

# Chinese university wins degree of freedom

South University of Science and Technology of China to pioneer educational reform without government control.

Jiao Li

15 May 2012

## BEIJING

When the South University of Science and Technology of China (SUSTC) in Shenzhen, launched in 2007, its supporters hoped that it would offer a revolutionary model for higher education. It planned to break free from much of the bureaucracy imposed by the central government's Ministry of Education by admitting students and hiring researchers on its own terms, and forging a world-class university in the process.

After a five-year battle, the pioneering university last month finally received ministry accreditation to enrol students. "It is an important milestone for the history of SUSTC, and for higher-education reform and development in China," says SUSTC president Zhu Qingshi. "SUSTC will push ahead for reform."

But some fear that the government's endorsement may dilute the university's reformist aims. "I wonder whether it will stray farther away from its claimed target," says Cao Zexian, a physicist at the Chinese Academy of Sciences' Institute of Physics in Beijing.

SUSTC is backed by the Shenzhen city government, which has invested more than 7 billion renminbi (US\$1.1 billion) to create the new campus and university buildings. Zhu, who was formerly president of the University of Science and Technology of China in Hefei, says that he wants SUSTC to become one of Asia's top research universities in the next twenty years (see '[Reformist leader defies Chinese academic system](#)'). SUSTC will be organized into just five departments as a way to encourage interdisciplinary collaboration. "In my whole life, the most important thing is working in SUSTC," Zhu told *Nature*.

One of Zhu's key goals is to avoid having a system of administrative rank in his university, which he describes as the "biggest obstacle" to reform. Faculty members in Chinese universities sometimes spend more time trying to attain higher-ranking positions — which confer status, powerful contacts and additional income — than they do on research and teaching (see '[Chinese academies promise cleaner elections](#)'). As part of this effort, the university last year set out the terms for a council appointed by the city government that will lead SUSTC.

## Test site

The university has also spurned the national entrance examination, known as gao kao, which is a mandatory requirement for winning a university place in China. Many academics think that the exam values rote memorization over creativity, and SUSTC wants to use a broader array of tests that probe students' potential and passion for learning. Last year, the university used the results of its own test to enrol 45 students. The Ministry of Education, however, insisted that the students must also take the national exam. Without it, any qualifications they received from SUSTC would not be recognized by the ministry, it said.

Zhu has now reached a compromise with the ministry, which will see a variety of factors being used to grade potential students. "Gao kao accounts for 60%, the grades of senior middle school account for 10%, and SUSTC uses the last 30% to assess their creativity and passion for learning," says Zhu.

Some academics think that the inclusion of gao kao will hamper SUSTC's attempts at reform. But Wang Lijun, a physicist at Tsinghua University in Beijing, says: "Gao kao is the correct choice, and it's fairer. There is a SAT [Scholastic Assessment Test] in the United States, too." However, Zhu hopes that SUSTC will move towards completely independent enrolment over the next few years.



Lan Hai/SUST

Zhu Qingshi, president of South University of Science and Technology of China in Shenzhen, is spearheading reforms that could revolutionize China's higher-education system.

SUSTC's battle may also have helped to spur broader reforms. Last month, the central government issued guidance to universities and other public bodies that urged them to gradually "revoke administrative level" systems.

"I certainly wish SUSTC the best in spearheading educational reform," says neuroscientist Rao Yi, dean of life sciences at Peking University in Beijing. "A new university should be free of some constraints at old universities."

*Nature* | doi:10.1038/nature.2012.10631