

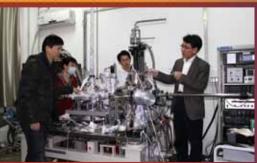
Tsinghua Newsletter

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Contents

News & Events	
Appointment of New University Vice Presidents	1
Materials and Mechanical Faculties Restructured	1
Tsinghua Alumni Elected to Leading Government Positions	2
Faculty Member and Alumni Elected to NAS, AAAS and NAE	3
14 Disciplines Crown National Ranking	3
Student Education & Development	
Six Doctoral Dissertations Win National Awards	4
MBA+X Double Degree Programs Established at Tsinghua University	4
Tsinghua Ski Team Harvests All Golds Among Beijing Universities	5
Creative Dorm Design Wins Applause for Architecture Students	5
Research & Achievements	
Seventeen National S & T Awards Won by Tsinghua Faculty	6
First Experimental Observation of the Quantum Anomalous Hall Effect	6
Life-saving Heart Surgery for Infant at Tsinghua's First Hospital	7
Social Links	
Tsinghua's Speedy Help to Sichuan Earthquake Area	8
Two New Education Funds Established at Tsinghua	8
Students Participate in Social Practice	9
Tsinghua & Mckinsey Establish Learning Factory	9
International Cooperation & Exchange	
"Schwarzman Scholars at Tsinghua University" Launched	10
Tsinghua Joins edX as an Online Course Provider	11
16th Annual Conference on Quantum Information Processing	11
Education Outlook	
Postgraduates in China Will Pay Tuitions Fees from 2014	12
More Chinese Graduates Return Home from Overseas for Employment	12

Previous issues of the Tsinghua Newsletter can be found on the website at http://news.tsinghua.edu.cn/publish/newsen/7160.

13

Chinese Top Universities Will Enroll More Students from Impoverished Areas

News & Events

Appointment of New University Vice Presidents



From left: Xue Qikun, Qiu Yong, Xie Weihe, Chen Jining (President), Cheng Jianping, Yuan Si, Jiang Shengyao, and Ji Junmin

The appointment of Tsinghua University's new Vice Presidents was announced in May.

Professor Cheng Jianping has been appointed as executive president. The other six vice presidents are Xie Weihe, Yuan Si, Qiu Yong, Jiang Shengyao, Xue Qikun and Ji Junmin. Among them, Xue Qikun and Ji Junmin are newly promoted to the positions. Xue Qikun is a member of the Chinese Academy of Sciences and also Director of the Office of Research and Development Management, Dean of the School of Sciences and Chair of the Department of Physics. Ji Junmin is also Director General for Logistics and has been a president assistant.

The appointment was approved and announced by China's Ministry of Education.

Materials and Mechanical Faculties Restructured

Tsinghua has restructured its materials and mechanical related departments.

The School of Materials Science and Engineering (SMSE) was established based on the previous Department of Materials Science and Engineering. Professor Zhang Zhengjun was recently appointed Dean of the SMSE. As part of the restructuring, the materials related section of the Department of Mechanical Engineering (DME) had been relocated to the SMSE.

The mechanical section of the previous Department of Precision Instruments and Mechanology (DPIM) has been transferred into the DME, while the remaining part of the DPIM that relates to instruments and optical engineering has been renamed the Department of Precision Instrument (DPI). Professor Luo Jianbin, a member of the Chinese Academy of Sciences, serves as Chair of the DME. Professor You Zheng continues to serve as Chair of the DPI.



Founding Ceremony for the School of Materials Science and Engineering



Tsinghua Alumni Elected to Leading Government Positions

Xi Jinping was elected President of the People's Republic of China on March 14th at the first session of the 12th National People's Congress (NPC). He was also elected Chairman of the Central Military Commission of the People's Republic of China at the same meeting.

President Xi enrolled at Tsinghua University in 1975 and studied in the Department of Chemical Engineering till 1979. He also received his Ph.D. degree at Tsinghua.

Liu Yandong was appointed vicepremier of China at the NPC meeting on March 16th. She studied in the Department of Engineering Chemistry at Tsinghua University from 1964 to 1970.

Three Tsinghua alumni, Lin Wenyi, Chen Yuan and Zhou Xiaochuan were elected Vice Chair of the 12th National Committee of the Chinese People's Political Consultative Conference on March 11th.

