

# 中國科技

CHINA SCIENCE & TECHNOLOGY

1985 — 1995

国家科委研究中心编



1985——1995

## 前言

科学技术是第一生产力  
在华厦大地改革开放的今天  
科学技术  
已经成为我们发展生产力  
和提高经济效益的  
关键手段  
1985年3月  
中共中央承历史之必然  
喊出了  
“进行科技体制改革”  
的世纪强音  
1985——1995  
10年了  
科技战线枯木逢春  
如今已是鲜花盛开

我们编著的  
《中国科技》  
虽不能面面俱到  
但管中窥豹  
几百项成果可见一斑  
她是10年科技改革的小结  
更是新长征路上又一块  
里程碑  
在《中国科技》出版之际  
再次感谢那些在  
科技战线上默默耕耘的人们  
也感谢那些  
为出版此书而付出了辛苦的人们  
编者  
1994年12月

CHINA SCIENCE & TECHNOLOGY

中國科技

## 北京市农林科学院

北京市农林科学院是北京市属的唯一的一所综合性农科院，下属作物研究所、畜牧兽医研究所、蔬菜研究中心、林果研究所、植保环保研究所、植物营养与资源研究所、植物细胞工程实验室、农业综合发展研究所、农业信息研究所、农林牧科技开发中心等 10 个研究所(室)。是全国具有相当规模的现代化农业科研基地之一。

该院主要任务是为首都农业发展提供有力的科技支撑，每年平均承担市以上重大课题近 70 项，“七五”以来获市级以上科技进步奖近 150 项，发表学报级论文 400 篇。有一批科研成果达到国内外领先水平，已成为北京市发展农业和丰富市场副食品需求的依靠力量。

### Beijing Municipal Academy of Agricultural and Forestry Sciences

Beijing Municipal Academy of Agricultural and Forestry Sciences is the only comprehensive research institutions of

agricultural sciences under the Beijing Municipal Government. It has 10 research institutions such as crops, animals and veterinary medicines, vegetables, forests and fruit trees, plant protection and environmental protection, plant nutrition and resources, agricultural information, comprehensive development for agriculture, forestry, and animal husbandry and plant cell engineering. It is one of the large-scale modern agricultural research bases in China.

Its main task is to provide effective support to the agricultural development of the capital and undertakes nearly 70 major research projects assigned by the municipal or central government each year. It has won 150 municipal level and above prizes of science and technology advancement since the Seventh-Five-Year Plan started, and published 400 papers on various journals. A lot of its research results have reached advanced level in China of overseas. It has become a reliable force to develop Beijing's agriculture and enrich non-staple food in the market.



院长董克勤



北京



## 作物研究所

北京市农林科学院作物研究所是以小麦、玉米、水稻、杂粮等作物为研究对象的研究所,开展主要粮食作物的新品种选育及高产栽培技术研究。研究所下设 15 个研究室及一个试验农场。近十年来共取得科研成果 54 项,其中国家级成果 2 项;市级成果 29 项,成果多为国际先进水平和国内先进水平。

## 植物营养与资源研究所

北京市农林科学院植物营养与资源研究所是在原土壤肥料研究所基础上扩充成立的。该所自 1978 年以来共主持或参加取得各级科研成果 43 项,其中国家级 5 项,部市级 22 项,其中以土壤普查、测土施肥及专用复混肥的研制与开发为主线的诸项研究达到国内先进水平。

## 林业果树研究所

北京市农林科学院林业果树研究所成立于 1958 年,是以果树、林业育种、栽培、资源保存、生物技术及果品贮藏加工研究为主的应用研究所。是国家级草莓、桃的种质资源圃之一。收集各种落叶果树及林木资源 2000 余种,同时选育出桃、李、杏、板栗等品种 60 多个。近年来,获各类科研成果 70 项,并先后与法国、意大利、加拿大、澳大利亚、日本等国家开展了合作研究和技术交流。

## Crops Research Institute

The Crops Research Institute of Beijing Municipal Academy of Agricultural and Forestry Sciences is an institute with an orientation towards wheat, corn, rice and other grains, and carries out the research on the cultivation of new varieties of main grain crops by selection and high-yield cultivation techniques. The institute has 15 research departments and an experimental farm. In recent years, it has achieved 54 research results, of which two are national level, and 29 are municipal level. Most of them have reached the advanced world levels or advanced domestic levels.

