Science China Newsletter, October 2019

Trends in education, research, innovation and policy

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Swiss Spotlight

**Scientist: Chinese Media History and Internet Governance**

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http://swissinnovation.org/newsChina/web/2019/00-191031-ea

**Startup: Swiss Pioneer in Security Token Offerings for Real Estate**

Tokenestate is a Swiss pioneer in Security Tokens and Security Token Offerings (STO), founded by INSEAD & McKinsey alumni Vincent Trouche. By combining the world class Swiss regulation and blockchain technology, Tokenestate is making real estate and private equity investing easier, faster and cheaper. Tokenestate is combining traditional financial instruments, such as ordinary shares, with blockchain tokens to raise financing from retail and qualified investors across geographies. Security tokens can be distributed through retail banking networks and exchanged between investors. Security tokens are a major trend in finance, and are disrupting investment banks, brokers, exchanges. Tokenestate is currently developing its first real estate investment products with its strategic investor SwissRoc, a real estate developer in Geneva Switzerland. The company is working to expand its partnership and distribution capabilities in Asia, and to enable Asian investors to access real estate investment opportunities across the world from their smartphone. In November, Tokenestate is taking part in the 6-day Venture Leaders Fintech roadshow in Hong Kong and Shenzhen.

http://swissinnovation.org/newsChina/web/2019/00-191010-81
1. Policy

Vice Premier Stresses Guangdong Pilot FTZ’s Role

(China Daily, October 06)

Chinese Vice Premier Hu Chunhua has called for greater efforts to build Guangdong pilot free trade zone into a cooperation model for the Guangdong-Hong Kong-Macao Greater Bay Area. Hu made the remarks during a research tour of South China's Guangdong province from Wednesday to Saturday. The pilot FTZ should speed up its construction as a gateway and hub for high-level opening-up, and promote coordinated regional development, Hu said. More efforts should be made to expand key overseas markets, promote the development of cross-border e-commerce, and give play to the important role of exhibition platforms such as China Import and Export Fair, he said.


China to Speed Up Innovation in Marine Tech

(China Daily, October 16)

President Xi Jinping called on Tuesday for speeding up innovation in marine technologies, improving marine development capacity and fostering emerging marine industries of strategic importance. He called for efforts to promote marine connectivity and pragmatic cooperation and actively develop "blue partnerships" among all countries. Xi stressed the need to strengthen pollution prevention and treatment in the oceans, protect marine biodiversity and develop marine resources in an orderly manner so that future generations will enjoy a well-preserved marine environment.


Government Stresses Sound Development of VR Industry

(China Daily, October 20)

Vice-Premier Liu He on Saturday called for efforts to promote the sound development of the VR industry. Currently, the new round of scientific and technological revolution represented by digital technology and life science are progressing rapidly with each passing day, with the VR industry being one of the most dynamic sectors, Liu said when addressing the opening ceremony of the 2019 World Conference on VR Industry in Nanchang, east China. To promote healthy development of the industry, China will pay attention to basic research and innovation capability, create sound environment for development, cultivate talents, and carry out international cooperation, said Liu.

http://swissinnovation.org/newsChina/web/2019/01-191020-6f
China Passes First Cryptography Law

China’s first cryptography law was passed on Saturday at the closing ceremony of the bimonthly session of the Standing Committee of the National People’s Congress, the country’s top legislature. The law aims to promote the steady and sound development of cryptography as well as ensure the effectiveness of China’s cybersecurity systems from January. The law classifies cryptography into core, common and commercial cryptography, stipulating core and common cryptography are used to protect national secrets and should be governed by the strict and united administration of cryptography authorities. The research and developments of commercial cryptography, which are frequently applied to online banks and payment tools, are encouraged by the law, as it can guarantee the safety of information for citizens, enterprises and social organizations to prevent users’ personal details from being stolen or falsified.  
http://swissinnovation.org/newsChina/web/2019/01-191026-1f

2. Education

China to Improve Online Education Infrastructure

China aims to beef up its efforts in building infrastructure in online education, according to a document jointly released by the Ministry of Education and other authorities. According to the document, China will promote the use of modern information technology, including the Internet, big data and artificial intelligence, in online education. A special online education network will be built at a faster pace, and by 2022, all schools nationwide are expected to enjoy high-speed and stable access to Internet services, said the document. It also pledged greater efforts in information sharing and consumer right protection in online education sector.  
http://swissinnovation.org/newsChina/web/2019/02-191002-64