Lin Wenyi studied in the Department of Engineering Mechanics and Mathematics at Tsinghua University from 1962 to 1968. In 1978, she enrolled again into a master's program in the Department of Engineering Mechanics (DEM) at Tsinghua. After her graduation in 1981, she worked at the University as a faculty member and vice chair of the DEM until 1994.

Chen Yuan, chairman of the board of China Development Bank,



Xi Jinping



Liu Yandong

studied in Tsinghua's Department of Automation between 1964 and 1970.

Zhou Xiaochuan, governor of the People's Bank of China, received his Ph.D. degree from Tsinghua's Department of Automation in 1985.

Two more Tsinghua alumni were appointed as China's ministers at the NPC meeting on March 16th.

Lou Jiwei was appointed Minister of Finance. He studied in Tsinghua's Department of Computer Engineering and Science as an undergraduate student between 1978 and 1982.

Han Changfu was appointed Minister of Agriculture. He received his Ph.D. degree from Tsinghua's Department of Humanities and Social Sciences in 2007.



Lin Wenyi



Chen Yuan



Zhou Xiaochuan



Lou Jiwei



Han Changfu

Faculty Member and Alumni Elected to NAS, AAAS and NAE

A faculty member and two alumni of Tsinghua University have recently been elected as members of three of the leading academic bodies in the USA.

Professor Shi Yigong, Dean of Tsinghua's School of Life Sciences, was elected into both the US National Academy of Sciences (NAS) and the American Academy of Arts and Sciences (AAAS) in April 2013. This year NAS and AAAS elected 21 and 12 foreign members respectively to their academies.

Professor Shi Yigong received his B.S. from Tsinghua

University in 1989 and gained his Ph.D. from Johns Hopkins University in 1995. He joined the academic faculty at Tsinghua in 2008 and is currently the Dean of the School of Life Sciences.

In February 2013, Xie Ken, president and CEO of Fortinet Inc., was elected a member of the US National Academy of Engineering (NAE) for his contributions to the field of cyber-security, including network security systems and services.

Mr. Xie received his bachelor's and master's degrees from Tsinghua's Department of Electronic Engineering in 1987 and 1989 respectively.

Dr. Zhou Ji, the President of the Chinese Academy of Engineering, has been elected as one of the 11 new foreign associates of the NAE for his research contributions in numeric control, computer-aided design, and design optimization. Zhou graduated from Tsinghua's Department of Precision Instruments and Mechanology in 1970. He served as China's Minister of Education from 2003 to 2009.







Shi Yigong

Zhou Ji

Xie Ken

14 Disciplines Crown National Ranking

Fourteen of Tsinghua's academic disciplines have taken first place in the 2012 China Discipline Ranking (CDR), while 10 others gained top three placings. The ranking was released at a news conference held by China's Ministry of Education (MOE) on January 29th, 2013.

The 14 top-place disciplines include architecture, biology, computer science and technology, control science and engineering, design, electrical engineering, environmental science and engineering, management science and engineering, materials science and engineering, mechanics, nuclear science and technology, power engineering and engineering thermophysics, software engineering, and urban-rural planning.

Other disciplines that ranked among top three positions include art theory, biomedical engineering, business administration, civil engineering, hydraulic engineering, instrumentation science and technology, landscape architecture, mechanical engineering, public administration and theory of Marxism.

This is the third time that China's MOE has conducted university discipline ranking. This year's rankings spanned a total of 95 academic disciplines. Overall, it involved 391

of China's tertiary education institutes with 4,235 of their disciplines.

Weighing more on objective evaluation criteria, this year's ranking evaluated universities in four aspects: faculty members and resources, research, teaching and learning, and academic reputation. About 5,000 respondents were collected for this year's reputation survey.





Student Education & Development

Six Doctoral Dissertations Win National Awards

Six academic dissertations written by Ph.D. candidates at Tsinghua University have been awarded the National Excellent Doctoral Dissertations for 2012 by China's Ministry of Education.

