovation factors of production (要素), and continuous optimization of the innovation ecosystem, heighten capabilities for systemization and for key breakthroughs, and enhance the overall effectiveness of the innovation system.

The State shall build and strengthen a national strategic S&T force with national laboratories, national S&T R&D institutions, high-level research universities, and leading technology enterprises as its mainstay, which shall play a strategic support and leadership role and effect major original innovations in key areas and key directions and serve the nation's major strategic needs.

Article 5 The State shall coordinate development and security, enhance its capability to manage S&T security, improve the systems and mechanisms for preventing and defusing S&T security risks, strengthen the security management of S&T research, development, and application activities, support S&T innovation in the field of national security, and improve the capability and level of S&T innovation to support national security.

Article 6 The State shall encourage the combination of S&T R&D with higher education and industrial development, and encourage the cross-fertilization and mutual promotion of disciplines.

The State shall strengthen the S&T cooperation among different regions, industries, and fields, and support the S&T progress of old revolutionary base areas, ethnic minority areas, remote areas, and underdeveloped areas.

The State shall strengthen the coordinated development of military-use and civilian-use S&T, and promote interoperability, exchange, and two-way technology transfer of military-use and civilian-use S&T resources and technology development requirements.

Article 7 The State shall follow the principle of combining service rendered by S&T activities to national goals with encouragement of free exploration, make far-sighted arrangements for major basic research, cutting-edge technological research with prospects for major industrial applications, and technological research for the public good, support the sustained and stable development of basic research, cutting-edge technological research, and technological research for the public good,

strengthen original innovation and breakthroughs on key and core technologies (关键技术), and accelerate the achievement of high-level S&T self-reliance.

Article 8 The State shall guarantee the freedom of S&T R&D, encourage scientific exploration and technological innovation, and protect the lawful rights and interests of science and technology personnel in free exploration, among others.

S&T R&D institutions, higher education institutions, enterprises, public institutions,³ and citizens shall have the right to independently select topics, explore unknown scientific fields, and engage in basic research, cutting-edge technological research and technological research for the public good.

Article 9 Schools and other educational institutions shall adhere to linking theory with practice, and pay attention to cultivating students' ability to think independently, to practice and to innovate, and their critical thinking, as well as the scientific spirit of pursuing truth, revering innovation, and seeking truth from facts.

The State shall maximize the important role of higher education institutions in S&T research, encourage higher education institutions to engage in scientific research, technological development, and social services, and train high-level specialists with a sense of social responsibility, innovative spirit, and practical ability.

Article 10 Science and technology personnel are an important talent force in the socialist modernization drive and shall be respected by the whole society.

The State shall adhere to the strategic position of talents in leading development, deepen the reform of talent development systems and mechanisms, comprehensively train, recruit, and make good use of talents, create an environment that conforms to the laws of S&T innovation and the growth of talents, and maximize the role of talent as the number-one resource.

Article 11 The State shall create a social environment conducive to S&T innovation, and encourage government agencies, mass groups and organizations (群团组织), enterprises, public institutions, social organizations, and citizens to participate in and support S&T progress activities.

The whole society shall respect labor, knowledge, talent, and creation, and develop a prevailing custom of revering science.

Article 12 The State shall develop undertakings for the popularization of science and technology, disseminate S&T knowledge, strengthen the building of

³ Translator's note: "Public institutions" (事业单位) are organizations created and led by PRC government departments that provide social services. Unlike state-owned enterprises (SOEs), public institutions do not create material products and do not generate income. Public institutions are not considered government agencies, and their employees are not civil servants. Most public institutions are fully or partially government-funded, but some fully privately funded (but still government-led) public institutions exist. Public institutions typically provide services in areas such as education, science and technology, culture, health, and sanitation.

infrastructure and capacity for popularizing S&T, and raise the scientific and cultural qualities of all citizens, especially youths.

Popularization of science and technology shall be the common responsibility of the whole society. The State shall establish sound incentive mechanisms for the popularization of S&T, and encourage S&T R&D institutions, higher education institutions, enterprises, public institutions, social organizations, and science and technology personnel to actively participate in and support activities to popularize S&T.

Article 13 The State shall formulate and implement the intellectual property strategy, establish and improve the intellectual property system, create a social environment in which intellectual property rights are respected, protect intellectual property rights, and encourage independent innovation.

Enterprises, public institutions, social organizations, and S&T personnel shall enhance their awareness of intellectual property, strengthen their independent innovation capabilities, enhance their capability to create, utilize, protect, manage, and serve intellectual property, and improve the quality of intellectual property.

Article 14 The State shall establish and improve a science and technology evaluation system conducive to innovation.

Science and technology evaluation shall adhere to the principles of openness, fairness, and impartiality, be oriented towards the quality, contribution, and performance of S&T innovation, and be implemented in a categorized manner according to the characteristics of different S&T activities.

Article 15 The State Council shall lead the work of S&T progress across the country, formulate medium- and long-term S&T development plans and S&T innovation plans, and determine major national S&T projects and major projects closely relating to S&T. Medium- and long-term S&T development plans and S&T innovation plans shall specify guidelines, play a strategic guiding role, and guide and coordinate the layout of S&T development, resource allocation, and policy formulation.

People's governments at or above the county level shall incorporate the work on S&T progress into national economic and social development plans and guarantee that S&T progress is in coordination with economic and social development.

Local people's governments at various levels shall take effective measures to strengthen the organization and management of S&T progress, optimize the environment for S&T development, and promote S&T progress.

Article 16 The science and technology administrative departments of the State Council shall be responsible for the macro management, overall coordination, service assurance, and supervision of the implementation of the work S&T progress nationwide; and other relevant departments under the State Council shall be responsible for work related to S&T progress within the scope of their respective duties.

The S&T administrative departments of local people's governments at or above the county level shall be responsible for the work of S&T progress within their respective administrative areas; and other relevant departments under the local people's governments at or above the county level shall be responsible for the work related to S&T progress within the scope of their respective duties.

Article 17 The State shall establish an S&T work coordination mechanism, study major issues in work on S&T progress, coordinate the establishment of and mutual connection between projects under national S&T programs, and coordinate such significant matters as the allocation of S&T resources, the integration of S&T R&D institutions, and the combination of S&T R&D with higher education and industrial development.

