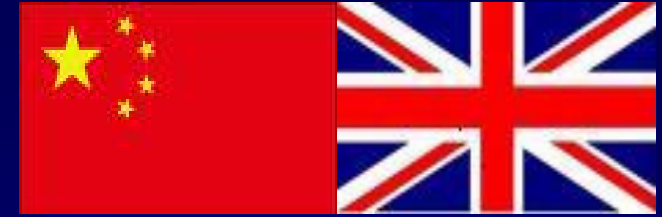


**Science & technology Collaboration  
between Chongqing and UK**

**Prof. Dr. Fusheng Pan**

**President, Chongqing Academy of Science & Technology (CAST)  
Deputy Director-General, Chongqing S&T Commission (CSTC)  
Professor and Director, National Engineering Research Center  
for Mg (Chongqing University)**



- **重庆简介**

A Brief of Chongqing

- **重庆科技简介**

A Brief of science and technology in Chongqing

- **重庆与英国的科技合作情况**

Science and technology cooperation between UK and Chongqing

- **重庆科学技术研究院简介**

A Brief of Chongqing Academy of Science & Technology

# 重庆简介

## A brief of Chongqing

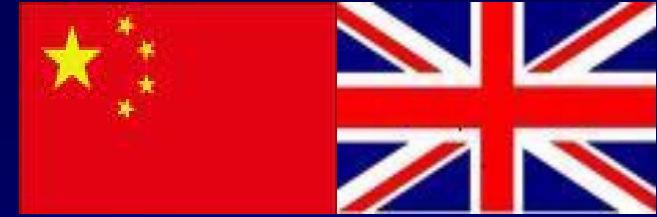
Chongqing, “Yu” for short, is a renowned cultural city, covering an area of 82,400 square kilometers, with a history of 3,000 years and a population of 32 million.

**It is the fourth municipality directly under the Central Government of China, like Beijing, Shanghai and Tianjin.**

Chongqing	
Area	82,400 Square KM
Population	32 million

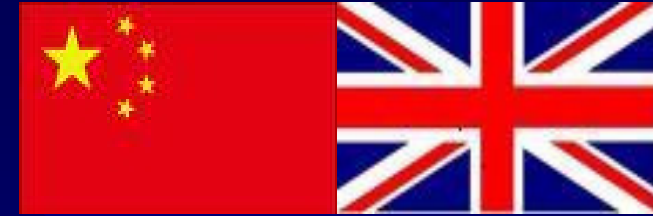
**Situated at the economic belt of Yangtze River, Southwest economic zone, and the basin of the Three Gorges,**

Chongqing has developed from an ancient regional trade center into the largest transportation hub and inland port city in southwest China and the upper Yangtze, and the only one in Western China that integrates water, land, and air transportation.



# 重庆简介

## A brief of Chongqing

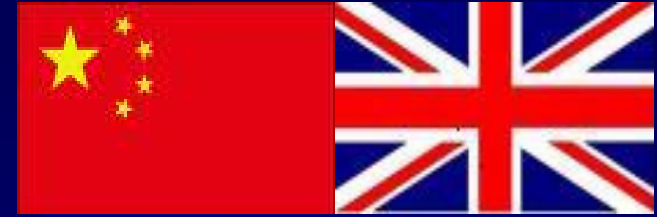


Chongqing connects eastern China of advanced Yangtze River economy and western China of abundant resources and has become the economic center in the upper reaches of the Yangtze River



# 重庆简介

## A brief of Chongqing



Chongqing Port



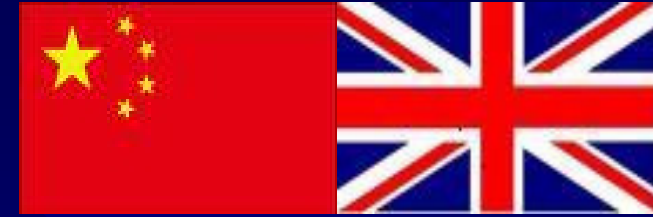
Chongqing People's Great Hall



Three Gorges at Chongqing

# 重庆科技简介

## A brief of science and technology in Chongqing

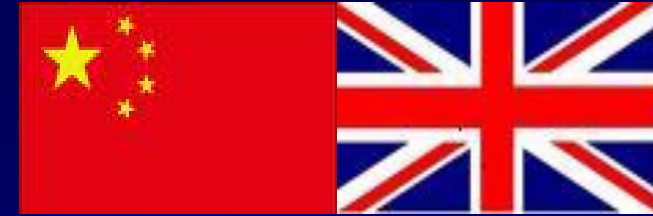


### Statistics (2008)

Area	82,400 Square KM
Number of universities & colleges	57
GDP	509.7 billion RMB
University student	414,000
Technical research personnel	70,000
Technical contract transactions	6.22 billion RMB
Investment in fixed assets	404.525 billion RMB
Foreign direct investment	2.72913 billion USD
S&T Innovation Capability	10 <sup>th</sup> in China and 1 <sup>st</sup> in western China