The six dissertations are:

- Synthesis and Properties of Metal Oxide/Sulfide Nanomaterials, by Wang Dingsheng from the Department of Chemistry, supervised by Professor Li Yadong;
- Forgetting Is Regulated by Rac Activity in Drosophila, by Shuai Yichun from the School of Life Sciences, supervised by Professor Zhong Yi;
- Film Forming Properties of Nanoscale Lubricant Films and Microbubbles Emergence Behavior under External Electric Fields, by Xie Guoxin from the Department of Precision Instruments and Mechanology, supervised by Professor Luo Jianbin;
 - Silicon and Nafion Nanowires: Syntheses and

Applications in Nanopower Sources, by Pan Caofeng from the Department of Materials Science and Engineering, supervised by Professor Zhu Jing;

- Study on Homogenous Dielectric Barrier Discharge at Atmospheric Pressure, by Luo Haiyun from the Department of Electrical Engineering, supervised by Professor Wang Xinxin;
- Miniaturization of Multiphase Reaction Processes with Micro-Structured Chemical Systems, by Wang Kai from the Department of Chemical Engineering, supervised by Professor Luo Guangsheng.

A total of 90 dissertations from across the country are listed this year. China's Ministry of Education initiated the awards selection for National Excellent Doctoral Dissertations in 1999 to promote academic innovation. Tsinghua has accumulated 107 excellent doctoral dissertations since then, more than any other university in the country.

MBA+X Double Degree Programs Established at Tsinghua University

Tsinghua University has initiated double degree MBA programs, known as the MBA+X, and recruited students from 2013. The new programs, in alliance with a number of Tsinghua departments - Engineering Physics, Arts & Design and

Heads of School of Economics and Management, Department of Engineering Physics, Academy of Arts and Design, School of Medicine are signing the cooperative agreement

Medicine, will provide a new opportunity for students to develop innovation and the spirit of entrepreneurship and humanity.

The first group of students has been selected among students from the Department of Engineering Physics, the Academy of Arts and Design and School of Medicine. Tsinghua plans to expand the enrollment to more departments later.

Professor Chen Jining, President of Tsinghua University, said at the program signing ceremony: "The aim of the program is not simply to let engineering students gain some knowledge about business, or have the MBA students learn something about design or medicine. Its aim is to cultivate their management methodology and their unique ways of thinking and critical spirit."

Professor Qian Yingyi, Dean of the School of Economics and Management believes that Tsinghua University has an advantage in compound talent training over other MBA schools. It has the ability to promote integration of different disciplines. This is seen as one of the superior qualities of a "University-Based Business School".

Tsinghua Ski Team Harvests All Golds Among Beijing Universities

Tsinghua's ski team swept the board by winning all the gold medals in the seventh Beijing University Students Alpine Skiing Competition on January 23rd, 2013.

Sun Shaoxuan, an undergraduate student from the Department of Automotive Engineering at Tsinghua, won the men's giant slalom event. He has held on to first place in this event among Beijing university students for the past four years. Miss Zhang Kailun, an undergraduate student from Tsinghua's Department of Hydraulic Engineering struck gold in the women's giant slalom. Tsinghua's ski team outclassed their rivals easily to win the trophy for the men's team title for the fourth time, while the female team also retained their group championship title this year. Guan Yue came third in the men's event while Zu Yan finished seventh in the women's event.

Tsinghua athletes then went on to



Members of Tsinghua's ski team

join the performances at the National University Students Ski Invitation Campaign.

The Tsinghua Ski Team was established in 2011. Since then the team has competed in more than 120 ski events.

The series of the ski events organized by the China Ski Association has attracted 26 of China's universities this year.



Tsinghua athlete at the competition

Creative Dorm Design Wins Applause for Architecture Students

University dormitories are usually described as chaotic and crowded, but sometimes the whole impression can be transformed with a little creative thought.

Four Tsinghua students majoring in architecture recently gave their rooms an amazing makeover, not only making better use of the limited space, but also creating a more joyful living environment.

The students used a series of vibrantly colored wooden boards with chains fixed to the walls. Differing from the usual plain room walls, these boards were brightly painted with red, yellow, white, black and blue to give a striking visual effect. The drop-down boards gave the students extra space so they could use their laptops on their beds, with bookshelves created as well as extra storage space. The boards easily fold up to be parallel to the walls





The creative dorm design [photo/ Yangtse Evening Post]

when not being used. The most unique aspect of the interior design is that it occupies much less of the original space, and it makes maximum use of the upper space within the bedrooms.

