



Science, Technology and Education News from China

Number 92 – February 2012

Please note that the previous newsletters can be downloaded from the website of the Embassy of Switzerland in China: www.eda.admin.ch/beijing¹. To subscribe/unsubscribe or send us your comments, please send an email with the corresponding subject to chenchen.liu@eda.admin.ch.

Introduction

This month's newsletter starts with a discussion on the reason behind the popularity of the dual degree programs in China. In science and technology, China outlined its plans to develop rare-earth based new materials in the 12th Five Year Plan for New Material, the government of Beijing promises to cut air pollution by 15% until 2015. In education, the president of Tsinghua University has been changed. The Dean of the Architecture Department of the China Academy of Art became the first Chinese architect to win Pritzker Architecture Prize. In Health, China plans to ban unauthorized use of genetically modified food. The use of bear bile in traditional Chinese medicine spurs outcry in Chinese public. NGO in China opposes the local HIV Testing Policy for privacy concern.

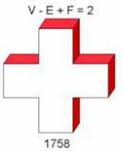
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¹ Please click on the blue texts to activate the hyperlinks to either email addresses or related websites.



Policies

University Dual Degree Programs: Cost-Effective Choice for Students?

Study abroad has never been so popular in China. Chinese Ministry of Education (MoE) statistics indicate that in the year of 2011, 339'700 students went abroad for various education programs, among them 314'800 were self-supported. The figure is a 19.32% increase from 2010.

But a full degree study abroad is not affordable or not worth the time for everyone. An alternative would be dual degree programs, which now flourish in China. A dual degree program enables students to spend 2-3 years studying at their home university in China and 1-2 year at their partner university. At the end, they receive degrees from both universities. According to the MoE website, there are already 98² officially registered China-U.S. dual degree programs available for interested candidates, ranging from economics, law to natural science and engineering. The number of China-British programs is even larger.

The quality of such dual degree programs has been questioned by a recent scandal involving a University in the United States. An internal auditing showed that the university has been awarding degrees to foreign students without qualifying grades. Embarrassingly, 95% of the unearned degrees were conferred to Chinese students who are in the U.S. on dual degree program. They came from 19 Chinese universities, some of which enjoyed good reputation at home. And all 19 programs are registered and approved by the Ministry of Education.

Obviously in this case, both sides can be held responsible—the Chinese universities for sending unqualified degree candidates abroad and for a lack of quality control measures, the US university for awarding them with degrees and both sides for maintaining such “cooperation” for several years. But a more important question would be: why dual degree programs—qualified and unqualified—could gain such popularity among Chinese universities and university students?

For Chinese universities, their urge to partner with foreign universities for dual degree programs is partially driven by the request from their Ministry to “internationalize” themselves and to keep their best young minds at home. Since improving the existing curriculum to international standards seems to be too big an investment and too time consuming, many Chinese universities turn to foreign counterparts for the “international element” in their university profile. From the publicity perspective, an extended list of dual degree programs with partner universities around the world and an increased number of registered foreign students on degree programs certainly appear to be a nice indicator of a Chinese university’s “internationalization” progress. From the economic perspective, a dual degree program requires little investment but usually generates more income, as Chinese students enrolled in such dual degree programs often pay more tuition fee as compared to their peers in regular programs.

Dual degree programs also seem to be a cost-effective choice for the university students. The 1 or 2 year overseas study costs much less than a full program abroad but ends up with the same degree. The entire stay abroad is organized by the home university and accompanied by the classmates at home, which also makes life easier. At the end of the day, some overseas experience plus a foreign degree will add an international touch in the students’ CV, which can be useful in the current job market.

With a strong demand from the Chinese side for international degrees and willingness to cooperate from Chinese universities, partnership in the form of dual degrees has almost become an easy way for foreign universities to access the mass pool of Chinese university students and the Chinese higher education market. Will the university will be able to maintain the quality of their graduates? And in what way such cooperation will impact the university’s academic reputation? Such questions remain controversial and will have to be answered sooner or later.

² The statistics only cover the programs that are registered and approved by the Ministry of Education, and where both sides (China and foreign) are universities issuing degrees that are recognized by the Chinese Ministry of Education.



News

1. State Council Appoints Dr. CHEN Jining President of Tsinghua University

(Tsinghua News, 12-02-2012)

Dr. Chen Jining was appointed President of Tsinghua University on February 20, with approval from the Central Committee of the Communist Party of China and the State Council. Dr. Chen succeeds Professor Gu Binglin, who retired from the post at the same time.