## Plant Nutrition and Resources Research Institute

Plant Nutrition and Resources Research Institute was established and expanded on the basis of the original Soil and Fertilizer Research Institute. Since 1978, it has achieved 43 research results at different levels, of which 5 are at national level and 22 are at municipal level. The research on general survey of soil, application of fertilizers according to the results of soil testing and the manufacture and development of compound fertilizer has reached the advanced domestic levels.

## Forestry and Fruit Trees Research Institute

Forestry and Fruit Trees Research Institute of Beijing Municipal Academy of Agricultural and Forestry Sciences set up in 1958, is mainly engaged in applied research on fruit trees, plant breeding for forests, cultivation, conservation of resources, biotechnology and fruit storage and processing. It is one of national-level nurseries for quality seeds of strawberry and peach. It has collected over 2,000 species of deciduous fruit trees and forestry resources and cultivated

more than 60 species of peach, plum, apricot, chestnut etc. In recent years, it has won 70 prizes for scientific research results and has respectively carried out cooperations in research and technical exchanges with France, Italy, Canada, Australia and Japan.

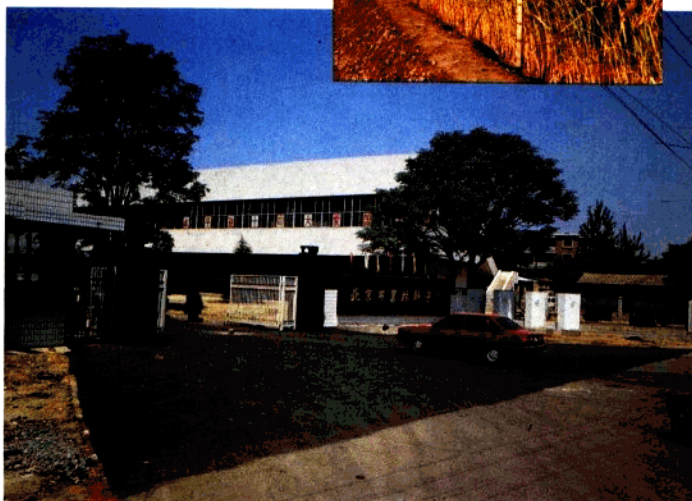


林业果树研究所所貌



植物营养与资源研究所 原子吸收仪测量微量元素

作物研究所秋季优 20 生产田(麦茬)



## 北京市农林科学院 畜牧兽医研究所

北京市农林科学院畜牧兽医研究所建于1958年。全所设9个研究室,拥有大型先进仪器设备上百台,科研水平居国内同行业领先地位。为更好地开发科研成果,该所下设瑞奇畜牧科技开发公司、鸡配合力测定站、种猪性能测定站、原种猪场、畜禽生物制品中试基地、蜂产品中试车间、技术开发服务部等部门。

该所曾承担多项国家攻关课题、部、市级重点课题、示范推广项目,并与日本东京都畜产试验场和澳大利亚农研中心开展胚胎移植、疫病诊断技术两方面的合作研究工作。多年来,共取得科研成果100余项。其中获国家级、部、市级科研成果奖58次。该所的北京黑猪、黄鸡出口日本及东南亚,蜂产品出口马来西亚、新加坡。10年累计创收、创汇1000多万元。

## Animal Husbandry and Veterinary Medicine Research Institute Affiliated to Beijing Municipal Academy of Agricultural Sciences

Animal Husbandry and Veterinary Medicine Research Institute under Beijing Municipal Academy of Agricultural Sciences was set up in 1958. It has 9 research departments and possesses 700 large advanced instruments. Its research level is in the lead of the same trade or business in China. In order to develop scientific results in a better way, the institute has set up Rurqi Livestock Science and Technology Development Corporation, Chicken matching Test Station, stud pig quality test station, original stud pig farm, animal and poultry biologicals experimental base, honey products pilot plant, and department of technology development and service.

The institute has undertaken many national key research projects, projects of the Ministry and the City, demonstration or

technology extension items and has carried out cooperations in research on technologies embryo transplanting and epidemic disease diagnosis with Tokyo Animal Products Testing Farm of Japan and Australian Agricultural Research Centre. It has achieved over 100 scientific research results, of which there are 58 national level, ministerial level or municipal level results. Beijing Black pigs and Yellow chickens bred by the institute are exported to Japan and Southeast Asia, and its honey products are exported to Malaysia and Singapore. It has totally created 10 million yuan of foreign exchange earnings in the past 10 years.