New Rules on College National Scholarship

Undergraduate and junior college students applying for the National Scholarship must be of Chinese nationality, according to a newly released document, Beijing Youth Daily reported. The measures on the appraisal for the National Scholarship for undergraduate and junior college students were jointly issued by the Ministry of Education and the Ministry of Finance. Apart from the new nationality requirement, there are some other notable changes in the new guideline from the previous one. Two more competitions have been
recognized as discipline events to help students apply for the scholarship. The two newly recognized competitions are the China College Students "Internet Plus" Innovation and Entrepreneurship Competition and the National Vocational Students Skills Competition.

Promoting Education for Poor Girls

(China Daily, October 11)

A Beijing-based foundation said on Thursday that it has taken new initiatives to promote young girls' access to education and psychological counseling. The moves marked the 30th anniversary of the foundation's flagship Spring Bud project, which helped put millions of poor girls in classrooms to combat gender bias. In a media release, the China Children and Teenagers' Fund said it launched a flurry of new programs in early September as an extension of Spring Bud, whose public donations have topped 2.1 billion yuan ($294 million) over the last 30 years, helping eliminate rural traditions that prioritize boys in schools. The latest projects range from lectures increasing rural girls' access to traditional Chinese culture to training sessions and vocational counseling aimed at promoting job opportunities. One project attempts to provide psychological comfort for so-called "left-behind" rural girls—whose parents are migrant workers—by pairing them with families in cities with whom they could pay mutual visits and keep daily contacts, it said.

Deepen Reform on Undergraduate Education

(China Daily, October 12)

China's Ministry of Education has issued a guideline to deepen the reform on the country's undergraduate education and teaching and improve the quality of universities' talent-cultivation work. The guideline, dated late September and published by the ministry on its website Saturday, proposed four areas for further reform, which are the management of education and teaching work, systems of education and teaching, teaching personnel and organizational guarantee. The aim of the guideline is to "nurture a new generation of capable young people who have a good and all-round moral, intellectual, physical and aesthetical grounding in addition to a hard-working spirit and are well-prepared to join the socialist cause," according to the guideline.
Plans to Tie Industries, Education Underway

About 50 cities will carry out trials integrating industry and education over the next five years, and a number of industries with distinctive regional characteristics that integrate industry and education will be built, according to a new plan. The country will also cultivate more than 10,000 enterprises under a pilot program during the period, according to the plan. The National Development and Reform Commission, the Ministry of Education and four other departments recently unveiled the plan, which is aimed at promoting the development of education, talent, industry and high-quality economic growth. The plan was reviewed and passed along with a number of guidelines and plans in July at the ninth meeting of the Central Committee for Deepening Overall Reform presided by President Xi Jinping.

http://swissinnovation.org/newsChina/web/2019/02-191015-02

3. Life Sciences / Health Care

China Working to Boost Elderly Care Services

Hundreds of millions of Chinese seniors observed the Double Ninth Festival, a day dedicated to the elderly community on the ninth day of the ninth lunar month, which fell on Monday this year. This year’s event was highlighted by funding recently earmarked by the central government to support the elderly care service sector. The government also ironed out a road map for that sector in the coming years, aiming to provide 249 million elderly people with care services. According to a guideline released earlier this year by the central government on promoting the elderly care industry, local authorities have been asked to put at least 55 percent of central government-allotted money from the welfare lottery revenue into the sector, up from an average of around 50 percent in the past few years.

http://swissinnovation.org/newsChina/web/2019/03-191008-4f

AI-powered Cancer Diagnosis System Developed

Chinese scientists have developed an artificial intelligence-powered system for diagnosing upper gastrointestinal cancers through the analysis of endoscopic imaging data. The system, based on data from more than 50,000 endoscopic images of upper gastrointestinal cancer patients and over 120,000 endoscopic images of non-patients, has registered a 96 percent accuracy rate in diagnosing upper gastrointestinal cancers and 90 percent accuracy in diagnosing such cancers at an early stage. In the
research led by Xu Ruihua, president of the Guangzhou-based Sun Yat-sen University Cancer Center, the system examined more than 1.036 million endoscopic images of 84,424 upper gastrointestinal cancer patients in six hospitals.
http://swissinnovation.org/newsChina/web/2019/03-191009-3a