The announcement of the new president was made on February 20 at a meeting of senior Tsinghua administrators.

Born in 1964, Dr. Chen Jining is a Professor of environmental system analysis. He became a student in Tsinghua's Department of Environmental Engineering in 1981, got his bachelor's degree from Tsinghua in 1986 and his Ph.D degree from Imperial College London, UK in 1993. He became an assistant researcher of Imperial College London in 1994. He joined the Tsinghua University staff in 1998 as Vice Dean of the Department of Environmental Engineering and became Dean of that Department in 1999. Dr. Chen was appointed as Tsinghua University Vice President in 2006. He became Deputy President of Tsinghua in 2007.

(<http://www.aoehome.com/china-school/news/State-Council-appoints-Dr.-Chen-Jining-president-Tsinghua-University-3119>)

2. China to Develop Rare-Earth Based New Materials

(Xinhua, 22-02-2012)

China will develop rare-earth-based new materials during the 2011-2015 period, in an effort to boost manufacturing capacity, according to a five-year plan for the new materials industry released on the 22nd.

The government will "make full use of its rare earth resources to expand the industrial scale of new materials made with rare earth," said the publication by the Ministry of Industry and Information Technology.

The government will focus on developing rare earth functional materials, increasing efforts to improve performances of new materials made with rare earth, promote its application in high-end manufacturing, and increase product added-value, the plan said.

The plan aims to promote the application rate of production technologies for rare earth functional materials to 70 percent in the country's high-tech industries by 2015, it said.

It also set goals to increase the output capacity for rare earth permanent magnet materials by 20,000 tonnes a year and that of rare earth hydrogen-containing alloy powder by 15,000 tonnes a year.

Rare earth permanent magnet materials, which have rare earth elements in their composition, are widely used in electrical motors, medical treatment and spaceflight, while hydrogen-containing alloy powder is used in high-performance batteries.

The plan also sets higher output goals for a range of other new materials that contain rare earth metals.

Production bases for rare earth functional materials will be mainly built in Beijing, Baotou city in Inner Mongolia autonomous region, Ganzhou city in Jiangxi province, Liangshan and Leshan in Sichuan province, Longyan in Fujian province and Ningbo in Zhejiang province, the plan said.

While pledging policy supports to accomplish the goals, the plan also stresses efforts to protect energy resources and promote integrated utilization by developing reproducible resource technologies.

China's rare earth sales account for nearly 90 percent of the global total, but its reserves only account for one-third of the world's total. Decades of excessive exploitation has resulted in serious environmental damage.



To promote healthy development of the industry, China has suspended the issuance of new licenses for prospecting and mining and adopted production caps, export quotas and stringent environmental standards, while launching crackdowns on illegal mining activities.

China set the 2012 rare earth export quota at basically the same level of 2011. Its rare earth exports totaled 14,750 tonnes during the first 11 months of 2011, accounting for only 49 percent of the total quota.

The plan, which maps out development of the nation's new material industry, prioritizes the development of six types of advanced materials, including special metal functional materials, high-end metal structural materials, advanced macromolecular materials, new inorganic non-metal materials, high performance composite materials and frontier new materials.

The plan targets a 2-trillion-yuan output in the country's new material industry by 2015. The industry's output value stood at 650 billion yuan in 2010, growing by an annual rate of 20 percent since 2005.

(http://news.xinhuanet.com/english/china/2012-02/22/c_131425452.htm)

3. **Draft Law Seeks to Ban Unauthorized Use of Genetically Modified Food**

(Global Times, 23-02-2012)

The production, trade and consumption of unauthorized genetically modified (GM) grain will be banned in China, according to the draft of China's first grain law, which was released by the State Council on Tuesday to solicit opinions from the public.

"Research, experiments, production, sales, imports and exports of the seeds of genetically modified grain should meet relevant national regulations, and no institution or individual should apply genetic modification technology to main grain breeds without authorization," the draft law says.

"It is the first time GM food control laws have been made at the national level, reflecting the fact that the national government has taken opposing opinions of GM food into consideration," Fang Lifeng, the director of agriculture and food projects at Greenpeace China, told the Global Times.

The commercial cultivation of GM rice and GM corn is currently forbidden in China, so they will not appear in China's market, Chen Xiwen, the deputy head of a central government rural work team, said earlier.

However, wide-scale unauthorized GM rice cultivation was discovered by Greenpeace in Hubei Province in 2005.