Article 18 May 30 of each year shall be National Science and Technology Workers Day.

The State shall establish a sound science and technology awarding system and found Highest Science and Technology Awards and other awards to reward the organizations and individuals that have made outstanding contributions in promoting S&T progress. Specific measures shall be formulated by the State Council.

The State shall encourage domestic and overseas organizations or individuals to set up S&T awards to reward organizations and individuals that have made contributions in promoting S&T progress.

Chapter II Basic Research

Article 19 The State shall strengthen the building of basic research capacity, respect the laws of scientific development and the growth of talents, improve the systematic layout of projects, talents, and bases, and provide good material conditions and powerful institutional assurance for the development of basic research.

The State shall strengthen planning and arrangements, promote the organic combination of free exploration and goal orientation in basic research, centering on the frontiers of science and technology, economic and social development, the major needs of national security, and the life and health of the public, with a focus on major key technological issues, strengthen basic research in emerging and strategic industries and other fields, and enhance our capacity for supply at the source (源头供给) for S&T.

The State shall encourage S&T R&D institutions, higher education institutions, and enterprises, among others, to bring their own advantages into play, strengthen basic research, and promote original innovation.

Article 20 An investment mechanism to stably support basic research will be established with state fiscal funding (国家财政).

The State shall encourage local people's governments with good preconditions, in light of the needs of local economic and social development, to reasonably

determine fiscal investment in basic research and strengthen support for basic research.

The State shall guide enterprises in increasing investment in basic research, encourage social forces (社会力量) to invest in basic research through multiple channels such as donations and formation of funds, and provide fiscal, financial, tax, and other policy support.

The proportion of funds for basic research relative to the aggregate funds for S&T R&D throughout society shall be gradually increased so as to meet the requirements of building China into an innovation-oriented country and an S&T powerhouse.

Article 21 The State shall establish a natural science foundation to fund basic research and support talent training and team building. The determination of projects funded by the National Natural Science Foundation of China (NSFC) shall adhere to the principles of macro guidance, independent application, competition on an equal basis, peer review, and merit-based support.

Local people's governments with good preconditions may, in light of local actual economic and social conditions and development needs, establish natural science foundations to support basic research.

Article 22 The State shall improve the layout of disciplines and the construction of knowledge systems, advance interdisciplinarity, and promote the coordinated development of basic research and applied research.

Article 23 The State shall increase efforts to train basic research talents, strengthen stable support for basic research talents, and improve the quality and level of China's cadre of basic research talents.

The State shall establish a resource allocation mechanism that meets the needs of basic research, establish an evaluation system and incentive mechanism commensurate with basic research, create a good environment for concentration on basic research, and encourage and attract outstanding science and technology personnel to participate in basic research.

Article 24 The State shall strengthen the construction of basic research bases.

The State shall improve the creation of basic conditions for basic research and advance opening and sharing.

Article 25 The State shall support higher education institutions in strengthening the construction of basic disciplines and the training of basic research talents, enhance the capability to independently arrange basic research, and promote the high-quality development of basic research in higher education institutions.

Chapter III Applied Research and Conversion of Achievements into Practical Applications

Article 26 The State shall encourage the promotion of basic research by applied research, and further the integrated development of basic research, applied research, and the conversion of achievements into practical applications.

The State shall improve the system for supply of general purpose and basic technology, promote the deep integration of the innovation chain and the production chain, and safeguard the security of the production chain and the supply chain.

Article 27 The State shall establish a sound mechanism for coordination of scientific research, strengthen the integrated allocation of projects, talents, bases, and funds in key fields, with a focus on economic and social development, major needs of national security, and the life and health of the public, promote close cooperation among firms, universities, and research institutes, and boost the independent controllability (自主可控) of key and core technologies.

Article 28 The State shall improve the structure for leveraging national capabilities (举国体制) for making breakthroughs on key and core technologies, organize the implementation of major S&T tasks that reflect national strategic needs, systematically lay out forward-looking and strategic major S&T projects, and arrange the R&D of key and core technologies in advance.

Article 29 The State shall strengthen the construction of general purpose technology platforms and S&T R&D institutions oriented to the needs of industrial development, and encourage local governments to build applied research and S&T R&D institutions which suit development needs.

The State shall encourage S&T R&D institutions and higher education institutions to strengthen research on general purpose and basic technology, and support R&D activities in which enterprises are the mainstay and which are oriented to markets and industrialized applications.

Article 30 The State shall strengthen pilot-scale experiments on, and the engineering (工程化) and industrialized development and application of, S&T achievements, and accelerate the transformation of S&T achievements into practical productive forces (生产力).

S&T R&D institutions and higher education institutions that are established with government fiscal funds shall actively promote the conversion of S&T achievements into practical applications, strengthen the building of technology transfer institutions and talent teams, and establish sound systems for promoting the conversion of S&T achievements into practical applications.

Article 31 The State shall encourage enterprises, S&T R&D institutions, higher education institutions, and other organizations to establish a cooperation mechanism featuring complementary advantages, clear division of labor, and sharing of

achievements and risks, jointly form R&D platforms, technological innovation alliances, and innovation consortia, among others, in accordance with market mechanisms, coordinate the advancement of R&D and the conversion of S&T achievements into practical applications, and improve the effectiveness of transfer and conversion of S&T achievements.

Article 32 For the S&T achievements of S&T plan projects established with government fiscal funds, on the precondition that there is no harm to national security, national interests, or major interests of society or the public (重大社会公共利益), persons undertaking the projects shall be authorized to acquire relevant intellectual property rights in accordance with law, and such persons may, in accordance with law, invest and implement conversion themselves, transfer the intellectual property rights to others, implement conversion jointly with others, permit others to use them, or invest them at an appraised value, etc.

The persons undertaking such projects shall exercise the intellectual property rights stipulated in the preceding paragraph according to law, and at the same time take protective measures, and shall submit an annual report on such exercise and protection to the project's management institution. If the persons undertaking the project fail to exercise their intellectual property rights within a reasonable period of time without justification, the State may exercise them without compensation, or may permit other persons to exercise them with or without compensation.

