



中国高等学校科技成果 产业化实践与探索

PRODUCTIVE UTILIZATION
OF RESEARCH ACHIEVEMENTS
IN INSTITUTIONS OF HIGHER LEARNING

教育部科学技术司 编
国际合作与交流司



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内容提要

我国高等学校在贯彻“经济建设必须依靠科学技术，科学技术工作必须面向经济建设”方针和科教兴国战略中，积极探索科技成果转化为现实生产力的有效途径，大大加强了科技成果产业化工作，为各行各业科技进步和提高效率与效益，作出了卓有成效的贡献。

为总结宣传高等学校科技成果产业化的成就与经验，本书选编了76个成功典型，介绍了它们实现产业化的主要业绩与实践经验。由于篇幅所限，有些典型只作了扼要简介。同时，选编了高教系统管理部门和中介服务机构的若干综合性文章，从不同层面总结介绍了在党和国家方针政策指引下，组织推动高等学校科技成果产业化的做法与经验体会。为便于国际交流，各篇均有英文摘要。

本书可供科教战线和其他有关方面人士参阅。

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序 言

高等学校是我国科技事业一个重要方面军。不仅是基础研究的一支主力，也是技术创新和高技术产业化的重要力量。在推动科技进步和促进经济与社会发展方面，都起着重大作用，取得了举世瞩目的成就。

自1982年党中央提出“经济建设必须依靠科学技术，科学技术工作必须面向经济建设”战略方针，特别是1985年作出《关于科学技术体制改革的决定》以来，高等学校科技工作重心转移到了为国民经济主战场服务，加强了技术创新和科技成果产业化。近20年来，在党和政府的方针政策指引下，各有关方面大力支持下，高等学校科技工作得到长足发展，科技成果产业化和推广应用获得显著成效。现在，高等学校不仅是培养高级科技人才的主要基地，发展科技文化的骨干力量；而且已经成为各行各业技术进步的重要依托，高新技术产业生长的强大源泉。

高等学校根据我国国情，积极探索具有中国特色的科技创新道路，在科技成果转变为现实生产力过程中，发挥了很大的作用。科技成果转化是一项复杂的系统工程，需要诸多方面合作与支持。高等学校科技成果产业化是通过多种途径实现的，其中大多采取各种方式产学研合作进行；部分技术难度较大的高技术成果，高等学校直接产业化也是一种有效模式。

经过长期的实践探索，高等学校科技成果产业化，已经走出了几种成功的路子，积累了不少宝贵经验。广大科技工作者深深意识到，必须打破传统观念束缚，跟上时代步伐，主动适应和促进市场经济发展以及科技经济结合的新趋势；加速科技成果转化，要有良好的政策环境，发展多种形式产学研合作，促进人员交流与素质提高；大学在高技术产业化中可以发挥独特的作用，创办科技园之类孵化基地是一种有效途径。

为了总结科技成果产业化的经验，促进国内外合作交流，更好地贯彻中共中央、国务院《关于加强技术创新，发展高科技，实现产业化的决定》精神，推动高等学校科技工作进一步为现代化建设服务，特编辑出版此书。同时，也作为向中华人民共和国成立50周年的一份献礼。

韦 经

中华人民共和国教育部副部长

Foreword

Institutions of higher learning are a main force in scientific and technical undertaking in China. Besides carrying out basic research activities, they are also an important source of strength in technological innovation and in industrialization of high technology. They play a major role in propelling scientific and technological progress and promoting economic and social development with remarkable results achieved.

Since the adoptions of the strategic guiding principles by the Party Central Committee in 1982 that “economic development must rely on science and technology, and science and technology must serve the economic development” and in 1985 “the Decision on Restructuring the Management System of Science and Technology”, the focus of university scientific and technological research has been shifted to the service for national economic growth by enhancing technical innovation and by speeding up the industrialization process of scientific findings and technological achievements. In the last twenty years, under the guidance of the relevant policies formulated by the Party and the Government, and with support from various social sectors, the university scientific and technological research work has achieved some major progress. Remarkable results have been obtained in industrialization, promotion and application of university scientific findings and technological achievements.

Today’s institutions of higher learning have not only become the primary bases for training advanced scientific and technical personnel and the backbones for scientific and technical cultural development, but also have been the important supporting base for technical progress to various walks of life and the vast resource for the growth of high technology industry.

In accordance with our national conditions, institutions of higher learning have actively been exploring new ways with unique Chinese characters for scientific and technological innovations. They have played significant roles in turning scientific and technological findings into actual productivity. This is a complicated system engineering process that needs cooperation and support from different sectors. The industrialization of university scientific findings and technological achievements is realized through diversified methods, many of which are carried out with joint efforts between production units and universities in various forms. The application of certain high-tech achievements that are with greater degrees of technical difficulties, has been carried out by the universities themselves. It is another effective model.

After a long period of practice and experiment, the ways for industrialization of

university scientific findings and technological achievements have been established with several successful models and with considerable amount of rare experience gained. The majority of university scientific and technical professionals feel deeply that some conventional concepts must be replaced so as to keep up with current trends. They must take active measures to meet new challenges from the market economy as well as from the new tendency of integration between S & T and economy. In order to speed up the shifting process of industrialization, it is necessary to have a favorable policy environment, to develop different forms of cooperation between production and education, to intensify personnel exchanges and to upgrade their quality. Universities play an unique and effective role in the industrialization process for scientific findings and technological achievements, such as to set up science parks to function like incubators.

The aims of editing and publishing this book are; to sum up past experiences on industrialization of scientific findings and technological achievements; to promote cooperation and exchanges at home and overseas; to better implement the decision, i. e. , Strengthening Technical Innovation, Developing Advanced Science and High Technology, and Achieving its Industrialization formulated by the Party Central Committee and the State Council; and to provide further university services in the field of science and technology for our country's modernization. At the same time, the book also serves as a small contribution to the 50th anniversary of the People's Republic of China.

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