The students also designed a room in a more natural style. The wooden boards in this room retained their natural primary color and wheels were installed on the boards to create a moveable table. Even a simple lampstand was fitted onto the bed.

Talking about their creative works, the four students were really excited. They said they designed and did the whole work themselves, enjoying the practice of a carpenter's job. The pictures of their finished works posted on the internet won them a massive applause from thousands of netizens.



Research & Achievements

Seventeen National S&T Awards Won by Tsinghua Faculty

Seventeen research projects from Tsinghua won the 2012 National Science and Technology Awards. The prizes were awarded at a ceremony held in Beijing on January 18th 2013. The number of awards gained by Tsinghua was higher than any other Chinese university.

The successes include three State Natural Science Awards (SNSA), seven State Technological Invention Awards (STIA), and seven State Scientific and Technological Progress Awards (SSTPA). Tsinghua's winning projects cover a wide range of research areas including advanced instruments, automation, chemical engineering, civil engineering, electrical engineering, electronics, hydropower engineering, internet technology, materials, and telecommunication.

Tsinghua faculty members won the only two firstprizes in the General Category for State Technological Invention Awards. One of the two prominent prizes was awarded to Professor Dai Qionghai and his colleagues from the Department of Automation for their research into the technology and apparatus for the reconstruction and display of 3D video. The other was awarded to Professor Nie Jianguo and his team from the Department of Civil Engineering for their research on new technologies and the applications of long-span steel-concrete composite structure in buildings.

Three SNSA second prize winning projects led by Tsinghua faculties are:



Professor Dai Qionghai (middle) with his team



Professor Nie Jianguo at a construction site

- Models for Joint Wireless Multimedia Communication and Performance Optimization, led by Professor Lu Jianhua from the Department of Electronic Engineering.
- Theory and Methodology of Real-Time Fault Detection, Isolation and Estimation for Control Systems, led by Professor Zhou Donghua from the Department of Automation.
- Fundamental Research on Microstructures and Properties Modulation of Zinc Oxide Thin Films, led by Professor Pan Feng from the School of Materials Science and Engineering.

The five projects winning second prizes in STIA are:

- Micro-Structured Mass Transfer Devices and their Applications in Chemical Industry, led by Professor Luo Guangsheng from the Department of Chemical Engineering,
- Multi-Loop Analysis of Alternating Current Machines and Its Applications, led by Professor Wang Xiangheng from the Department of Electrical Engineering.
- A Novel Video Delivery Network for Massive Internet Users, led by Professor Yin Hao from the Research Institute of Information Technology.
- Advanced Optical Sensors for Attitude Measurement of Spacecraft, led by Professor You Zheng from the Department of Precision Instrument and Mechanology.
 - High-speed Distributed Feedback Semiconductor

Lasers and their Monolithic Integrated Light Sources with Electro-Absorption Modulators, led by Professor Luo Yi from the Department of Electronic Engineering.

Another project, Damage-Rupture Mechanism and Safety Evaluation Methods of High Dams under Seismic and Extreme Loads, led by Professor Zhang Chuhan from the Department of Hydraulic Engineering won a second prize in the State Scientific and Technological Progress Awards.

First Experimental Observation of the Quantum Anomalous Hall Effect

The research team led by Professor Xue Qikun from Tsinghua, in collaboration with researchers from the Institute of Physics of Chinese Academy of Sciences and Stanford University, has made a breakthrough in the field of condensed matter physics. They reported the first experimental observation of the quantum anomalous Hall effect, which reveals a very important new phenomenon.

The dissipationless edge states of the quantum Hall effect

Research & Achievements

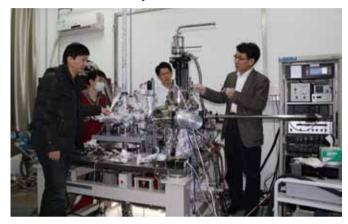
can be used in the making of a new generation of low energy consumption transistors and electronic devices. This can help reduce the heating and energy cost of computers. However, the realization of conventional quantum Hall effect needs a very strong magnetic field (more than 10,000 times larger than the earth's magnetic field), making the application very challenging. The most fascinating property of the quantum anomalous Hall effect is that it occurs in zero magnetic field, which significantly facilitates the practical applications of the quantum Hall effect for low energy consumption electronics.