With respect to the intellectual property rights provided for in the first paragraph of this article which are obtained by the person undertaking the project according to the law, for the benefit of national security, national interests, or major interests of society or the public, the state may exercise them without compensation or permit another person to exercise them with or without compensation.

The benefits arising from the exercise of the intellectual property rights provided for in the first paragraph of this article by the persons undertaking the project shall be distributed according to applicable laws or regulations, or according to the agreement in the absence of applicable laws or regulations.

Article 33 The State shall implement a distribution policy oriented to increasing the value of knowledge, advance the reform of mechanisms for the ownership of, and distribution of rights and interests in, intellectual property in accordance with relevant state provisions, and explore a system for vesting ownership or rights of long-term use of job-related S&T achievements in S&T personnel.

Article 34 The State shall encourage the intellectual property rights created in projects under science and technology programs established with government funding to be used first within the People's Republic of China (PRC).⁴

⁴ Translator's note: The Chinese word 境内 jìngnèi, translated throughout as "within the PRC," literally means "inside the borders [of mainland China]." China considers Hong Kong, Macau, and Taiwan to be part of China but not to be "within the PRC."

Where the intellectual property rights provided for in the preceding paragraph are to be transferred to organizations or individuals outside the PRC,⁵ or to be permitted to be exclusively exercised by organizations or individuals outside the PRC, the matter shall be subject to approval by the project management institution; and where any law or administrative regulation otherwise provides for the approval organ, such law or administrative regulation shall prevail.

Article 35 The State shall encourage the application of new technology, promote trials for the application of new technology, products, services, and models on the principle of tolerance and prudence, and create conditions for the application of new technology and products.

Article 36 The State shall encourage and support applied research on agricultural science and technology, disseminate and popularize agricultural S&T knowledge, accelerate the conversion and industrialization of agricultural S&T achievements, promote agricultural S&T progress, and use agricultural science and technology to lead the revitalization of rural areas and the modernization of agriculture and rural areas.

People's governments at or above the county level shall take measures to support non-profit agricultural S&T R&D institutions and agricultural technology promotion institutions in researching, developing, applying, and promoting new agricultural varieties and technologies.

Local people's governments at all levels shall encourage and direct agricultural S&T service institutions, S&T envoys (科技特派员), and rural mass S&T organizations to provide S&T services for the development of the farming, forestry, animal husbandry, and fishery industries, among others, and provide farmers with S&T training and guidance.

Article 37 The State shall promote the combination of S&T R&D with the formulation of product and service standards as well as the combination of S&T R&D with product design and manufacturing; and guide S&T R&D institutions, higher education institutions, enterprises, and social organizations in jointly promoting research on and formulation and lawful adoption of standards for major national technological innovation products and services, and in participating in the formulation of international standards.

Article 38 The State shall cultivate and develop a unified, open, and interconnected technology market with orderly competition, encourage the establishment of intermediary service institutions that engage in technology assessment, technology brokerage, innovation and entrepreneurship services, and other activities, and guide the establishment of a professionalized, networkized (网络化), informatized (信息化), and intelligentized (智能化) technology trading service

⁵ Translator's note: The Chinese word 境外 jìngwài, translated throughout as "outside the PRC," literally means "outside the borders [of mainland China]." The term encompasses not just foreign countries but also Hong Kong, Macau, and Taiwan.

system and innovation and entrepreneurship service system that is common throughout society (社会化), in order to promote the application and popularization of S&T achievements.

Technology trading activities should abide by the principles of voluntariness and equality, mutual benefit and compensation, and good faith.

Chapter IV Scientific and Technological Innovation by Enterprises

Article 39 China shall: Establish a market-oriented technological innovation system with enterprises as the mainstay that features close cooperation between enterprises, scientific research institutions, and higher education institutions; guide and support the technological innovation activities of enterprises; support enterprises in leading national missions to tackle key S&T problems; give full play to the mainstay role of enterprises in technological innovation; push enterprises to become the mainstay in making technological innovation decisions, investing in and organizing scientific research, and converting achievements into practical applications; and promote the agglomeration by enterprises of all kinds of innovation factors of production, so as to raise the technological innovation ability of enterprises.

The State shall incubate leading S&T enterprises with influence and competitive strength, and fully utilize the role of leading S&T enterprises in driving innovation.

Article 40 The State shall encourage enterprises to carry out the following activities:

1. Establishing internal S&T R&D institutions;
2. Cooperative research with other enterprises or with S&T R&D institutions or higher education institutions, jointly establishing S&T R&D institutions and platforms, setting up S&T enterprise incubation institutions and innovation and entrepreneurship platforms, or carrying out S&T R&D by means of contracting, etc.;
3. Training, attracting, and using S&T personnel;
4. Training professional and technical personnel and highly skilled personnel jointly with S&T R&D institutions, higher education institutions, vocational colleges or training institutions, and attracting university graduates to work in enterprises;
5. Establishing postdoctoral work stations or floating stations (流动站);
6. Carrying out S&T popularization activities in conjunction with technological innovation and employee skills training, and establishing S&T popularization venues or facilities open to the public.

Article 41 The State shall encourage enterprises to strengthen original innovation, carry out technological cooperation and exchanges, increase investment in R&D and technological innovation, independently determine R&D topics, and carry out technological innovation activities.

The State shall encourage enterprises to engage in the digestion, absorption, and re-innovation (消化、吸收和再创新) of introduced technologies.

In accordance with relevant state provisions, pre-tax deductions and increased deductions may be applied to the R&D expenses incurred by enterprises in developing new technologies, new products, and new processes, and accelerated depreciation may be taken on enterprises' S&T R&D instruments and equipment.

Article 42 The State shall improve multi-level capital markets, establish sound mechanisms for promoting S&T innovation, and support qualified S&T-based enterprises in utilizing the capital markets to drive their own development.

The State shall strengthen guidance and policy support, and broaden sources of venture capital funds from multiple channels, so as to support the development of entrepreneurial enterprises.

The State shall improve the market listing and financing system for S&T-based enterprises, and smooth the domestic listing and financing channels for S&T-based enterprises, to take full advantage of the financing function of the capital markets in serving S&T innovation.