# 重庆科技简介

A brief of science and technology in Chongqing



2008年综合科技进步水平指数列全国第12位, 西部第1位  
**Overall index of science and technology progress ranked 12th in China and 2nd in western regions in 2008**

区域科技创新能力指数位于全国第10位, 西部第1位

**Regional Science and Technology Innovation Capability ranked 10<sup>th</sup> in China and 1st in Western regions**



# 重庆科技简介

A brief of science and technology in Chongqing



新产品产值与工业总产值的比重名列全国第1位

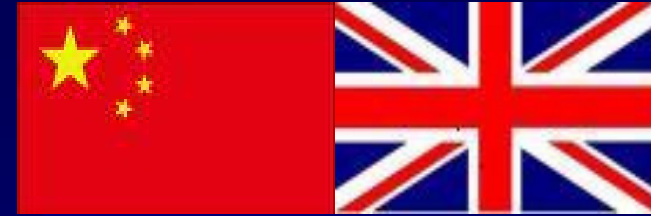
**The proportion of new product output value in gross industrial output value ranked 1st in China in 2008**

企业R&D经费支出占产品销售收入比重名列全国第1位

**The proportion of enterprise R&D expenditure in product sales Income ranked 1st in China in 2008**

# 重庆科技简介

A brief of science and technology in Chongqing



普通高校**38**所

**38** universities

国家级重点学科**14**个

**14** state-level key disciplines

国家级重点实验室**4**个

**4** state-level key labs

国家大学科技园**2**个

**2** national university science parks

国家级工程技术研究中心**5**个

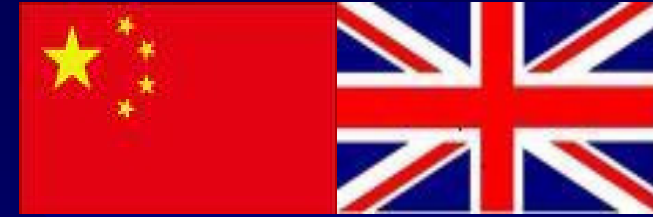
**8** national engineering research centers

企业（行业）技术中心**149**个

**149** industry or company sponsored technology centers

# 重庆科技简介

A brief of science and technology in Chongqing



**There are 2 national university science parks in Chongqing. (totally 69 national university science parks in China)**

**(1) National University Science Park of Chongqing University**

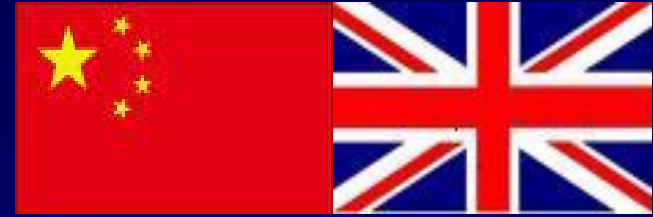
**(2) National University Science Park of Beibai (Southwestern University)**

Chongqing University



# 重庆科技简介

A brief of science and technology in Chongqing



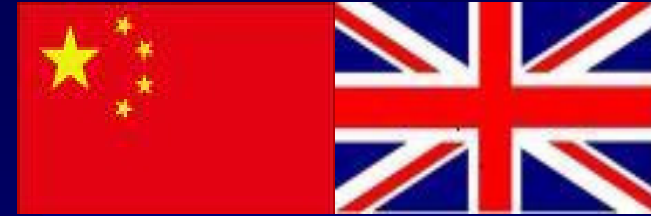
**There are 8 national Engineering Research Centers in Chongqing, including:**

- (1) Functional Materials**
- (2) Magnesium Alloys**
- (3) Metallurgical Engineering**
- (4) Wind Energy**
- (5) Natural Gas Automobile**
- (6) Safe Technologies for Coal Mine**
- (7) Orange Technologies**
- (8) Road Technologies**

