

The 2nd Asian Robotics Society Summit Meeting
Nov. 1, 2007, San Diego, USA

The Professional Committee on Robotics,
Chinese Association of Automation

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Outline

- About of the PCR, CAA
- Some Current Research Activities
- The Future Robotics R&D

About of the PCR, CAA

- There is no academic community named like Robotics Society of China yet
- Under some societies in China there are sub-societies, usually called professional committees

About of the PCR, CAA

- Three main professional committees on robotics in China
 1. The PC on Robotics under the Chinese Association of Automation (PCR,CAA)
 2. The PC on Intelligent Robot belonged to the Chinese Association for Artificial Intelligence (PCIR, CAAI)
 3. The PC on Robotics under the Chinese Society of Astronautics (PCR,CSA)
- The PCR,CAA is the largest one, with the longest history

About of the PCR, CAA

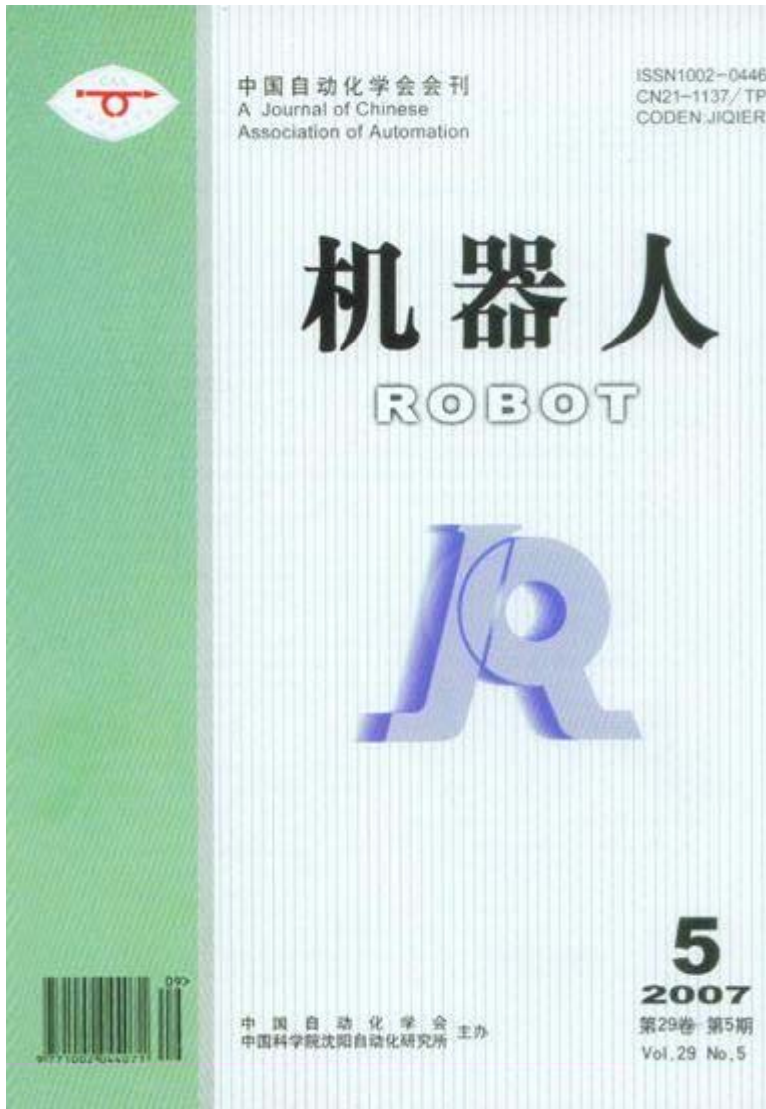
- The PCR,CAA was founded in Sep. 1985
- Membership
 - more than 260 individuals from over 100 universities, research institutes and enterprises
 - No membership of any organization and enterprise

The purposes of the PCR, CAA

- To promote the development of robotics in China
- To strengthen the exchange of the professionals and technicians on robotics
- To popularize the robotics knowledge in China

The main activities of the PCR, CAA

- The organization of national conference on robotics every two years. Sometimes we hold it jointly with other PCRs.
- The publication of a Chinese bimonthly journal of ROBOT
- As host or co-sponsor to hold domestic and international events about robotics.