Article 43 The following enterprises shall enjoy tax preferences in accordance with relevant state provisions:

1. Enterprises that engage in the R&D and production of high-tech products;
2. S&T-based small and medium-size enterprises;
3. Venture capital firms that invest in startup S&T-based enterprises;
4. Other enterprises stipulated by laws and administrative regulations and related to S&T progress.

Article 44 The State shall provide support for the construction and operation of public R&D platforms and S&T intermediary, innovation, and entrepreneurship service institutions.

Public R&D platforms and S&T intermediary, innovation, and entrepreneurship service institutions should provide services for the technology innovation of small and medium-size enterprises.

Article 45 The State shall protect the intellectual property rights obtained from enterprise R&D. Enterprises shall continuously improve the quality and effectiveness of intellectual property rights to enhance their independent innovation ability and market competitiveness.

Article 46 State-owned enterprises (SOEs) shall establish sound R&D investment, distribution, assessment, and evaluation systems conducive to technological innovation, and improve incentive and restraint mechanisms.

The person in charge of an SOE shall be responsible for the technological progress of the enterprise. The performance appraisal of the person in charge of an SOE shall include the enterprise's innovation investment, innovation capacity building, innovation effectiveness, etc., in the scope of the appraisal.

Article 47 People's governments at the county level or above, and their relevant departments, shall create a market environment of fair competition, to promote the technological progress of enterprises.

The relevant departments of the State Council and provincial people's governments should develop industrial, public finance, financial, energy, environmental protection, and climate change policies to guide and motivate enterprises to research and develop new technologies, new products, and new processes; carry out technological transformation and equipment updating; eliminate technologically backward equipment and processes; and stop producing technologically backward products.

Chapter V Scientific and Technological Research and Development Institutions

Article 48 The State shall coordinate planning for the layout of S&T R&D institutions, so as to establish a sound S&T R&D system.

The State shall build national laboratories in the major S&T innovation fields for the overall national security and economic and social development situation, establish a sound laboratory system led by the national laboratories and supported by key laboratories nationwide, and improve stable support mechanisms.

The use of government funding to establish S&T R&D institutions should be guided by national strategic requirements, and should provide S&T support for the public provision of S&T and for emergency response.

Article 49 Natural persons, corporations, and unincorporated organizations are entitled to establish S&T R&D institutions in accordance with law. Overseas organizations or individuals may independently establish S&T R&D institutions within the PRC in accordance with law, or may jointly establish S&T R&D institutions with organizations or individuals within the PRC.

S&T R&D institutions engaged in basic research, cutting-edge technology research, and technology research for the public good may be established with government funding. In establishing S&T R&D institutions with government funding, the configuration should be optimized and redundant establishment should be prevented.

S&T R&D institutions and higher education institutions may set up postdoctoral floating stations or work stations. S&T R&D institutions may establish branches abroad in accordance with law.

Article 50 S&T R&D institutions shall enjoy the following rights:

1. To organize or participate in academic activities according to law;
2. In accordance with relevant state provisions, to independently determine their S&T R&D direction and projects, and independently decide internal management matters such as use of funds, organizational configuration, performance assessment and salary allocation, title evaluation, conversion of S&T achievements into practical applications and distribution of revenue therefrom, configuration of job positions, and the hiring and rational flow of personnel.
3. To jointly carry out S&T R&D, technical consulting, technology services, and other activities with other S&T R&D institutions, higher education institutions, and enterprises.
4. To receive donations and financial support from the public;
5. Other rights stipulated by laws and administrative regulations.

Article 51 S&T R&D institutions should: Formulate articles of association in accordance with law, and carry out S&T R&D activities in accordance with the functional positioning and scope of business stipulated in their articles of association; strengthen their scientific research style, establish and improve systems for scientific research integrity and S&T ethics management, and comply with the norms of scientific research activities; and should not organize, participate in, or support superstitious activities (迷信活动).

Where S&T R&D institutions established using government fiscal funding carry out S&T R&D activities, they should serve national goals and the public interest; and where conditions are met, they should open S&T popularization venues or facilities to the public, and organize and carry out S&T popularization activities.

Article 52 S&T R&D institutions established using government fiscal funding should: Establish a modern institutional system that is open and orderly, and has clear responsibilities, scientific evaluation, and standardized management; implement a system wherein the president or director takes responsibility; establish systems such as an S&T committee consultation system and a workers' congress supervisory system; bring in external experts to participate in management, and accept supervision by society; and introduce competitive mechanisms in the hiring of the president or director.

Article 53 The State shall improve the assessment system for S&T R&D institutions established using government funding, with the assessment results to serve as the basis for the establishment, support, reorganization, and termination of institutions.

Article 54 S&T R&D institutions established using government fiscal funding should establish sound systems for the open sharing of S&T resources, so as to promote the effective utilization of such resources.

The State shall encourage S&T R&D institutions established by social forces to implement open sharing of S&T resources within reasonable limits.

Article 55 The State shall encourage S&T R&D institutions founded by enterprises and other social forces to protect their legitimate rights and interests.

S&T R&D institutions established by social forces shall be entitled, in accordance with relevant state provisions, to compete on an equal basis for S&T plan projects established using government fiscal funding, and participate in their implementation.

The State shall improve the system of tax preferences for non-profit S&T R&D institutions established by social forces.

Article 56 The State shall: Support the development of new-style innovation entities (新型创新主体) such as new-style R&D institutions (新型研究开发机构); improve development models with diversified investment entities, modernized management systems, marketized operating mechanisms, and flexible employment mechanisms; and guide the new-style innovation entities in focusing on scientific research, technological innovation, and R&D services.

Chapter VI Science and Technology Personnel

Article 57 The State shall create a social environment that respects and cares for talents, an institutional environment that is fair and equal, competitive and merit-based, and a living environment with appropriate treatment and effective assurance, creating good conditions for S&T personnel to devote themselves to scientific research.

The State shall take multiple steps to improve the social position of S&T talents, train and create specialized S&T personnel, and provide assurance for the investments of S&T personnel in S&T innovation and R&D activities, so as to give full play to the role of S&T personnel. It shall be forbidden to treat S&T personnel and their S&T achievements unfairly in any way or by any means.

Article 58 The State shall accelerate the building of strategic talent forces, optimize the structure of the S&T talent ranks, improve mechanisms for the training, discovery, recruitment, use, and evaluation of strategic scientists, leading S&T talents, and other innovation talents and teams, and implement supporting policies for talent tiers (人才梯队), research conditions, management mechanisms, etc.