**National Engineering Research Center means ranked 1<sup>st</sup> in this field in China**

# 重庆科技简介

A brief of science and technology in Chongqing



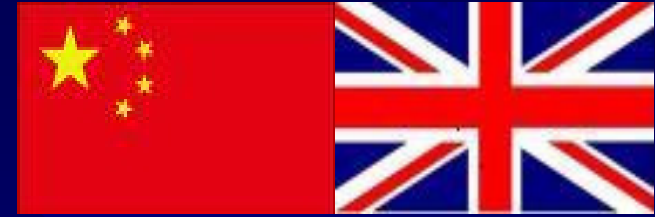
## Management organizations for science & technologies in Chongqing

Chongqing Science & Technology Commission is a department of Chongqing Government, which is responsible for management of science & technology development in Chongqing

**Chongqing Development and Reform Commission is to formulate scientific development strategies, make the mid-term and long-term plans and annual plans in terms of the city's scientific development and the hi-tech industrialization development. It also should involve itself in balancing the scientific investment in the plan of the city's national economy and the development of society.**

# 重庆科技简介

A brief of science and technology in Chongqing



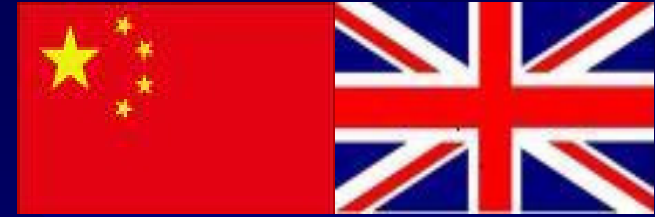
## Management organizations for science & technologies in Chongqing

Chongqing Economic Commission works out policies, local laws and measures for enterprises' technical progress, technical innovation, technology introduction and the major nationalized equipments. It should also guide the establishment of the enterprises' technical innovation mechanism.

Chongqing Foreign Economy and Trade Commission is one of the functional departments of the people's government to administrate the city's foreign economic and trade cooperation. Its obligations relating to the scientific are supposed to work out the development strategy of promoting trade by science and technology, and the plan of scientific development in foreign trade, the way of administration and the annual schedules, and to organize the implementation of them.

# 重庆科技简介

A brief of science and technology in Chongqing



## **The government program for innovation and technology transfer in Chongqing:**

- (1) Key Technologies R&D Program**
- (2) Basic Research Program**
- (3) Innovation Program for Small & Middle Enterprises**
- (4) R&D Infrastructure and Facility Development**
- (5) International Cooperation Program**
- (6) Policies and Laws Research for Innovations**
- (7) VC Program**

# 重庆与英国的科技合作

Science and technology cooperation between UK and Chongqing



80年代末，英国政府支持重庆开展了长江（嘉陵江段）水质污染控制可行性调研。

**In 1980s, British government supported Chongqing in conducting feasibility study of water quality of Yangtz river.**

2003年，英国政府举办的“创意英国”活动(重庆、北京、上海、和广州)举行。

**In “Think UK,2003” ,a number of events were held in Beijing, Shanghai, Guangzhou and Chongqing.**

2005年，重庆市科委与英国驻重庆总领馆签订了合作备忘录，成为“精英科技年”的合作伙伴之一。

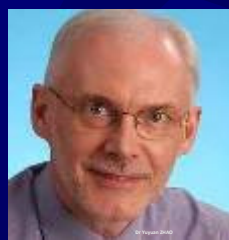
**In 2005, Chongqing Science and technology Commission (CSTC) and British Consulate-General Chongqing (BCG) signed MOU, CSTC became one of the partners of “Partners in Science” initiative.**

# 重庆与英国的科技合作

科技交流与学术活动

Science and technology cooperation between UK and Chongqing

- ★ **The 1st and 2<sup>nd</sup> “UK-China advanced materials symposium” were held in Chongqing and Manchester ,respectively, and the 3rd was developed into “China-Europe advanced materials symposium” ,which was held in Chongqing in April,2008**
- ★ **Organizers:**
- ★ Prof. George David William SMITH (FRS) (Univrsty of Oxford)
- ★ Prof. Fusheng Pan (Chongqing University)
- ★ Prof. Z Xiao Guo (University of London)
- ★ Prof. B Derby (University of Manchester University)



# Visits in Chongqing



# 重庆与英国的科技合作

*科技交流与学术活动*

Science and technology cooperation between UK and Chongqing

**In March 2009, The cooperation agreement was signed by CSTC and Technology and Innovation Division of the Welsh Assembly Government, UK signed MOU.**