The research team used molecular beam epitaxy to grow atomically flat thin films of magnetically doped (Bi,Sb)₂Te₃ topological insulators. They fabricated the films into transport devices and measured the anomalous Hall effect at extremely low temperatures. They found that within a certain range of gate voltages, the zero magnetic field anomalous Hall resistance of this system reaches the quantized value $h/e^2 \sim 25800~\Omega$, which is the hallmark of quantum Hall effect.

These results were published on March 15th in *Science* magazine. Tsinghua graduate students Chang Cuizu, Zhang Jinsong, Feng Xiao, and graduate student Shen Jie at the Institute of Physics made equal contributions to the discovery. The other members of the joint research team include

Professor Wang Yayu, Professor Chen Xi and Professor Jia Jinfeng from Tsinghua, Professor Ma Xucun, Professor He Ke, Professor Wang Lili, Professor Lu Li, Professor Fang Zhong and Professor Dai Xi from the Institute of Physics, and Professor Zhang Shoucheng from Stanford.

The research had gained support from the National Natural Science Foundation of China, the Ministry of Science and Technology of China, the Ministry of Education of China, and the Chinese Academy of Sciences.



Xue Qikun (right) and his team members

Life-saving Heart Surgery for Infant at Tsinghua's First Hospital

A young infant is making a good recovery after a lifesaving ten-hour operation at Tsinghua's First Hospital Heart Center. The patient underwent cardiac surgery at the age of just eight months on January 22nd to resolve a rare congenital heart disease.

Tests revealed the infant had eight complicated malformations, including a double-outlet right ventricle, taussig-bing anomaly, ventricular septal defect, patent foramen ovale, pulmonary hypertension, arch dysplasia, coarctation of aorta and patent ductus arteriosus. Such a range of complications in babies are very rare, and the baby boy had already missed the best opportunity for early surgical treatment. This meant later cardiac surgery would present many greater risks.

Dr. Wu Qingyu, a professor of heart surgery and his expert pediatric team, had perfected a series of interrelated tests and procedures, and finally worked out a set of rigorous treatment protocols for the boy. Dr. Wu performed a variety of surgical procedures, including correction of the Transposition of Great Arteries (TGA), correction of coarctation of the aorta, repair of the Ventricular Septal Defect (VSD), and suture of Patent Foramen Ovalethe (PFO).

Results of the operation were positive, with indicators showing the boy's vital signs being stable. To date, the infant has recovered very well.

Dr. Wu is also acting as the head of Tsinghua's First

Hospital. Devoting more than 30 years to cardiovascular clinical surgery, he has initiated four new world-leading techniques in cardiac surgery. Because of his team's experience in relation to the surgical management of infants and children with congenital heart diseases, Tsinghua's First Hospital Heart Center receives many more young and low birth-weight children with sophisticated and complicated heart conditions than any other specialist hospital in China.



The infant recovers well after heart surgery



Dr. Wu at work in an operation



Social Links

Tsinghua's Speedy Help to Sichuan Earthquake Area

Faculty members, students, and alumni of Tsinghua University swung into action to offer a helping hand as soon as news broke about the disastrous earthquake that struck Ya'an in China's Sichuan Province on April 20th, 2013. Relief efforts by Tsinghua included fulfilling tasks in worst hit areas and providing expert support and solutions. Tsinghua people also donated money and emergency goods worth tens of millions of RMB to help the stricken area.

Immediately after the earthquake, alumni and students of Tsinghua's EMBA program quickly reacted with their own modest contributions to the earthquake area. The Tsinghua EMBA Hong Kong and Macao Students Union initiated a 'One Person, One Tent' appeal, and donated 100 tents which arrived promptly in Zhengwan village on April 22nd.

Experts from Tsinghua's Center for Public Safety Research made and regularly updated thematic maps of the earthquake disaster area, and of the rescue operations. Chen Bao and other Tsinghua engineers sent to the rescue headquarters a mobile emergency response platform they developed at Tsinghua. The equipment helped in the process of releasing information and provided technical support to ensure coordinating conferences being successfully held on site.