Article 59 The State shall improve mechanisms for the education and training of innovation talents, strengthen cultivation of interest in science within basic education, strengthen training of technically skilled talents within vocational education, and enhance the combination of educational resource allocation with the training of innovation talents in S&T fields, so as to strengthen and improve reserves of strategic S&T talents.

Article 60 People's governments at all levels, enterprises, public institutions, and social organizations should: Take measures to improve income distribution mechanisms that reflect the value of innovation factors of production such as knowledge and technology, so as to optimize the income structure; establish

mechanisms for stable wage growth, and improve the salary level of S&T personnel; and give preferential treatment and honorary incentives to S&T personnel with outstanding contributions.

S&T personnel of S&T R&D institutions established using government fiscal funding may engage in part-time jobs to obtain lawful income with the consent of their work units, provided that they perform their duties, complete their own work, and do not have conflicts of interest. Their receipt of rewards and remuneration for activities such as technology development, technical consultation, and technical services shall be implemented in accordance with the relevant provisions on the conversion of S&T achievements into practical applications.

The State shall encourage S&T R&D institutions, higher education institutions, enterprises, etc., to adopt methods such as equity, options, and profit-sharing to motivate S&T personnel.

Article 61 People's governments at all levels, enterprises, and public institutions should assure the right of S&T personnel to receive continuing education, and create environments and conditions for the rational, smooth, and orderly flow of S&T personnel, so as to make the most of their expertise.

Article 62 S&T personnel may choose work units and compete for appropriate jobs, and obtain corresponding positions or job titles, based on their educational attainments and professional competencies.

S&T personnel should honor their work commitments, perform their job duties, and complete the work corresponding to their positions or job titles.

Article 63 The State shall: Implement a differentiated evaluation system for S&T personnel, implementing different evaluation standards and methods for personnel engaged in different S&T activities, and emphasizing innovation value, ability, and contribution; rationally determine remuneration, allocate academic resources and set evaluation cycles; and form a talent evaluation system conducive to dedicated research and innovation on the part of S&T personnel, so as to inspire the enthusiasm of S&T personnel for innovation.

Article 64 Science and technology administrative departments and other relevant departments, and enterprises and public institutions, should improve their S&T personnel management systems, strengthen their sense of service and their assurance ability, streamline their administrative processes, avoid redundant inspection and assessment, and lighten the burdens of S&T personnel with respect to applying for projects, submitting materials, reimbursing expenses, etc., so as to protect the scientific research time of S&T personnel.

Article 65 The work units of S&T personnel working in hardship and remote areas or harsh and dangerous environments shall give them subsidies in accordance with relevant state provisions, provide them the occupational health and hygiene assurance and safety assurance warranted for their positions and workplaces, and

provide them facilitative conditions for receiving continuing education, professional training, etc.

Article 66 Young S&T personnel, ethnic minority S&T personnel, female S&T personnel, etc., shall enjoy equal rights in competing for professional technical positions, participating in S&T evaluations, undertaking S&T R&D projects, receiving continuing education, and other aspects. Elderly S&T personnel shall be encouraged to play an active role in the progress of science and technology.

People's governments at all levels, enterprises, and public institutions should create environments and conditions for the growth of young S&T personnel, and encourage young S&T personnel to boldly explore and dare to try in technological fields, giving full play to the role of young S&T personnel. Circumstances regarding the discovery, training, and use of young S&T personnel should serve as important content for the work of evaluating S&T progress.

People's governments at all levels, enterprises, and public institutions should improve training, evaluation, and incentive mechanisms for female S&T personnel, show concern for female S&T personnel during pregnancy and nursing, and encourage and support female S&T personnel in playing a greater role in the progress of science and technology.

Article 67 S&T personnel should vigorously carry forward the spirit of scientists—patriotism, innovation, pragmatism, dedication, collaboration, and nurturing—adhere to the spirit of craftsmanship, comply with academic and ethical norms in all types of S&T activities, and adhere to professional ethics, honesty, and integrity; and shall not practice deception in S&T activities, nor participate in or support superstitious activities.

Article 68 The State shall encourage S&T personnel to explore freely and dare to take risks, creating a good atmosphere that encourages innovation and tolerates failure. Where original records and so on are able to prove that S&T personnel who take on highly exploratory and risky S&T R&D projects have performed their duties diligently but they are still unable to complete such projects, they shall be exempt from liability.

Article 69 Scientific research integrity records (科研诚信记录) shall serve as an important basis for the appointment of S&T personnel to professional technical positions or job titles, vetting of applications by S&T personnel for S&T R&D projects, granting of S&T awards, etc.

Article 70 S&T personnel shall have the right to lawfully establish or participate in S&T community groups (社会团体).

S&T associations and S&T community groups shall, in accordance with their charters, play roles in encouraging academic exchanges, promoting the building of academic disciplines, promoting S&T innovation, S&T popularization activities, training of professionals, providing consultation services, strengthening the self-discipline of

S&T personnel and safeguarding the legitimate rights and interests of S&T personnel, and other aspects.

The legitimate rights and interests of S&T associations and S&T community groups shall be protected by law.

Chapter VII Regional Scientific and Technological Innovation

Article 71 The State shall coordinate the overall regional spatial pattern of S&T resources, closely link central S&T resources to local development requirements, and adopt multiple means to support regional S&T innovation.

Article 72 Local people's governments at the county level or above should support S&T research and application, promote the conversion of S&T achievements into practical applications, and create conditions for promoting regional innovation and development, thereby providing a good innovation environment.

Article 73 When people's governments at the county level or above, and their relevant departments, formulate industrial development-related S&T plans, they should reflect industrial development requirements.

When people's governments at the county level or above, and their relevant departments, determine S&T planning projects, they shall encourage enterprises to compete for them on an equal basis and participate in their implementation; for projects that meet the requirements of industrial development and have clear market application prospects, enterprises shall be encouraged to join forces with S&T R&D institutions and higher education institutions to implement them jointly.

Implementation of major S&T plans should be linked together with major national S&T task deployments.