About 90 percent of soybean oil sold in China is made from GM soybean imported from the US, Fang said. "The soybean imported into China could only be used as raw materials but not as seeds for planting."

"The authorities are taking a prudent attitude toward the commercial cultivation of GM products," said Liu Shi, the former manager of Longping High-Tech Company, which specializes in seed production. "GM food has not proven to be free of potential harm to human health, because the commercialization of GM food production is currently in its very early stages," Liu said.

"On the other hand, if there was a loophole in the management of GM product cultivation, it might lead to very bad consequences for the environment and ecological balance."

According to a survey conducted by Greenpeace and Tsinghua University in 2010 in Beijing, Shanghai and Guangzhou, 70 percent of about 1,000 participants said they would not eat GM rice.

(<http://www.globaltimes.cn/NEWS/tabid/99/ID/697128/Draft-law-seeks-to-ban-unauthorized-use-of-genetically-modified-food.aspx>)



4. **NGOs Oppose HIV Testing Policy**

(Global Times, 21-02-2012)

The controversy surrounding the government's promotion of real-name HIV testing in Guangxi Zhuang Autonomous Region and Hunan Province reached a new high when two influential non-governmental organizations sent letters to related government bodies calling for an end to the draft regulation, which some experts believe may scare off test takers and even result in a further spread of the disease.

Tianxiagong (Justice for All), a Nanjing-based NGO that promotes welfare, benevolence and equality, and China Alliance of People Living with HIV/AIDS (CAP+), a non-profit information exchange and activity network, have respectively petitioned the Ministry of Health and the China Center for Disease Control and Prevention (CDC), to stop promotion of real-name testing nationwide.

Wang Yu, director of the CDC, advocated the use of real-name HIV testing, which may soon be approved in South China's Guangxi Zhuang Autonomous Region, stating that the tests will be beneficial for the prevention and treatment of HIV/AIDS.

However, many HIV carriers, people infected with AIDS, and AIDS prevention activist groups have attacked the proposal, claiming this move may result in fewer people volunteering for testing, as discrimination against HIV carriers is a major social issue.

Mian Liping, coordinator of the World AIDS Campaign, also claimed that the regulation is impractical since very few HIV carriers in China would want to expose their condition.

"We can't deny that the current society can't provide HIV carriers with equal rights. Many high-risk groups might delay or dodge HIV tests for fear of personal information being leaked. So before related regulations and laws to protect carriers' privacy and rights are in place, the promotion of real-name testing may have a negative result," Mian said.

China offers HIV tests without asking for personal details, but some provinces and regions, such as Yunnan Province, have adopt the real-name registration policy.

Although the government claimed the move is to ensure those who test positive are informed in time, and that it will make it easier for data collection purposes, some HIV carriers are not convinced.

(...)

(<http://www.globaltimes.cn/NEWS/tabid/99/ID/696763/NGOs-oppose-HIV-testing-policy.aspx>)

5. **Beijing to Cut Air Pollution by 15% by 2015**

(Reuters, 09-02-2012)

The level of air pollution in the capital varies, depending on winds. But a cocktail of smokestack emissions, vehicle exhaust, dust and aerosols have at times blanketed Beijing in a pungent, beige shroud for days on end over the past few months, and has even forced the cancellation of flights.

Many Beijing residents complain on the Internet that official figures greatly underestimate the problem and say they only trust readings from the U.S. Embassy, which has its own measurement based on U.S. standards. Those readings appear much grimmer than those of the city government's.

In an effort to assuage those complaints, the city last month began to disclose the amount of tiny pollution particles in the air of 2.5 micrometers or less in diameter, known as PM2.5.

State radio said on its website the city government would cut PM2.5 levels by 15 percent by 2015 compared with 2010 levels, and cut overall air pollution levels by 30 percent over the same period.

Chinese experts had earlier criticized as "unscientific" a single monitoring point on the roof of the U.S. Embassy, which releases hourly air quality data via a widely followed Twitter feed.



China previously only disclosed readings of pollutant particles that are 10 micrometers in diameter or larger.

Doctors warn that the tiny floating PM 2.5 particles can settle in the lungs more easily and cause respiratory problems and other illnesses.

"After 2020, the Beijing Environment Bureau will not rest in its efforts to continue improving air quality," state radio said.

Xinhua news agency said 1.6 million old and polluting vehicles will be taken off the roads by 2020, and that all cement factories would be closed by then.