北京市农林科学院畜牧兽医研究所外景

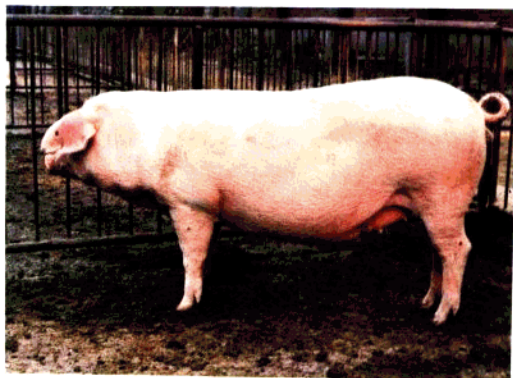




宫廷黄鸡在日本“土蒸鸡”



中日合作胚胎移植研究



VI-1 6号系猪



北京油鸡公鸡



北京油鸡  
北京油鸡母鸡



宫廷黄羽肉鸡



## 北京市眼研究所

北京市眼研究所是我国第一个眼科学研究所，现有 7 个研究室(包括 WHO 中国防盲合作中心)是兼有临床和基础研究的综合性研究所。主要对白内障、角膜病、青光眼、眼肿瘤和 WHO 防盲等方面进行临床和基础研究。

建所以来，先后取得国家级、部级和市级科技成果 60 余项。该所主办的三个国家级刊物在国内眼科学界有着广泛的学术影响。做为中华眼科学会主任委员的张士元所长带领全所的科研人员为中国的眼科事业发展做出了较大的贡献。

### Beijing Municipal Ophthalmology Research Institute

Beijing Municipal Ophthalmology Research Institute, the first one in China, has 7 research departments including China Blind Prevention Cooperative Centre of WHO and is a comprehensive research institute combining clinical treatment with fundamental research. It is mainly engaged in the clinical and basic research of cataract, conjunctivitis, glaucoma, eye tumour and blind prevention of WHO.

Since its founding, it has made over 60 scientific and technological achievements at the state, provincial or municipal levels. Three state-level journals sponsored by the institute have produced wide academical impact in the domestic ophthalmological field.

As a chief Committee member of China Ophthalmology Society Director zhang Shiyuan with all the research personnel under him has made great contributions to the development of the Chinese ophthalmological cause.

沙眼、角膜病、感染性、免疫性眼病专家金秀英研究员



出席93届美国全国眼科学会的张士元所长



青光眼治疗专家徐亮所长





## 国内贸易部北京 商业机械研究所

国内贸易部北京商业机械研究所是集机电设备研制、工艺研究于一体，以建立完善果品加工为主的各类食品加工生产线。生产厂为主攻方向的综合性实用技术研究所。

该所研制的“年产 30 吨甜叶菊糖贰生产线及工艺”、“澄清果汁、果茶及果酱生产线及工艺”等具有很好的经济效益。该所先后获部、市级科技进步奖 13 项，北京市发明奖 2 项，并有一批成果获得国家专利。

### Beijing Business Machinery Research Institute

Beijing Business Machinery Research Institute Affiliated to the Ministry of Domestic Trade is a comprehensive technology research institute which is engaged in the research and development of both

electromechanical equipment and technological process in order to set up and perfect various kinds of food processing production lines with fruit processing as its top priority.

The production line with an annual capacity of 30 tons of stevioside made from stevia rebaudiana and its technology, and the production line of manufacturing clear and bright fruit juice, fruit tea and jam and their technologies, which were developed by this institute have gained good economic efficiency.

The institute has won 13 prizes of Science and Technology Advancement Award granted by the Ministry or the City and 2 prizes of the Municipal Invention Award number of its results has gained the state patent rights.