Article 74 The State Council may approve the establishment of national high-tech industrial development zones, national independent innovation demonstration zones, and other S&T parks as required, and give guidance and support for the construction and development of S&T parks, causing them to form distinctive features and advantages, and putting into play their clustering and demonstration driving effects.

Article 75 Based on national strategies and local development requirements, the State shall encourage qualified local people's governments at the county level or above to construct major S&T innovation bases and platforms, incubate innovation and entrepreneurship vehicles, and create strong regional centers of S&T innovation.

The State shall support qualified localities in constructing S&T innovation centers and comprehensive science centers, taking advantage of their radiating and driving effects, and their role in deepening innovation-oriented reform and participating in global S&T cooperation.

Article 76 The State shall build mechanisms for regional cooperation, collaboration, and mutual assistance on S&T innovation, and encourage people's governments at all levels, and their relevant departments, to engage in cross-regional cooperation on innovation, so as to promote the rational flow and effective clustering of innovation factors of production of various kinds.

Article 77 The nation's major strategic regions can build benefit-sharing mechanisms relying on regional innovation platforms, encourage the free flow of talent, technology, capital, and other factors of production, promote the open sharing of scientific instruments and equipment, S&T infrastructure, and scientific engineering and S&T information resources, and improve efficiency in the regional conversion of S&T achievements into practical applications.

Article 78 The State shall encourage localities to actively explore regional S&T innovation models, respect the laws of regional S&T innovation clustering, and choose S&T innovation development paths with regional characteristics according to local conditions.

Chapter VIII International Scientific and Technological Cooperation

Article 79 The State shall promote international S&T cooperation and exchanges that are open and inclusive, mutually beneficial, and shared, and support the building of a community of common destiny for humanity (人类命运共同体).

Article 80 The Government of the People's Republic of China shall develop S&T cooperation and exchanges with foreign governments and international organizations.

The State shall encourage S&T R&D institutions, higher education institutions, S&T community groups, enterprises, S&T personnel, and other types of innovation entities to carry out international S&T cooperation and exchanges, and actively participate in scientific research activities, thereby encouraging the open flow of international S&T resources, and the formation of a pattern of high-level open S&T cooperation, and promoting the world's S&T progress.

Article 81 The State shall encourage enterprises, public institutions, and social organizations to establish international S&T innovation cooperation platforms through a variety of ways, and to provide international S&T innovation cooperation services.

Enterprises and public institutions, social organizations, and S&T personnel shall be encouraged to participate in and launch international S&T organizations, so as to enhance international S&T cooperation and exchanges.

Article 82 The State shall adopt a variety of methods to support excellent domestic and foreign S&T talents in collaborating on R&D, addressing common challenges facing humanity, and exploring cutting-edge science.

The State shall support S&T R&D institutions, higher education institutions, enterprises, and S&T personnel in actively participating in and launching the organization and implementation of international scientific programs and large scientific projects.

The State shall improve mechanisms for the protection of intellectual property rights and the review of S&T ethics and security in international S&T research cooperation.

Article 83 The State shall expand the opening up of S&T plans to external cooperation, encourage foreign-funded enterprises and foreign scientists and technicians in China to undertake and participate in S&T plan projects, and improve mechanisms for scientists and technicians from outside the PRC to participate in national S&T plan projects.

Article 84 The State shall improve the relevant social services and security measures, so as to encourage S&T personnel working abroad to return to China, and to attract foreign S&T personnel to China to engage in S&T R&D work.

S&T R&D institutions and other S&T organizations can employ S&T personnel from outside the PRC based on their development needs. Where S&T R&D institutions and higher education institutions established using government fiscal funding employ S&T personnel from outside the PRC to engage in S&T R&D work, they should provide them facilitation for their work and life.

Where outstanding foreign S&T personnel come to China to engage in S&T R&D work, they can be given priority for obtaining permanent residency in China or obtaining Chinese nationality, in accordance with the relevant state provisions.

Chapter IX Assurance Measures

Article 85 The State shall increase investment of government fiscal funds, and formulate industrial, financial, taxation, government procurement, and other policies to encourage and channel social funding⁶ investment, so as to promote the sustained and steady growth of S&T R&D funding throughout society.

Article 86 The State shall gradually increase the overall level of S&T funding, and the growth rate of the national government budget used for S&T funding should be higher than the rate of increase of the regular revenue of the national budget. The S&T R&D funding of the whole society shall account for an appropriate percentage of gross domestic product (GDP), and shall be gradually increased.

⁶ Translator's note: The Chinese term 社会资金, translated literally as "social funding," and its synonyms "social capital" (社会资本), "social investment" (社会投资), and "social financing" (社会融资), refer to any source of funding outside of government budget outlays. These terms encompass investment by private individuals and private institutions. However, investment from state-funded entities such as state-owned enterprises (SOEs), including state-run banks, also falls under the umbrella of "social funding."

Article 87 Government funds for S&T should be used mainly for investment in the following:

1. Construction of basic preconditions and facilities for S&T;
2. Basic research and cutting-edge interdisciplinary research;
3. Research on technologies that have strategic, basic, and forward-looking roles in economic construction and social development, including cutting-edge technologies, technologies for the public good, and major general purpose key technologies;
4. Applications of major general purpose key technologies and demonstration of high technology industrialization.
5. R&D, application of achievements, and extension of science and technology related to the ecological environment and the life and health of the people;
6. R&D of new agricultural varieties and new technologies, and application and extension of agricultural S&T achievements.
7. Training, recruiting, and using S&T personnel;
8. Popularization of science and technology.

For S&T R&D institutions established using government fiscal funds, the State shall give support in terms of funding, experimental methods, etc.

Article 88 The establishment of national science and technology programs should be in accordance with national requirements, focus on major national strategic missions, and adhere to the laws of scientific research, technological innovation, and the conversion of achievements into practical applications.

To strengthen professionalized management, the State shall establish S&T plan coordination mechanisms and a performance assessment system.

Article 89 The State shall establish a fund to financially assist small and medium-size enterprises in carrying out technological innovation, and promote the conversion of S&T achievements into practical applications.

When necessary, the State may establish other non-profit funds to support basic research, research on technology beneficial to society, international joint research, etc., to financially assist S&T progress activities.