Xi Stressess Role of Traditional Chinese Medicine

(Global Times, October 25)

Chinese President Xi Jinping has underlined the important role of traditional Chinese medicine (TCM) in building "Healthy China." The country should carry on fine elements in TCM and innovate them, Xi said in a recent instruction, stressing that traditional medicine is a treasure of Chinese civilization embodying the wisdom of the nation and its people. Xi's instruction was delivered at a national conference of TCM held Friday in Beijing. Xi said that equal importance should be placed on traditional Chinese and Western medicines and efforts be made to enable them to supplement each other and prosper together. He also underlined the efforts to promote TCM internationally and fully develop its unique strength in preventing and treating diseases.

Gender-based Difference in Microbiomes

(Xinhuanet, October 29)

Chinese researchers have discovered how men and women differ in their microbiomes, suggesting that the gender-based difference may have an influence on whether one is at risk of some diseases. Microbiomes refer to a community of microorganisms such as bacteria or fungi living in or on the human body. Researchers from the Kunming Institute of Zoology, the Chinese Academy of Sciences analyzed microbiomes in 15 sites in or on the body such as skin and found seven out of 15 sites exhibited significant differences between males and females. The researchers said that many diseases are related to immunity and metabolism in which microbiomes play a significant role. One of the reasons why males are at a higher risk of getting gouty arthritis lies in the difference in gut microbiomes.
http://swissinnovation.org/newsChina/web/2019/03-191029-20
Head-down Bedrest Study Completed in China

An experiment with up to 36 people lying in bed simultaneously to simulate the effects on the human body experienced in a weightless space environment recently concluded at a research institute in Shenzhen, South China's Guangdong province, Xinhua reported. During the experiment, 36 recruited male volunteers rested in beds that were tilted head-down at a six-degree angle for 90 days, setting a new record number of people who stay in bed at the same time in experiments of the same kind. The experiment helps research on medical problems in spaceflight, such as cardiovascular dysfunction, bone loss, muscular atrophy and endocrine dyscrasia. With the collected data, we can assess the effectiveness of the health protection measures for the astronauts.


4. Engineering / IT / Computer Science

6th World Internet Conference Opens

The sixth World Internet Conference opened Sunday in the river town of Wuzhen in east China's Zhejiang Province. With the theme of "Intelligent Interconnection for Openness and Cooperation -- Building a Community with a Shared Future in Cyberspace," the three-day conference will bring together more than 1,500 participants from over 80 countries and regions, including members of the Internet Hall of Fame, Nobel Prize winners and Turing Award winners. Executives from major tech companies from home and abroad such as Microsoft, Qualcomm, Alibaba Group and Huawei will share their insight on the future development of the internet at 20 sub-forums, covering popular and cutting-edge topics such as artificial intelligence (AI), 5G and industrial digitization.


Trains Reach Record Speed in Test Run

Trains running on the Beijing-Zhangjiakou High-speed Railway reached a record speed of 385 kilometers per hour, 10 percent higher than the designed speed, in a test run carried out on Sunday, reported Chinanew.com. Linking Beijing and Zhangjiakou in the northern province of Hebei, the 174-kilometer railway scheduled to go into operation by the end of the year will shorten the travel time between the two cities from the current three hours to less than one hour. With a designed top speed
of 350 km/h, the line is expected to be the world’s first autonomous, driver-monitored railway. Joint debugging started earlier this month at a maintenance station in Changping District in Beijing to check all aspects of its operation through dynamic testing, and the train finally achieved the running speed of 385 km/h after adjustments.


VR Town to be Built in East China

(Xinhuanet, October 21)

Nanchang, capital of east China's Jiangxi Province, laid the cornerstone of a VR town on Sunday in a bid to seek new growth engines and lead China's VR boom with the arrival of the 5G era. The VR town, or the VR technology and innovation town, covers a total area of nine square km with gross investment amounting to around 50 billion yuan (about 7 billion U.S. dollars). An integrated value chain is expected to take shape in the VR town, which consists of platforms of enterprise services and talent training, to further boost VR applications, hardware manufacturing, software engineering and content production.

http://swissinnovation.org/newsChina/web/2019/04-191021-8f

Chinese Marine Research Vessel Completed Mission

(China Daily, October 24)