该所研制产品多次荣获部、市级科技进步奖



主持完成的国家“七·五”攻关项目鉴定验收会会场



针刺无纺布生产线





## 北京老年病医疗研究中心

首都医学院宣武医院、北京老年病医疗研究中心是一所承担着医疗、教学、科研和预防任务,以老年病医疗研究为特色的市级综合医院和市属科研机构。在全国首批被评为三级甲等医院。目前共承担各级科研课题 157 项,其中老年病研究课题达 60%,取得了一批具有国际先进水平的科研成果,并接受世界卫生组织、联合国人口基金、世界实验室援助开展了多项国际合作研究,成为海内外关注的发展中的老年病医疗研究基地。

该中心以神经系统和心血管系统的老化和疾患为研究重点,以应用研究为主,强调实验研究与临床研究相结合,个体研究与群体研究相结合,西医和中医相结合。近年来,在胎儿肾上腺髓质——隐神经混合体脑内移植治疗重症震颤麻痹的基础与临床研究、中药抗衰老的基础研究、中医辨证施治治疗急性脑梗塞的前瞻性研究、人类心包钠素等方面的研究,取得了突破性的成果,并在中药治疗脑胶质瘤的研究、青霉素过敏反应的诊断和预报系列研究方面达到国际先进水平,分别获得北京市科技进步一等奖。

## Beijing Gerontology Research Centre

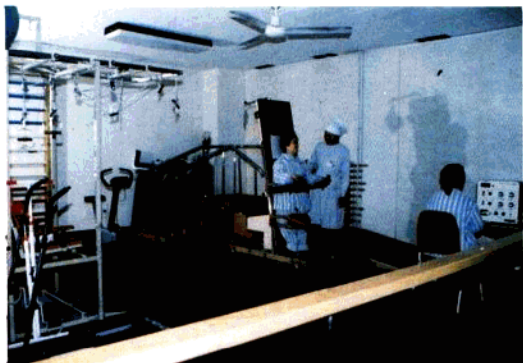
Beijing Gerontology Research Centre of Xuanwu Hospital attached to Capital Medical College is a city-level comprehensive hospital and a municipal Scientific research organization with the distinctive features of treating and studying geriatric diseases, undertaking the tasks of treatment, teaching, scientific research and disease prevention. It was graded as one of the first group of class A hospitals at the third level. It is now undertaking 157 scientific research projects at different levels, of which the projects studying the diseases of the aged constitute 60%. It has achieved a number of results reaching the advanced world levels. It has received financial support from the World Health Organization, U.N. Population Foundation and the world laboratory to unfold many collaborative research activities with foreign countries, becoming a developing base of treating and studying the geriatric diseases, which people at home and abroad are paying close attention to.

This centre, taking the aging and diseases of nervous system and cardiovascular system as its top priority and taking applied research as the main form,

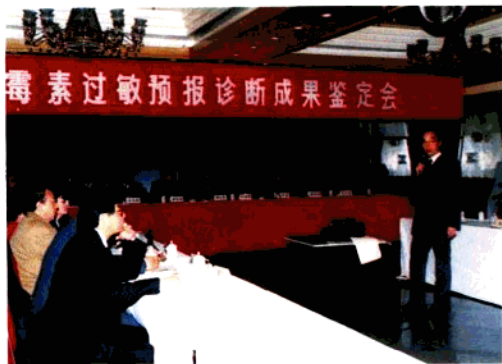
stresses the combination of individual research with collective research and the combination western medicine with the traditional Chinese medicine. In recent years, the basic and clinical researches on the treatment of serious paralysis agitans by trans planting marrow of adrenal gland cryptoneurous mixture into brains, the basic research on antiaging effect of traditional Chinese medicine, the research on the prospect of the treatment of acute cerebral infarction by tradition chinese medical science and the research on human pericardium atrie natriuretic factor (ANF) have received breakthrough results. Its research results on the treatment of cerebrobroma by using the traditional Chinese medicine and diagnose and warnings of allergic reaction of penicillin has reached the world advanced level, and won respectively the first Prises of Beijing Municipal Science and Technology Advancement.