Tents Donated by Tsinghua Alumni arrive at the earthquake area



Students pray for earthquake victims

Three faculty members from Tsinghua's Department of Civil Engineering, Lu Xinzheng, Pan Peng and Li Wei, arrived at the disaster area within 24 hours of the earthquake along with other experts. Wang Hanbing and Miao Qisong, both alumni of Tsinghua, worked as part of the experts group. By nightfall on April 22nd, the group had conducted emergency safety assessments on construction conditions in quakestricken areas of Ya'an City and Lushan County, spanning an area of 66,000 square meters. Since then, 25 Tsinghua experts have continually worked in the disaster area. By April 28th they had checked an area of 272,000 square meters.

Admission groups from Tsinghua University journeyed to Sichuan on April 24th to offer on-the-spot consultations about college entrance examinations, helping high school students to prepare their applications.

As of May 13th, more than 6,564 Tsinghua people have donated money to the disaster area, with a total sum of RMB 1.03 million. Adding the value of goods, the total aid to the earthquake area ran into a value of tens of millions of RMB a shining example of the Tsinghua spirit "Action speaks louder than words".

Two New Education Funds Established at Tsinghua

Two new funds, the Tsinghua Alumni Art Education Fund and the Wang Hanbin Law Fund, have recently been established at Tsinghua University.

Mr. Chen Chong, who began his studies at Tsinghua in 1997 and majored in chemistry, signed a donation agreement on March 30th, 2013. On behalf of Country Garden Holdings Company Limited, Mr. Chen donated RMB 10 million to set up the "Tsinghua Alumni Art Education Fund".

The Tsinghua Alumni Art Education Fund is an openended fund to help fund art education courses, invite artists to lecture at Tsinghua, finance the Student Art Troupe and organize performances and expositions.

A ceremony for the founding of the Wang Hanbin Law Fund was held at Tsinghua on April 28th. The first batch of donations to the fund reached RMB 12 million. Donors



Donation Ceremony of the Tsinghua Alumni Art Education Fund

included Golden Bridge United Financial Leasing Co., Ltd. President Shi Jinshan and CEO Li Ran, as well as Ms. Feng Lin.

Tsinghua alumnus Wang Hanbin, former Vice Chairman of the Standing Committee of the National People's Congress, said at the ceremony that the fund would provide financial aid to assist needy students and reward outstanding students at Tsinghua and four other universities. It will also award excellent academic research in the subject of law.



Founding Ceremony of the Wang Hanbin Law Fund

Students Participate in Social Practice

More than 3,400 Tsinghua University students spent their winter vacation on research projects, fieldwork, community services, education aiding-the-poor programs and other social practice activities.

Students themselves proposed and planned their program of activities. A total of 78 teams, made up of 720 graduate students participated in this social initiative during the vacation period. Ph.D. students organized five teams and headed to various counties to do investigation and give advice on current local issues, such as how to improve the incomes of



Yu Miao and his ticket booking team work at Weihai Railway Station in Shandong Province

farmers, and shaping the image of government organizations.

Mao Xin, a student from the Department of Hydraulic Engineering, went to Lengzhuguan Hydropower Station in Sichuan Province and investigated the situation of the dam, the water diversion system, the underground power plant and the associated switching station. Using professional knowledge he had learned at Tsinghua, Mao Xin provided useful suggestions on ways of ensuring environmental protection while running the hydropower station, and measures to recruit high quality people.

Another student team helped many elderly people, migrant workers and foreigners to book railway tickets during the Spring Festival through the new booking system, using the internet or by telephone call. Mr. Yu Miao, a student from the Department of Chemical Engineering recruited fellow students and organized the "ticket booking team" at Weihai railway station in Shandong province. In just three days, from January 19th to 21st, Yu Miao and his friends helped hundreds of people. Yu also wrote instructions to show people how to efficiently book train tickets. They were most appreciated by the local passengers.

Tsinghua & Mckinsey Establish Learning Factory

China's first "model factory", where students can be taught the concepts of lean operations and energy-saving management by using real-life working production lines, has finished its construction. Jointly established by Tsinghua University and McKinsey & Company, the model factory, also known as the "China Center for Operations Excellence

(CCOE)", is designed to be a reality learning platform based on business and operations management. It spans an area of 500 square meters. Three production lines - a discrete machining production line, an assembly line and an iced tea continuous production line - are already fully equipped and have been used for training.