Chinese marine research vessel Haiyang 6 (Ocean 6) has completed its deep-sea exploration mission in the Western Pacific ocean after 122 days and 35,000 km at sea. The vessel, which is under the Guangzhou Marine Geological Survey, Ministry of Natural Resources, returned to Guangzhou on Wednesday. According to the GMGS, the mission has carried out a comprehensive geological and geophysical survey in some areas of the Northwest Pacific Ocean and obtained sediment samples rich in rare earth elements, laying a foundation for the scientific research on deep-sea ecosystems and evaluation of new resources. Meanwhile, the expedition team also carried out the annual investigation in the contract area of cobalt-rich crusts.

http://swissinnovation.org/newsChina/web/2019/04-191024-5c

World's Largest Manned Submersible

(China Daily, October 29)

China has developed and completed the manned cabin for a new deep-sea manned submersible capable of carrying three people deeper than 10,000 meters, according to media reports. Researchers from the Institute of Metal Research at the Chinese Academy of Sciences said Monday that the manned...
cabin has the largest space and carrying capacity among myriameter (10,000 meters) manned cabins worldwide. The manned cabin, made of titanium alloy, is the core component of the deep-sea manned submersible, and has recently passed through hydrostatic pressure-test assessments and obtained approvals for the vehicle's integration unit.


5. Energy / Environment

Trains to Operate Under Ecological Supervision

China's longest heavy-load railway met strict environment protection requirements during construction, and long-standing ecological supervision will occur. Haoji Railway spans 1,814 kilometers, running between Ordos, Inner Mongolia autonomous region and Ji'an, Jiangxi province. The railway, which began operations on Sept 28, crosses 32 environmentally sensitive areas including deserts, grasslands, soil erosion areas, lakes and wetlands. Each conservation area has a specific protection plan. The total investment in environmental and water protection during railway construction reached 8.02 billion yuan ($1.1 billion).

http://swissinnovation.org/newsChina/web/2019/05-191005-5c

Reshaping Energy with Innovation

Sinochem Energy Co Ltd, the energy business arm of State-owned Sinochem Group, will operationalize the second phase of its Quanzhou refinery base in East China's Fujian province in 2020. This move will raise its annual petroleum refinery distillation capacity from 12 million metric tons to 15 million tons a year, which will help meet domestic demand. In addition to boosting its refining capacity, the annual production of 1 million tons of ethylene (including related derivatives) and 2 million tons of aromatics in the second phase of Sinochem Energy's Quanzhou petrochemical project will be guaranteed by the increase in the production volume of chemical raw materials.

http://swissinnovation.org/newsChina/web/2019/05-191014-17
Plan for Strict Garbage Sorting Rules in Beijing

(Global Times, October 15)

Beijing will soon enforce new trash sorting rules that may call for fines of 200 yuan ($28.30) to individuals who refuse to properly dispose of their waste, while giving restaurants and hotels up to 5,000 yuan if they provide disposable products to customers. According to a draft amendment to its trash management regulations released on the Beijing government’s website, residents will be required to sort their garbage and place it in specified collection containers or face a fine of up to 200 yuan. Companies and organizations could be fined from 10,000 to 50,000 yuan if they fail to follow the new regulations, according to the draft. The draft requires residents to sort their garbage into four classifications - kitchen waste, recyclable waste, hazardous waste and residual waste.


Anti-pollution Plan for North Region

(Global Times, October 16)

Chinese authorities published a comprehensive plan to control air pollution in Beijing, Tianjin, North China’s Hebei Province as well as surrounding areas which could experience heavy air pollution in autumn and winter. The plan issued by the Ministry of Ecology and Environment said the average PM 2.5 concentration in the regions in autumn and winter should be reduced by 4 percent year-on-year, and the number of days with heavy pollution or above should drop by 6 percent. The report said that although China’s air quality has continued to improve, air pollution is still serious in the Beijing-Tianjin-Hebei region and surrounding areas in autumn and winter.

http://swissinnovation.org/newsChina/web/2019/05-191016-f9

East China Sees Emerging IoT Companies

(Xinhuanet, October 24)

New enterprises in the Internet of Things (IoT) industry have sprung up in east China’s Jiangxi Province in the past year, with 3.5 newly registered every day, the local market regulator said Thursday. A total of 828 IoT companies have been registered in Jiangxi since last October. It was a 57.7 percent year-on-year increase, more than six-fold of the growth of an average number of business registrations in Jiangxi over the same period, according to the provincial administration for market regulation. China has seen tremendous growth in the IoT industry in recent years. In 2018, the revenue of the industry rose around 73 percent year on year, according to a report from the Ministry of Industry and Information Technology.