北京老年病医疗研究中心远眺

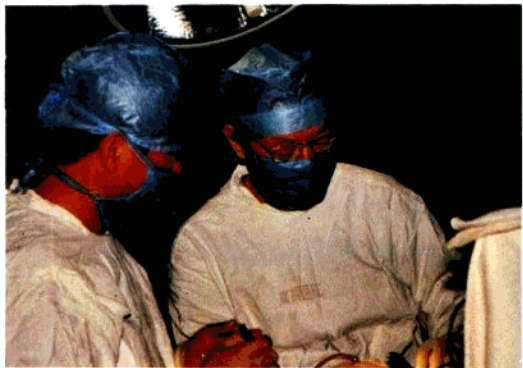




康复厅



科研成果鉴定会



胎儿肾上腺髓质——隐神经混合体  
脑内移植治疗重症震颤麻痹的临床  
研究



心血管病基础研究



国际合作项目资料数据处理



国际合作课题工作会议





脑血管病实验动物研究

核磁共振



## 北京市耳鼻咽喉科研究所

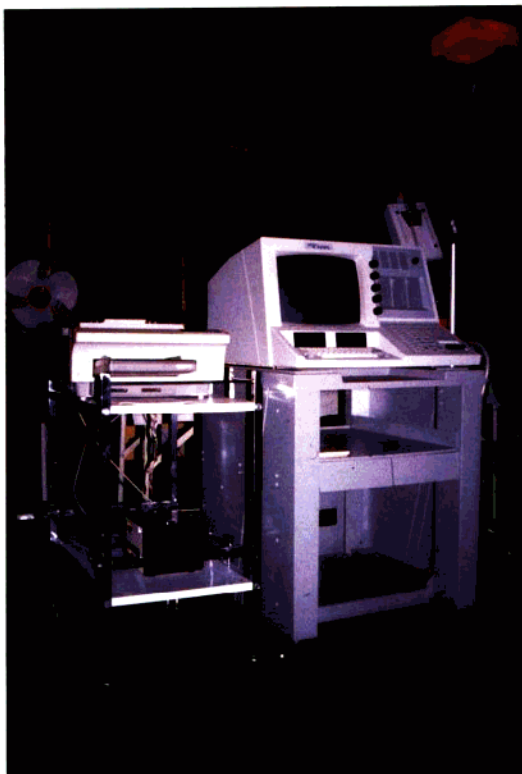
北京市耳鼻咽喉科研究所下设病理形态、生理、生化、微生物、肿瘤病理及肿瘤免疫、听力语言康复、医学信息编辑等研究室。编辑出版国家级专业杂志《耳鼻咽喉科——头颈外科》等3本杂志。主要研究方向为听觉、病理、生理、听力康复、耳鼻咽喉常见多发病、头颈部肿瘤等。该所除承担部分国家攻关研究课题外，近年来其成果分别获国家科委、卫生部、市科委及北京市卫生局科技成果奖50余项。

### Beijing Research Institute of Otolaryngology

Beijing Research Institute of otolaryngology has set up departments of pathological formation, physiology, biological chemistry, microorganism, tumour pathology and tumour immunology, regaining hearing, and editing medical information. It edits and publishes 3 specialized magazines including 《Ear, Nose and throat — Surgery of Head and Neck》 which is a state-level magazine. Its main research orientation is hearing, pathology, physiology, recovery of hearing, common or frequently-occurring diseases of ear, nose and throat and tumours in head and neck.

The institute is now undertaking some national key research projects. In recent years, its research results have respectively won over 50 prizes of scientific and technological results achievements given by the State Science and Technology, Commission Ministry of Public Health, the Municipal Science and Technology Committee and Bureau of Beijing Municipal Public Health.

诱发电位测试系统



北京同仁医院耳鼻咽喉内窥镜诊疗中心门诊



喉CO2激光显微手术



## 首都儿科研究所 附属儿童医院

首都儿科研究所是我国最早诞生的一所儿科学术研究机构，它以科研为主体，担负着医疗、保健、教学、预防等任务。1990年以来获北京市“改革与发展”一等奖三次，二等奖一次。现已生产有百余种儿童药品与保健制品，还成功地开发了双歧杆菌生态制剂和系列支原体诊断试剂等高新技术产品，并建立了一个固定资产达千万元的中试基地。研究所已成为一所科、工、贸一体化的新型研究机构。

### Capital Institute of Paediatrics and its affiliated hospital

Capital Institute of Paediatrics is the first research institution of paediatrics in China. It has an affiliated children's hospital and is engaged mainly in scientific re-

search while undertaking the tasks of medical treatment, health care, teaching and medical prevention. Since 1990, it has won 3 first prizes and a second prize of the Municipal "Reform and Development Award". It has produced over hundred kinds of medical and health products for child use, and also succeeded in developing high-tech products such as active bifido bacterium preparations and series reagents for diagnosing mycoplasma. It has also established a medium-sized experimental base with fixed assets of 10 million yuan. This institute has become a new type research organization integrating research, industry and trade into one entity.