Article 90 Those that engage in the following activities shall enjoy tax preferences in accordance with relevant state provisions:

1. Technology development, technology transfer, technology licensing, technology consulting, technology services;

2. Importation of supplies for scientific research, technology development, or S&T popularization that China is unable to produce or is unable to produce with sufficient performance to meet demand;

3. Importation of key equipment, raw materials, or components for the implementation of major national S&T special projects, and major projects of national S&T programs, that cannot be produced domestically;

4. S&T popularization activities open to the public carried out by S&T popularization venues, bases, etc.;

5. Donating to financially assist the carrying out of S&T activities;

6. Other scientific research, technology development, and S&T application activities stipulated by laws and relevant state provisions.

Article 91 The S&T innovation products and services of domestic natural persons, corporations, and unincorporated organizations should be purchased in government procurements, provided their functional, quality, and other indicators are able to meet government procurement requirements; where they are coming onto the market for the first time, government procurement should take the lead in purchasing them, and restrictions shall not be made on account of commercial performance.

Where government-procured products still await R&D, implementation shall be done through ordering. Procurers should give priority to using competitive methods to determine the S&T R&D institutions, higher education institutions, or enterprises that are to carry out the R&D, and products shall be procured as agreed once their R&D meets requirements.

Article 92 The State shall encourage financial institutions to conduct intellectual property pledge financing (质押融资) business, encourage and guide financial institutions in supporting the application of S&T and the development of high-tech industries, in terms of credit, investment, and other aspects, and encourage insurance institutions to develop types of insurance based on the development needs of high-tech industries, so as to promote the application of new technologies.

Article 93 The state shall abide by the principles of coordinated planning and optimized allocation, and shall integrate and set up national science and technology research and experimentation bases.

The State shall encourage the setting up of comprehensive science and technology experimental service units (综合性科学技术实验服务单位) to provide, or entrust others to provide, S&T experimental services for S&T R&D institutions, higher education institutions, enterprises, and S&T personnel.

Article 94 Based on the needs of S&T progress, and in accordance with the principles of integrated planning, giving prominence to sharing, optimized allocation, comprehensive integration, being government-led, and multiparty joint construction, the State shall coordinate the purchasing of large-scale scientific instruments and

equipment, and carry out joint review work for large-scale scientific instruments and equipment purchased mainly with government fiscal funding.

Article 95 The State shall strengthen academic journal construction, and improve mechanisms for the exchange of research papers and S&T information, to promote the development of open (开放) science, and encourage the exchange and dissemination of science and technology.

Article 96 The State shall encourage organizations and individuals at home and abroad to donate property and establish S&T funds, thereby financially assisting S&T R&D and S&T popularization.

Article 97 Where S&T R&D institutions, higher education institutions, and enterprises are established using government fiscal funding, and where the relevant persons in charge determinedly pursue innovation and exploration in the course of promoting S&T management reform, carrying out S&T R&D, or implementing activities to convert S&T achievements into practical applications, and decision-making errors and deviations arise, but they have fulfilled their duty of reasonable care and supervisory management responsibility, and no illegal profits have been made, they shall be exempted from their decision-making responsibility (免除其决策责任).

Chapter X Supervision and Administration

Article 98 The State shall strengthen efforts to institute the rule of law in science and technology and to improve the style of work and study in scientific research, establish and improve the scientific research integrity system and S&T supervision system, and build a sound ethical governance system for science and technology, thereby creating a good environment for S&T innovation.

Article 99 The State shall improve the rules and procedures for S&T decision-making, establish standardized consultation and decision-making mechanisms, and make decision-making more scientific, democratic, and based on the rule of law.

The State shall reform and improve the consultation system for making major S&T decisions. In formulating S&T development plans and major policies, and determining major S&T projects and major projects closely related to science and technology, the views of S&T personnel should be listened to thoroughly, the role of think tanks should be brought into play, public participation should be expanded, scientific assessment should be conducted, and scientific decision-making should be implemented.

Article 100 The State shall strengthen the performance management of government fiscal S&T funds, and increase the efficiency of fund allocation and use. The management and use of government fiscal S&T funds should be subject to the supervision and inspection of audit institutions and finance departments.

S&T administrative departments and other relevant departments should strengthen supervision of the implementation of S&T programs established using

government fiscal funds, and strengthen the coordination, assessment, and supervision of scientific research project funds.

No organization or individual shall falsely apply for, fraudulently obtain, embezzle, misappropriate, or retain government fiscal S&T funds.

Article 101 The State shall establish a differentiated management mechanism for S&T program projects, and strengthen the review and evaluation of project effectiveness. The approval of S&T program projects established with government fiscal funding should adhere to being problem-oriented, goal-oriented, and demand-oriented, and project undertakers shall be determined based on merit in accordance with relevant state provisions.

The State shall establish an S&T management information system, establish a database of review experts, and enhance the expert review system for S&T program projects and the review expert selection, recusal, confidentiality, and accountability systems.

Article 102 The S&T administrative departments of the State Council, together with the relevant managing departments of the State Council, shall establish an information system and resource databases related to S&T research bases, scientific instruments and equipment, and other assets, as well as S&T literature, S&T data, S&T natural resources, S&T popularization resources, and other S&T resources, and shall make timely disclosures to the public regarding S&T resource distribution and use.

S&T resource management units should make announcements to the public regarding the shared use system and usage circumstances for the S&T resources under their management, and arrange usage based on the use system; and where laws and administrative regulations stipulate that this information should be classified (保密), these stipulations shall be followed.

S&T resource management units shall not infringe the intellectual property rights of users of S&T resources, and shall determine the fees in accordance with relevant state regulations. Other relationships of rights and obligations between administrative units and users shall be as agreed upon by both parties.

Article 103 The State shall establish an S&T ethics committee to improve S&T ethics system regulation, strengthen S&T ethics education and research, and enhance the review, assessment, and supervision systems.

S&T R&D institutions, higher education institutions, enterprises, public institutions, etc., should fulfill their primary responsibility for S&T ethics management, establish sound S&T ethics review mechanisms in accordance with relevant state provisions, and carry out ethics reviews of S&T activities.

Article 104 The state shall strengthen scientific research integrity-building, establish project integrity files and a scientific research integrity management information system, persist in using both prevention and punishment and in attaching

equal importance to self-discipline and supervision, and improve mechanisms for the prevention, investigation, and handling of breaches of trust.