6. Physics / Chemistry / Material Science / Nano- & Micro Technology

First Polar Observation Satellite Supports Polar Research

(China Daily, October 09)

China's first polar observation satellite, the BNU-1, has successfully obtained data on polar regions, according to the satellite's chief scientist Wednesday. After nearly one month of in-orbit testing, the satellite is working normally and conducting full-coverage observation of the Antarctic and the Arctic every day, Cheng Xiao, the chief scientist, said at the China Symposium on Polar Science 2019. Cheng said the satellite data connection system launched on Tuesday allows scientists around the world to obtain polar observation data acquire by the satellite. Registered users can also propose new observation requirements. The satellite continuously monitored a gigantic iceberg breaking away from the Amery Ice Shelf in east Antarctica in September, helping limit its impact on submerged buoys and investigation ships in the surrounding area.

http://swissinnovation.org/newsChina/web/2019/06-191009-d1

Chinese Scientists' Pursuit of Cosmic Rays

(China Daily, October 23)

In the wilderness of Daocheng, Southwest China's Sichuan province, 4,400 meters above sea level, Chinese scientists are constructing a cosmic ray observation station on an area equivalent to 200 soccer fields. Huge rocks left from the Ice Age have been blasted. Different detectors are being installed to form a huge "net" to catch the particles generated by cosmic rays in the atmosphere, to help scientists study both the micro and the macro worlds in the universe. Three huge underground pools, more than triple the size of the Water Cube (National Aquatic Center) in Beijing, will hold detectors to collect high-energy photons generated by remote celestial bodies. Beside the pools, 12 telescopes will be erected to conduct high-precision measurement of cosmic rays with the highest energy.

http://swissinnovation.org/newsChina/web/2019/06-191023-f0

Lunar, Mars Exploration Missions for Next Year

(China Daily, October 24)

Chinese scientists are determined to carry out two of the nation's most challenging space endeavors next year: its Chang'e 5 lunar mission and first Mars exploration. Ye Peijian, a leading space exploration researcher at the China Academy of Space Technology, said in Beijing recently that he and his colleagues are confident they will honor their commitment to the Chinese people, that of commencing with the Chang'e 5 and Mars missions in 2020. The original plan for the Chang'e 5 mission was to launch it at
the end of 2017. However, the failure of the second launch of the Long March 5 carrier rocket, the country’s largest and mightiest rocket and the one tasked with ferrying the Chang’e 5 probe, led to the lunar mission’s delay.

http://swissinnovation.org/newsChina/web/2019/06-191024-5b

**Space Telescope to Observe Black Holes**

(China Daily, October 27)

China’s first X-ray space telescope has helped scientists open a new window to observe and better understand bizarre celestial bodies like black holes and neutron stars. The Hard X-ray Modulation Telescope (HXMT), dubbed Insight, sent into an orbit of 550 km above the Earth on June 15, 2017, has detected areas that are probably the closest to the black holes so far, shedding light on the basic properties of black holes and neutron stars and the behavior and radiation of matters near the strong magnetic and gravitational fields, said Lu Fangjun, deputy chief designer of the satellite.

http://swissinnovation.org/newsChina/web/2019/06-191027-52

**China Plans More Space Science Satellites**

(China Daily, October 29)

China plans to launch four new science satellite missions by 2023, and scientists have completed concept research on another five to be launched in the next 10 years. Successful Chinese science satellites launched since 2015 include the Dark Matter Particle Explorer (DAMPE), the Quantum Experiments at Space Scale (QUESS) and the Hard X-ray Modulation Telescope (HXMT). These were under a space science program of the Chinese Academy of Sciences (CAS). The second phase of the program has now started, Wang Chi, director of the National Space Science Center under the CAS, recently told the first China Space Science Assembly in Xiamen, east China’s Fujian Province.