中试基地生产的部分产品



科研人员在超净间作细胞培养



北京市卫生系统第一家医学高技术实验室——北京市感染与免疫中心实验室



中试基地双歧杆菌生态制剂的灌装车间



## 北京市环境保护 护科学研究所

北京市环境保护科学研究所是中国成立最早的多学科、综合性环保科研机构，下设 15 个研究室和设计室，6 个实验室。

近 20 年来，共完成国家和地方重点科研、污染治理工程项目 640 余个。1978 年获《全国科学大会奖》12 项，历年来共取得科研成果 243 次，其中国家科技进步一等奖 3 项，二等奖 1 项，三等奖 5 项；获北京市及省部级科技进步奖 74 项，获国家发明奖 1 项，获国家专利 17 项。

近年来，该所已发展成集环境科学研究，区域环境规划与管理，环境科技产品开发，环境工程设计和承包一体化的综合研究机构。

### Beijing Municipal Research Institute of Environmental Protection Science

Beijing Municipal Research Institute of Environmental Protection Science is the first-established multi-disciplinary and comprehensive environment protection research organization. It has set up 15 departments or designing institutes and 6 labs.

In recent 20 years, it has accomplished over 640 state or local-level key scientific research items and pollution control projects. Of them, 12 won the prizes awarded by the National Congress of Science. In the past years, it has achieved 243 scientific and technical results of which 3 won the first prizes; one, the second prize; 5, the third prizes of the State Science and Technology Advancement Award; 74 won the prizes at the municipal, provincial or ministry levels; one was given the prize of the State Invention Award, and 17 gained the state patent rights.

1971年10月周总理在东方炼油厂污水处理场关心环境保护工作



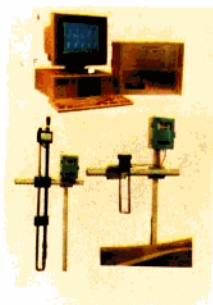
北京密云污水处理厂水解池



与美国EPA进行污水土地处理研究



污水自动监测系统





## 北京蔬菜研究中心

北京蔬菜研究中心是海内外知名的蔬菜专业研究机构。该中心下设 8 个研究室，一个试验农场，两个经济实体。“六·五”以来中心相继推出了大白菜、番茄、甜椒、西瓜、黄瓜等系列配套品种。该中心主持的“蔬菜机械化育苗”、“大白菜强制通风储藏”等项研究取得突破性进展。先后获国家发明奖，部、市级科技进步奖 36 项，并广泛开展了与美国、法国、意大利等国的蔬菜科技合作研究，还承担着国际培训任务。

### Beijing Vegetables Research Centre

Beijing Vegetables Research Centre is an internationally well-known specialized vegetables research organization. This centre has set up 8 research departments, an experimental farm and 2 economic entities. Since the 1980's the centre has continuously developed a series new varieties of Chinese cabbage, tomato, big capsicum, water melon and cucumber. The research projects of mechanization of raising vegetable seedlings and Chinese cabbage storage by compulsory ventilation have made great progress. It has won 36 prizes or the State inventions or the prizes of Science and Technology Advancement at the ministry level or provincial level and has cooperated with the United States, Germany and Italy in the research and development of vegetable growing techniques. It has also undertaken the international training task.