Local people's governments at the county level or above, and the departments in charge of relevant industries, shall take measures to strengthen scientific research integrity-building, and enterprises, public institutions, and social organizations should fulfill their primary responsibility for managing scientific research integrity.

No organization or individual may fabricate or falsify scientific research achievements, publish or disseminate false scientific research results, or engage in trading, ghostwriting, or ghost-submission services in connection with scholarly papers and their experimental research data, S&T program project application and acceptance materials, etc.

Article 105 The State shall establish sound S&T statistical survey and national innovation survey systems, so as to grasp the basic situation of national S&T activities, and monitor and evaluate national innovation capacity.

The State shall establish a sound S&T reporting system, and parties that undertake government-funded S&T program projects should submit reports on a timely basis in accordance with provisions.

Article 106 The State shall implement a S&T secrecy protection system (保密制度) and strengthen S&T secrecy protection capacity-building, so as to protect S&T secrets related to the nation's security and interests.

The State shall, in accordance with law, implement an export management system for important biological germplasm resources, genetic resources, data resources, and other S&T resources and key and core technologies.

Article 107 S&T R&D and application activities that endanger national security, harm the public interest, endanger human health, or violate scientific research integrity or S&T ethics, shall be prohibited.

Management norms for S&T activities should be followed when engaging in S&T activities. Organizations and individuals that seriously violate the management norms for S&T activities shall be recorded by S&T administrative departments and other relevant departments into a database of serious acts of dishonesty in scientific research integrity.

Chapter XI Legal Liability

Article 108 Where S&T administrative departments or other relevant departments and their staff, as well as other personnel performing public duties according to law, violate the provisions of this Law by abusing their powers, neglecting their duties, or engaging in favoritism or fraud, the directly responsible person in charge and other directly responsible personnel shall be punished according to law.

Article 109 Where the provisions of this Law are violated by abusing the power of one's position in order to obstruct, restrict, or suppress S&T R&D activities, or by using the power of one's position to suppress, exclude, or deliberately make things difficult for S&T personnel, the persons in charge who are directly responsible, and other persons who are directly responsible, shall be punished according to law.

Article 110 Those who violate the provisions of this Law by falsely applying for, fraudulently obtaining, embezzling, misappropriating, or retaining government fiscal funds, or funds from public donations, used for S&T progress, shall be ordered by the relevant department in charge to make restitution (改正) and recover the relevant government fiscal funds, shall be ordered to return the donated funds, and shall be given a warning or have criticism circulated, and may have funding suspended, or relevant S&T activities terminated or revoked. If the circumstances are serious, they shall be punished with fines according to law, and shall be prohibited from undertaking or participating in S&T activities supported by government fiscal funds within a certain period of time; and those directly responsible shall be subject to administrative penalties and punishment according to law.

Article 111 Those who violate the provisions of this Law by failing to perform their shared-use obligations for large-scale scientific instruments and equipment and other scientific and technological resources, after having purchased large-scale scientific instruments and equipment with government fiscal funds and state-owned capital, shall be ordered to make restitution, shall be given a warning, or shall have criticism circulated by the relevant department in charge, and the directly responsible person in charge and other directly responsible persons shall be punished according to law.

Article 112 Those who violate the provisions of this Law by carrying out S&T R&D or application activities that endanger national security, harm the public interest, endanger human health, or violate scientific research integrity or S&T ethics, shall be ordered to make restitution by the work unit to which the S&T personnel belong or the relevant department in charge. If government fiscal funds used for S&T progress have been obtained or there is illegal income, the relevant department in charge shall terminate or cancel the relevant S&T activities, recover the government fiscal funds, and confiscate the illegal income. If the circumstances are serious, the relevant department in charge shall announce their illegal acts to the public, impose administrative penalties and sanctions, and prohibit them from undertaking or participating in S&T activities supported by government fiscal funds or applying for administrative licenses for relevant S&T activities within a certain period of time; and the directly responsible person in charge and other directly responsible persons shall be subject to penalties and sanctions according to law.

Those who fabricate or falsify scientific research achievements, publish or disseminate false scientific research results, or engage in trading, ghostwriting or ghost-submission services in connection with scholarly papers and their experimental research data, S&T plan project application and acceptance materials, etc., shall be given a warning or have criticism circulated, and be punished with fines; where there is

illegal income, the illegal income shall be confiscated; and if the circumstances are serious, their license shall be revoked.

Article 113 Those who violate the provisions of this law by engaging in S&T activities that violate the management norms of S&T activities shall be ordered by the relevant department in charge to make restitution within a time limit, and they may have the relevant government fiscal funds recovered, be given warnings or have criticism circulated, have disbursements suspended, or have relevant S&T activities supported with government fiscal funds terminated or withdrawn. If the circumstances are serious, they shall be forbidden to undertake or participate in S&T activities supported by government fiscal funds within a certain period of time, and their management qualifications for S&T activities supported by government fiscal funds shall be canceled for a certain period of time. The directly responsible person in charge and other directly responsible personnel shall be punished according to law.

Article 114 Those who violate the provisions of this Law by fraudulently obtaining national S&T awards shall have such awards revoked according to law by the department in charge; their medals, certificates, and bonuses shall be recovered, and they shall be punished according to law.

Where, in violation of the provisions of this Law, a nominating unit or individual provides false data or materials to assist others in fraudulently obtaining national S&T awards, the department in charge shall circulate criticism. If the circumstances are serious, their nomination qualifications shall be suspended or canceled, and they shall be punished according to law.

Article 115 Where this Law does not provide for administrative penalties for acts violating the provisions of this Law, but other relevant laws and administrative regulations have such provisions, such provisions shall be followed. If they cause property losses or other damages, they shall bear civil liability according to law. If their acts constitute violations of social order (治安) management, they shall be subject to social order management punishment; and if this constitutes a crime, their criminal responsibility shall be investigated according to law.

Chapter XII Supplementary Provisions

Article 116 Other relevant matters involving the progress of science and technology for national defense shall be stipulated by the State Council and the Central Military Commission (CMC).

Article 117 This Law shall be effective as of January 1, 2022.