"By 2020, the government is expected to limit the city's annual total consumption of coal within 10 million tonnes, 62 percent less than the amount estimated to be consumed by the end of 2015," Xinhua said.

"From now on, heavy-polluting and energy-consuming companies in the oil refining, petrochemical, cement, iron and steel industries will not be allowed to open new plants or expand their current workplaces," it said.

The city will also plant 133,000 hectares of new forests, the report added.

(<http://www.reuters.com/article/2012/02/09/us-china-beijing-pollution-idUSTRE8180C520120209>)

6. **Bear Bile Controversy Heats Up in China**

(WantChinattimes 20-02-2012)

Uproar against the bear-bile industry is growing louder in China, with celebrities such as retired NBA star Yao Ming joining the ranks to denounce the practice of extracting bile from live bears and dozens of pharmacies discontinuing the sale of bear-bile products.

The protests against bear-bile pharmaceuticals have become a debate pitting animal rights vs. Chinese traditional industry. The Traditional Chinese Medicine Association has said opponents of bear bile are being funded by western organizations aiming to discredit Chinese medicine and pave the way for western pharmaceuticals to take a dominant position in the Chinese market, according to a report from the Hong Kong-based *Ming Pao*.

The campaign against live bear-bile extraction began when Guizhentang, a company whose main business is selling bile extracted from live bears, announced they would seek an IPO this year. On Feb. 14, 72 celebrities, including Oprah Cui, submitted a letter protesting the IPO to the Securities Regulatory Commission.

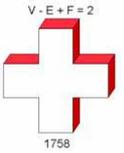
Basketball player Yao Ming went to a black bear rescue center in southwest China's Sichuan province on Saturday to visit bears released from a bear-bile farm.

Dozens of pharmacies in Chengdu and Shenyang have announced they will stop selling bear-bile products.

In order to quell the uproar, Guizhentang invited the public to visit its farm on Wednesday and Friday, allowing them to inspect the whole process of the raising bears and extracting bile. However, their website — where the invitation was posted — was hacked two hours after the announcement. Qiu Shuhua, the founder of Guizhentang, said, "extracting bile from a live bear is permitted by the government; it's legal. To go against our company is to go against the country."

According to Chinese Medicine Journal, there could be more problems to come out of the of Guizhentang controversy. Many Chinese medicines contain ingredients extracted from live animals, including musk, bezoar, gall bladder fluids and other substances.

(http://www.china.org.cn/business/2012-02/13/content_24620587.htm)



7. Chinese Architect Wins Pritzker Architecture Prize

(Pritzker Prize, 28-02-2012)

Wang Shu, a 48 year old architect whose architectural practice is based in Hangzhou, The People's Republic of China, will be the recipient of the 2012 Pritzker Architecture Prize, it was announced on the 27th of February by Thomas J. Pritzker, chairman of The Hyatt Foundation which sponsors the prize.

In announcing the jury's choice, Pritzker elaborated, "The fact that an architect from China has been selected by the jury, represents a significant step in acknowledging the role that China will play in the development of architectural ideals. In addition, over the coming decades China's success at urbanization will be important to China and to the world. This urbanization, like urbanization around the world, needs to be in harmony with local needs and culture. China's unprecedented opportunities for urban planning and design will want to be in harmony with both its long and unique traditions of the past and with its future needs for sustainable development."

[...]

Wang earned his first degree in architecture at the Nanjing Institute of Technology, Department of Architecture in 1985. Three years later, he received his Masters Degree at the same institute. When he first graduated from school, he went to work for the Zhejiang Academy of Fine Arts in Hangzhou undertaking research on the environment and architecture in relation to the renovation of old buildings. In 1997, Wang Shu and his wife, Lu Wenyu, founded their professional practice in Hangzhou, naming it "Amateur Architecture Studio."

By the year 2000, he had completed his first major project, the Library of Wenzheng College at Suzhou University. In 2004, the library received the Architecture Arts Award of China.

His other major projects completed, all in China, include in 2005, the Ningbo Contemporary Art Museum and five scattered houses in Ningbo which received acknowledgment from the Holcim Awards for Sustainable Construction in the Asia Pacific. In that same city, he completed the Ningbo History Museum in 2008. In his native city of Hangzhou, he did the first phase of the Xiangshan Campus of the China Academy of Art in 2004, and then completed phase two of the same campus in 2007.

Since 2000, Wang Shu has been the head of the Architecture Department of the China Academy of Art in Hangzhou. In 2011, he became the first Chinese architect to hold the position of "Kenzo Tange Visiting Professor" at Harvard Graduate School of Design in Cambridge, Massachusetts.