- The journal of ROBOT (bimonthly) in Chinese with the English title and abstract

Some Research Activities



**Test application
over 1000 clinical
cases since 2002**

**Brain surgery assistant robots
(Beijing Univ. of aeronautics and Astronautics)**

Some Research Activities



**Test application
for 50 clinical cases**

**Orthopedic robots used for the distal nail holes locked
(Harbin Institute of Technology)**

Some Research Activities



BHR-01



BHR-02

Humanoid robot in Beijing Institute of Technology

Some Research Activities



**used more
than 20 units**

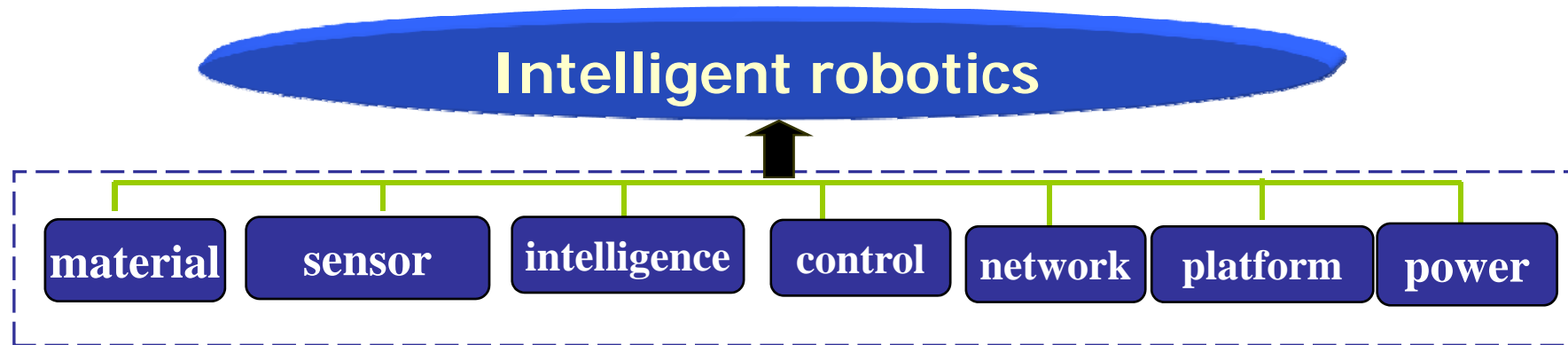
**Detecting and Processing robot
(Shenyang Institute of Automation)**

The Future Robotics R&D

- **Chinese economy is still in fast developing period, it is expected that the robotics R&D and its applications will have more progress in coming ten years in China.**
- **The PCR, CAA will be with**
 - Robotics Basic Research
 - Service Robot
 - Industrial Robot Technology
 - International cooperation

Robotics Basic Research

- **Continuously investigating sensor, smart mechanism, materials and intelligence and integrated technology, achieving the original creative theories , methods and technology**



Service Robot

- **Developing robotic nursing bed, disable wheel chair, medical treatment, floor cleaning, indoor supervision, outdoor public security, smart toys , etc.**



Service robot

Elder & disable aid

Home service

Education & Amusement

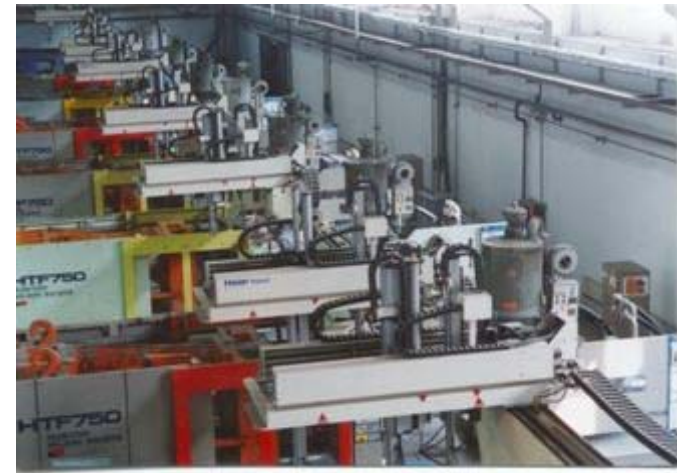
Medical operation

Industrial Robot Technology

- Promoting industry-academic cooperation, developing system technology for the further application of industrial robot, to meet the need that China is producing more and more cars and electric appliances



SIASUN's IR production



HAIER's robots used for plastic injection machine

International Cooperation



- **The PCR, CAA will do more for the international cooperation on robotics among the Asian countries**

Thank you for your attention!