The factory reflects traits of the manufacturing industry such as labor-intensiveness, capital-intensiveness, continuous production and the concepts of "minimal and energy efficient". It is suitable for reality simulations in the study of production and logistics management. The training style in



The model factory in Beijing

the factory will follow the philosophy of "learning by doing". Students and trainees from various industries will learn the core concepts and methods of lean operations through targeted classroom training and practice in the model factory.

"Tsinghua knows how to teach and McKinsey knows how to apply theory into practice. We are complementary", Professor Zheng Li, Chair of the Department of Industrial Engineering at Tsinghua University said, "Chinese companies, no matter from what industry and at what development phase, will find a way here to realize excellent operations."



Students study in the model factory

International Cooperation & Exchange

"Schwarzman Scholars at Tsinghua University" Launched

A new global scholarship program, "Schwarzman Scholars at Tsinghua University" was launched in China's Great Hall of the People on April 21st. Initiated by Tsinghua University and Stephen A. Schwarzman, Chairman of the U.S. investment and advisory firm Blackstone, the program aims to provide future leaders with a deeper understanding of China and relationships with its people.

Chinese President Xi Jinping and US President Barack Obama each sent congratulatory letters to the program's launching event.

The program is designed to foster greater cooperation between China and the rest of the world. It will provide full financial support to 200 students each year, who will come from all over the world to attend a one-year program at Tsinghua University in Beijing. Four disciplines will be covered including public policy, economics and business as well as international relations.

According to the plan, the students will be selected from the world's future elites who possess an international perspective and leadership qualities in various of fields such



The launching ceremony of "Schwarzman Scholars at Tsinghua University"

as business, public service, science, technology, engineering, law and the non-profit space. The 200 students will be recruited from across the world, with 90 of them coming from the United States, 20 from China and the rest from other countries.

They will have the opportunity to visit rural China and gain a broader experience of the country, said Li Daokui, dean of the program.

International Cooperation & Exchange

Tsinghua University President Chen Jining said, "The world is at an important crossroads that calls for institutions of higher education to step forward and play a significant role in shaping the future of international relations".

Mr. Schwarzman said, "Leveraging the world-class resources and talented people at Tsinghua University, one of China's most prestigious universities, the program will bring together an exceptional group of students who, we hope, will one day have the power to change the course of history".

The Schwarzman Scholars program has a world-class Advisory Board whose members have unparalleled insight

and experience in international policy and diplomatic challenges. Members of the Academic Advisory Council include many world-renowned scholars.

The program is supported by a \$300 million donation. Schwarzman himself donated \$100 million. Other early partner donors include British Petroleum, China Resources (Holdings) Company, Boeing Company and others.

A residential college for the program, designed by Robert A.M. Stern from Yale University, is being constructed at Tsinghua University. The first group of 100 students will be recruited in 2016.



Design of the "Schwarzman College"

Tsinghua Joins edX as an Online Course Provider

Tsinghua University has become one of the new consortium members of edX, a US-based free online learning platform created by Harvard University and the Massachusetts Institute of Technology. According to the announcement made by both Tsinghua and edX on May 21st, Tsinghua and 14 newly joint universities will offer courses on edX beginning in late 2013 or 2014.

To develop its non-profit open source platform, Tsinghua University recently started a Massive Open Online Courses (MOOCs) Research Centre under the Department of Computing, Institute for Interdisciplinary Information Sciences and the Department of Psychology and Institute of Education. As a pilot project under the blended teaching pattern, Tsinghua will develop 30 new online courses to

enrich its curriculum, and promote equitable education.

EdX is now composed of 27 global leading institutions. It currently offers around 50 free courses and has more than 900.000 users from across the world.



TsinghuaX on the website of edX

16th Annual Conference on Quantum Information Processing

The 16th annual conference on Quantum Information Processing (QIP 2013) was held at Tsinghua from January 21st to 25th, 2013. Hosted by Tsinghua's Institute for Interdisciplinary Information Sciences (IIIS), this was the first of the QIP conference series to be held in China. More than 300 scholars and experts attended QIP 2013. Those participating in the event came from China and

other countries, including the US, Canada, Australia, and Switzerland.

Quantum Information Processing is a rapidly developing field of research, spanning both physics and computer science. The field extends information processing, including computing and cryptography, to physical regimes where quantum effects become significant.



