

China to Explore Nuclear Fusion Source on the Moon

China is likely to send a man to the Moon and set up a space station by 2020, a designer with the nation's lunar exploration programme said yesterday.

Jiang Jingshan, a designer with the Chinese Lunar Orbiting Exploration programme, said solving the country's long-term energy shortage would be among the aims of the three-phase Moon- exploration programme.

Professor Jiang said the first stage would involve sending a satellite to orbit the Moon in the first half of 2007. In the second phase, robots would be sent to land on the moon's surface to collect samples over four to five years.

"Then we'll spend the next seven years mastering technologies that can send our astronauts to and from the moon safely. We have to guarantee that they'll be safe ... if things go well, we will send astronauts to the moon by 2020," he said.

Professor Jiang said a unique feature of China's lunar mission was to measure the depth and density of **helium-3** coating the Moon's surface.

Helium-3, regarded as a clean, safe and cheap energy resource for nuclear fusion by scientists, is abundant on the Moon, but scarce on Earth.

"By measuring the depth of the helium-3 coating, we can have a clearer picture of its exact amount. According to the US, there are 3m tonnes of helium-3 on the Moon. This amount could satisfy the globe's energy needs for millions of years," he said.

Professor Jiang said the space station would be built "in line with China's situation".

"We would tend not to build a very big one, like that of the US," he said. "It's not necessary to spend that much money. It will be big enough for three to five people to work inside."

With Shenzhou VI, China's second manned spacecraft, expected to take off next week from Jiuquan , Professor Jiang said the flight would break new ground in China's space programme.

"Shenzhou V was a breakthrough because it was our first manned mission. Shenzhou VI is another as we are sending two astronauts into space for five days."