服务厅、生化楼



品种照片

### 国家蔬菜 系统工程技术研究中心 NERCV



蔬菜温室



中心主楼

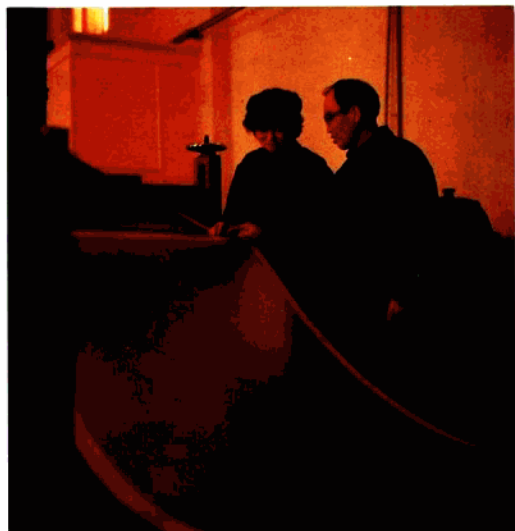


## 中国印刷科学技术研究所

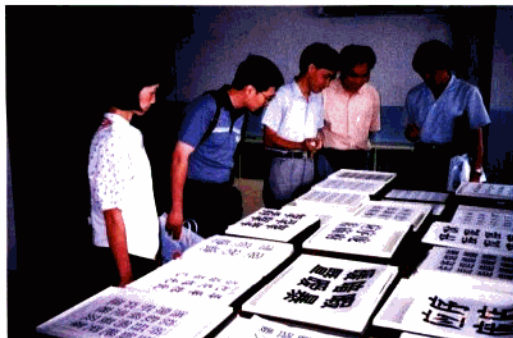
中国印刷科学技术研究所创建于1956年,是集科、工、贸、出版、信息于一体的开发型综合性印刷科研单位。在计算机激光文字排版、彩色图像处理、印刷新工艺、新材料、新设备等研究方面具有雄厚的研究开发实力。该所自行研制的阳图PS版生产线和《科印》电子出版系统在我国印刷业发挥着极大的作用。

该所设有印刷工业出版社及《印刷技术》等三本专业杂志,并设有全国印刷工业科技情报网中心点、全国印刷标准化技术委员会秘书处、全国PS版质量检测机构以及全国印刷质量检测中心等为印刷业服务的机构。

星光牌P-1型阳图PS版荣获国家科技进步二等奖



国家级计算机汉字字体研究中心



## Research Institute of China Printing Science and Technology

Research Institute of China Printing Science and Technology, established in 1956, is a comprehensive development-oriented printing organization, integrating research, industry, trade, publishing, and information into one entity.

It has a strong research and development capability in fields of computer controlled laser phototypesetting, colour image processing, new printing technology, new printing materials and new printing equipment. The production line of producing positive image PS plates and 'Kerim Wa' electronic publishing system which were developed by this institute have played an important role in China's printing industry.

This institute has a publishing house of printing industry and Publishes 3 journals such as The Printing Techniques. It has also established some organizations serving printing industry such as the Central Station of the National Printing Science & Technology information Network, the Secretariat of the National Printing Standardization Technology Committee, the National PS Plate Quality Inspection Unit and the National Printing Quality Testing Centre.

《科印》微机排版系统荣获国家科技进步二等奖



沈海祥所长(右三)与日本SCREEN公司访问团合影





## 北京理工大学



中国科学院院士、  
中国工程院院士、  
北京理工大学校长

王强

北京理工大学是一所以工为主的综合性高等学校，座落在北京海淀新技术开发区的中心地带。

50年来，共为国家培养了五万名科技干部。学校设有研究生院，成人教育机电工程、车辆工程、信息工程、化工与材料、机械工程、计算机、管理、科学技术学院、自动控制系、工业设计系、外语系、人文社会科学系；建有西山分校、秦皇岛分校和房山分校。共有40个本科专业、20个博士学位授予点、58个硕士学位授予点、3个博士后流动站。学校还有函授、夜大等在职教育。

学校现有25个研究所，5个跨系研究中心，5个系级研究室，有4个国家重点学科点，30个部级重点学科点，83个教学科研实验室，其中爆炸灾害预防与控制实验室被定为国家重点实验室，汽车动力性能及排放测试、颜色科学与工程、信号采集与处理、阻燃材料研究实验室被列为国家重点学科点专业实验室。

学校十分重视开展国内外学术交流与科技合作。有200余人担任370多个全国和省（市）的学术团体负责人。“七五”以来，在国内发表学术论文8000余篇，出版专著350多部，有600余项科技成果通过技术鉴定，获国家级奖励34项，部、委级奖励267项。学校与世界36个国家和地区进行学术和科技交流，先后与27所国外大学建立了校际关系，与国内20多个省市的有关单位建立了科技协作关系。

### Beijing University of Science and Engineering

Beijing University of Science and Engineering, located in the centre of the New Technology Development Zone in Haidian District of Beijing, is a comprehensive institution of higher learning with engineering as its mainstay.

In the past 50 years, it has cultivated a total of 50,000 scientific and technological personnel for the Country.

北京理工大学校内一角