**In March, 2007, Workshop on Welsh Science Park was held in Chongqing**

**In Feb., 2008, Delegation of Parliament Members from UK visited Chongqing**



# 重庆与英国的科技合作

科技交流与学术活动

Science and technology cooperation between UK and Chongqing

- 1 On March 11,2009, UK – Workshop on China Modernization & Industrialization of Chinese Medicine , jointly sponsored by BCG, Chongqing, CSTC was held in Chongqing.**

Some scientists from  
University of  
Nottingham University



- 2 Delegation from University of Nottingham visited Chongqing in March, 2008 (School of Community Health Sciences Queen`s Medical Centre University of Nottingham)**

# 重庆与英国的科技合作

科技交流与学术活动

Science and technology cooperation between UK and Chongqing

## 1 Mayor of Chongqing Government, Mr Wang, visted UK in Aug, 2008



## 2 Delegation of Materials from China lead by Fusheng Pan visited UK niversities, such as Oxfor University, Cambridge University, Manchester University, London University and Leeds in Aug., 2006

# 重庆与英国的科技合作

中英科技项目合作

Science and technology cooperation between UK and Chongqing

## 医药器械领域

重庆金山科技（集团）有限公司与英国布里斯托大学、巴士大学和帝国理工大学在图像传感器、胶囊内镜技术和新型胶囊内镜技术等领域进行联合研发。

## Medical Appliances

Joint research and development in image sensor, capsule endoscopy capsule endoscopy technology, etc were conducted by Chongqing Jinshan Science and Technology (Holdings) Ltd. University of Bristol, Bath University and Imperial College.



# 重庆与英国的科技合作

中英科技项目合作

Science and technology cooperation between UK and Chongqing

重庆天海公司与威尔士恩菲斯公司合作研制出了全球首台大功率色温连续可调的LED芯片手术无影灯，并成立了“天海·恩菲斯LED技术研发中心”，已在英国挂牌；近日，天海在英国的研发基地已正式成立。



Chongqing Tianhai L.td. and Enfis L.td produced the world's first high-power continuously adjustable color temperature of LED chip surgery. A joint LED R & D Center " was established and was listed in the United Kingdom. Recently, Tianhai R & D base in the United Kingdom has been officially established.

# 重庆与英国的科技合作

中英科技项目合作

Science and technology cooperation between UK and Chongqing

## 先进制造业领域

重庆市光学机械研究所是中国西南地区唯一一所英国焊接所的会员单位。2008年8月，该所与英国焊接研究所共同建立了“中英先进连接技术转移平台”。



## Advanced manufacturing

Chongqing Optical Mechanical Research Institute is the only one in southwest China that enjoys a membership of British Welding Institute. In August 2008, it established the “China-UK advanced connectivity technology transfer platform” jointly with the British Welding Institute.

# 重庆与英国的科技合作

中英科技项目合作

Science and technology cooperation between UK and Chongqing

## 先进材料领域

重庆大学与英国牛津大学、剑桥大学、伦敦大学、曼彻斯特大学等在材料领域进行了多方面的合作，联合主办了多次国际会议。

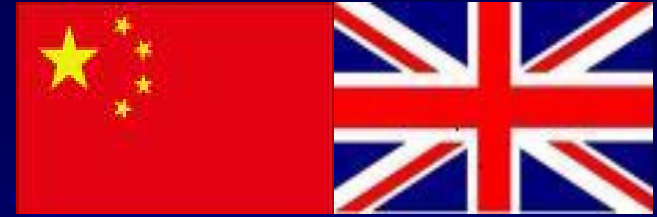


## Advanced materials

A lot of collaborations between Chongqing University and UK universities, such as Oxford University, Cambridge University, London University and Manchester University have been carried out or being carried out.

# 重庆科学技术研究院介绍

## A Brief of Chongqing Academy of Science & Technology

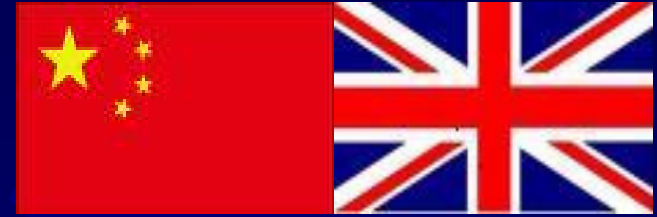


Chongqing Academy of Science and Technology (CAST) was established in 2008. It was called the Chongqing Academy of Applied Technology and is a public institution approved by the People's Government of Chongqing Municipality. CAST is an industrial & technical all-around institution to integrate researches & developments, technical transformations & transfers, personnel training and international exchanges. It is the largest service institution that is committed to scientific researches and technical innovations constituted by Chongqing Municipality.