The QIP conference focuses on theoretical aspects of quantum computing, quantum cryptography, and quantum information, in a series that began in 1998. QIP 2013 featured invited talks, contributed talks, a poster session and a separate session for short informal talks. Professor Andrew Chi-Chih Yao, Dean of IIIS, served as Chair of the Steering Committee. The conference received 167 submissions.



Opening Session of QIP 2013



Poster session for OIP 2013

Education Outlook

Postgraduates in China Will Pay Tuitions Fees from 2014

Graduate students will start to pay their tuitions fees from the 2014 fall semester, announced the Ministry of Finance and the Ministry of Education recently. The highest annual tuition fees will be RMB 8,000 Yuan for Master's degree students and RMB 10,000 Yuan for Ph.D. candidates.

The announcement has led to some public concern that the new rule will affect the enrolment of poorer graduates. But at the same time, a new grant scheme will be implemented. According to the government, the new grants schemes will include national scholarships, national financial aid, assistantships, national educational loans, special academic scholarships, and special subsidies for poor families. The grant schemes widely cover all the full-time graduate students under the national enrolment plan. "Under the new instructions, general available grants will exceed the total tuition fees for each graduate", explained the Ministry of Education after the announcement of tuition fees.

The government believes with the new grants scheme the reform of postgraduate education will not have impact on student enrollment. Instead, with the implementation of the new measures, educational resources can be better allocated and rationally used in professional training. It is also expected that the new arrangements will encourage graduate students to make more rational choices in study areas and perform better for their degrees.



Applicants take the graduate student enrollment examination at Tsinghua [Photo/kaoyan.eol.cn]

More Chinese Graduates Return Home from Overseas for Employment

The number of overseas Chinese graduates choosing to return China to seek employment has been increasing over the recent years.

According to statistics, the numbers of Chinese students studying abroad and returning to China are both increasing annually from 2008 to 2012.

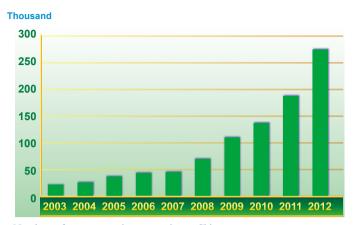
In 2012, over 399,600 students began their studies overseas, a 21% increase over 2011. Meanwhile, 272,900 Chinese graduates choose to return to China in 2012 to seek

jobs, a 47% rise over the figure for 2011.

A recent survey conducted by Nankai University charts the increasing tendency of Chinese graduates returning home to work. The study investigated 1,872 students from 41 majors at 11 leading universities, including Tsinghua University, Peking University, Renmin University, Beijing Normal University and others.

The survey shows more students are changing their expectations towards overseas study and employment options.

Education Outlook



Numbers of overseas students returning to China

It indicates about 47.1% of the interviewed students expect to improve their competitiveness through overseas study. They believe that this experience will be helpful when they return home to seek job opportunities. Only 9.3% of them expect to emigrate and become locally employed for a longer term after their studies. This survey also shows a great contrast with data from 10 years ago. According to the Ministry of Education's published data in 2003, about 82.9% of overseas students emigrated or live overseas after completing their education abroad.

The survey also showed a change in expectations among graduates in their potential work locations within China. Although over half of the interviewees still hoped to work in first tier cities within China, 17% of them considered working in China's less developed areas.

Chinese Top Universities Will Enroll More Students from Impoverished Areas

China's top universities have been called upon at a recent meeting of the country's State Council to help promote equality in education by enrolling more students from impoverished areas of the country.

The central government has decided to increase the quota of students from China's impoverished areas entering top universities to 30,000, a figure three times that of the previous year. The recruitment drive will involve over 110 universities, which are regarded as China's most prestigious universities. The push will cover all of the nationally poverty-stricken counties.

Based on the national university entrance examination's process and standards, the new enrollment quota for this measure will mainly support China's central and western provinces.

The government will continue to conduct its "Support Cooperation Plan for University Enrollment in China's Central and Western Provinces", which will create a special quota of 185,000 places in eastern China's universities for students from central and western areas.

The measures will benefit a greater number of hard-working students from remote rural or ethnic minority areas. It will also help to promote equal opportunities for young people in sharing higher educational resources.



A Tsinghua student receives enrollment gifts offered by the Green Channel – financial aid system

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Graduation work exhibitions by students from Tsinghua's Academy of Arts and Design