[...]

(<http://www.pritzkerprize.com/2012/announcement>)



Events (March – April 2012)

March 2012

Asian Joint Conference on Propulsion and Power 2012 AJCPP2012

Date: March 1st
Place: Xi'an
Contact: The Chinese Society of Engineering Thermophysics, CAST

Exhibition: Albert Einstein: 1879-1955

Date: March 2nd to June 17th
Place: Wuhan Science and Technology Museum
Contact: Embassy of Switzerland in China

China South Printing Equipment and Materials Exhibition

Date: March 5th
Place: Dongguan
Contact: Print and Equipment Industries Association of China

Dental South China Expo 2012

Date: March 7th
Place: Guangzhou
Contact: Department of Science and Technology of Guangdong Province

International Conference on Modern Hydraulic Engineering

Date: March 9th to 11th
Place: Nanjing
Contact: <http://www.cmhe-conference.org>

CIEET International Education Tour

Date: March 10th to 11th
Place: Beijing
Contact: <http://www.cieet.com>

CIEET International Education Tour

Date: March 13th
Place: Chengdu
Contact: <http://www.cieet.com>

E+ Lecture, Einstein Exhibition Wuhan Professor Heinrich Rohrer

Date: March 16th
Place: Wuhan
Contact: <http://www.swissnexchina.org>

CIEET International Education Tour

Date: March 17th to 18th
Place: Shanghai

Contact: <http://www.cieet.com>

The 25th China International Medical Equipment, Supplies and Technical Exchange Expo

Date: March
Place: Hangzhou
Contact: Zhejiang Provincial Science and Technology Department

China Fashion Week 2012

Date: March
Place: Beijing
Contact: China Fashion Association

China Content Broadcasting Network 2012

Date: March
Place: Beijing
Contact: Academy of Broadcasting Science, SARFT

2012 International Conference on Information and Industrial Electronics

Date: March 24th to 25th
Place: Shenzhen
Contact: <http://www.iciie.org>

2012 3rd International Conference on Mechanical, Industrial and Manufacturing Technologies

Date: March 24th to 25th
Place: Shenzhen
Contact: <http://iacsit.org/mimt>

2012 International Conference on Medical Information and Bioengineering (ICMIB 2012)

Date: March 24th to 25th
Place: Shenzhen
Contact: <http://www.icmib.org>

The 2012 International Conference on Management and Sustainable Development

Date: March 26th
Contact: <http://www.appeecconf.org/2012/MSD2012.aspx>



**2nd Annual Renewable Grid Integration
China Week 2012**

Date: March 27th to 30th
Place: Beijing

**E+ Lecture, Einstein Exhibition Wuhan
Professor Zaiqing FANG**

Contact: <http://www.opplandcorp.com/grid-integration>

Date: March 30th
Place: Wuhan
Contact: <http://www.swissnexchina.org>

April 2012

**23rd China International Glass Industrial
Exhibition**

Date: April 2nd
Place: Shanghai
Contact: Chinese Ceramic Society, CAST

**3rd Reception of the St. Gallen
Symposium in Beijing**

Date: April 3rd
Place: Beijing
Contact: Embassy of Switzerland in China

Frontiers of Plasmonics Symposium

Date: April 7th
Place: Chengdu
Contact: Institute of Physics, CAS

**The 1st International Conference on World
Healthcare Informatics**

Date: April 9th
Place: Beijing
Contact: Graduate University of CAS

**The 11th China International Exhibition for
Large Screen Display System Integration
and Projector & AV Products**

Date: April 10th
Place: Shanghai
Contact: Chinese Society of Electronics,
CAST

**The 9th IEEE International Conference on
Networking, Sensing and Control**

Date: April 11th
Place: Beijing
Contact: Institute of Automation, CAS

**2012 International Conference on
Advanced Manufacturing Technology and
Systems**

Date: April 17th to 18th
Place: Wuhan
Contact: <http://www.amts2012.org>

The 19th China International Industry Fair

Date: April 19th
Place: Chongqing
Contact: Chinese Mechanical Engineering
Society

**2012 International Conference on
Electronics, Nanomaterials and
Component**

Date: April 21st to 22nd
Place: Kunming
Contact: <http://www.icenc.org>

7th China Pharmaceutical R&D Summit

Date: April 23rd to 26th
Place: Shanghai
Contact: <http://www.chinapharmard.com>