**It is a bridge between universities and enterprises, government and R&D organizations, Chongqing and foreign organizations**

# 重庆科学技术研究院介绍

## A Brief of Chongqing Academy of Science & Technology



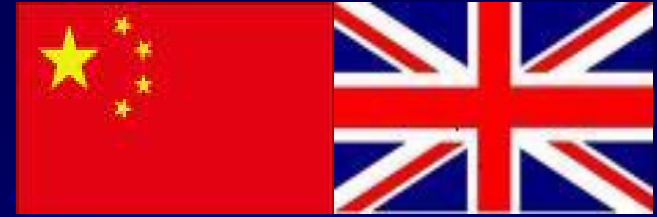
CAST consists of nine (9) institutes and seven (7) centers.

Nine (9) institutes are the “Chongqing Institute of Industrial Automation and Instrumentation,” “Chongqing Institute of Optics and Mechanics,” “Chongqing Research Institute of Biotechnology,” “Chongqing Institute for Daily-Use Chemical Industry,” “Chongqing Silicate Research Institute,” “Chongqing High-Technology Incubation Center,” “Chongqing Institute of Mechanical & Electrical Engineering,” and “Chongqing Metrological Institute of Physical & Chemical Measurements of Mechanical Industry” and “Chongqing Institute for Food Industry”

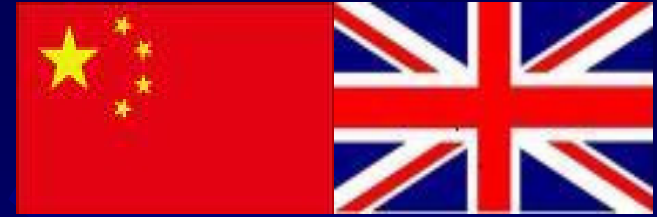
Seven (7) centers are “Chongqing Center for Moulds,” “Chongqing Center for Industrial Automation,” “Chongqing Center for Advanced Materials,” “Chongqing Center for the Parts and Assemblies of Automobiles and Motorcycles,” “Chongqing Center for Biomedicines,” and “Chongqing Center for Petroleum and Chemical Engineering” and “Chongqing Center for Scientific & Technical Testing.”

# 重庆科学技术研究院介绍

## A Brief of Chongqing Academy of Science & Technology



CAST will be committed to the services of economical & social developments of Chongqing Municipality, aiming at the frontier of the world's science & technology and key technical problems of the economical & social developments of Chongqing Municipality as well as the technical bottleneck problems in the industrial developments, while insisting on the concurrent developments of research & industrialization, and of innovation and service in order to emphasize the leading position of technology developments and result-transformations, mainly develop innovations of science & technology, research on the common technology of industry and the basic research of relevant applied technologies. Moreover, it will undertake the key projects of science & technology; build up the resources-sharing platform of science & technology, the platform of science & technology developments, and the platform of achievements-transformations.



# 国际知名研发机构重庆行动

International R&D Institution Mission to Chongqing

国际知名研发机构重庆行动

International R&D Institution Mission to Chongqing

主办：中华人民共和国科学技术部 重庆市人民政府

Sponsored by: Ministry of Science and Technology, PRC (MOST)

Chongqing Municipal Government

承办：科学技术部国际合作司 重庆市科学技术委员会

Organized by: Department of International Cooperation, (MOST)

Chongqing Science and Technology Commission (CSTC)

时间：2009年10月22日—23日

Date: October 22-23, 2009

地点：重庆

Venue: Chongqing, China

# 中国·重庆国际知名研发机构重庆行动

2009年10月22日-23日 中国·重庆

International R&D Institution Mission to Chongqing

October 22-23, 2009 Chongqing, China

1. “国际知名研发机构重庆行动”启动仪式；  
Opening ceremony
2. “碳捕获与储存技术国际研讨会”；  
International symposium on carbon capture and storage technology
3. “国际生物医药与生物技术高级论坛”  
International forum on bio-tech and bio-medicine
4. “国际电动汽车技术创新发展论坛”；  
International forum on innovation and development of electric vehicle technology
5. “超声无创治疗国际高峰论坛”；  
International summit of the non-invasive ultrasound treatment
6. “未来移动通信技术国际研讨会”；  
International symposium on future mobile communication technology
7. “国际宜居城市暨生态建筑技术研讨会”  
International symposium on livable cities and ecological construction technology
8. “国际科技合作项目交流洽谈会”。  
Business talks of international science and technology cooperation projects

合作 Cooperation

创新 Innovation

发展 Development



*Thanks!*

Chongqing