### 7. Economy, Social Sciences & Humanities

**Zhongguancun Invests More in R&D**

(Xinhuanet, October 07)

Beijing’s Zhongguancun, known as China’s “Silicon Valley,” has seen increases in both spending on and persons employed for research and development (R&D) during the January-August period this year. R&D expenses totaled 146.45 billion yuan (20.5 billion U.S. dollars), up 16.1 percent year on year, according to the latest report by the Beijing Municipal Bureau of Statistics. The total revenue of large
high-tech enterprises in Zhongguancun was close to 3.707 trillion yuan, an increase of 12.5 percent over the same period last year, according to the bureau. Zhongguancun, established in 1988 and located in northwestern Beijing with clusters of universities and research institutes, was the first national high-tech industrial development zone.

http://swissinnovation.org/newsChina/web/2019/07-191007-41

Robot Maker Improves Lives of the Elderly

(China Daily, October 08)

China's leading robot maker, SIASUN Robot & Automation Co Ltd, said it has been developing robots that can provide better services for the aged. Based in Shenyang, capital of Northeast China's Liaoning province, SIASUN's products have been utilized in nursing institutions, medical institutions and hospitals for the elderly. So far, the company has created more than 20 kinds of robotic products, including intelligent robots for daily care, intelligent beds, semi-automatic bed chairs and walking aids. The enterprise said robots could assist the elderly in daily care, which would increase efficiency and reduce the labor intensity of nursing staff.

http://swissinnovation.org/newsChina/web/2019/07-191008-6a

New Steps to Boost Support for SMEs

(China Daily, October 11)

China is actively taking steps to spur lending to micro, small and medium-sized enterprises secured by their credit records, in a move to lift the economy amid mounting growth downside pressure. The new steps will allow medium, small and micro companies with good credit history to enjoy more favorable loan interest rates and more convenient loan approval channels, which will help ease their difficulties in accessing affordable financing, the National Development and Reform Commission and the China Banking and Insurance Regulatory Commission said in a recent statement. According to the statement, the country will establish and perfect the credit information collection, sharing and inquiry mechanism and a credit evaluation system for medium, small and micro businesses.

http://swissinnovation.org/newsChina/web/2019/07-191011-93

First License for Drone Delivery

(China Daily, October 17)

China's first license for the test-running of drone deliveries has been granted to Antwork Technology, a drone delivery company based in eastern province of Zhejiang, by the Civil Aviation Administration of China (CAAC). Since the idea of drone deliveries was proposed by Amazon in 2013, leading logistics
companies and e-commerce giants in China have been testing the water of the drone-delivery market. Drone deliveries can help expand coverage of logistics, reduce the pressure on traditional logistics services and cut labor costs. To ensure flight safety, 90 percent of the routes, which Antwork maps, are over urban rivers, and the drones can also reduce their speed and change routes when faced with emergencies or extreme weather, according to Zhao Liang, CEO of Antwork Technology.

http://swissinnovation.org/newsChina/web/2019/07-191017-ab

**New Beijing Airport Opens to International Flights**

(China Daily, October 28)

Beijing’s brand new Daxing International Airport on Sunday launched international and Hong Kong, Macao and Taiwan services, and saw nine outbound and six inbound flights on the first day. The airport’s first outbound flight, CA757 to Bangkok took off at 7:50 am. The first inbound flight, BA039 from the United Kingdom landed at the airport at 9:13 am. Beijing customs said it has taken multiple measures to streamline exit and entry procedures to optimize the experience for passengers. The airport opened to flights on Sept 25. Located 46 km south of downtown Beijing, the new aviation hub is shaped like a phoenix spreading its wings. Its passenger and cargo throughput are expected to reach 72 million and 2 million tonnes, respectively, by 2025, with 620,000 takeoffs and landings.

http://swissinnovation.org/newsChina/web/2019/07-191028-d8

**Facial Recognition Tech to be Applied at Subways**

(China Daily, October 30)

The Beijing subway system will apply facial recognition technology to passenger security checks to improve transport efficiency, a senior official from the Beijing transport authority said on Tuesday. A new security check system will be established soon to divide passengers into groups, Zhan Minghui, director of Beijing Rail Traffic Control Center, said during the 2019 Urban Rail Transit Operation Development Forum in Beijing. Some databases will also be set up - including one related to identifying forbidden items to help subway security screening staff - and safety measures will be adopted accordingly.

http://swissinnovation.org/newsChina/web/2019/07-191030-bf
8. Corporates / Startups / Technology Transfer

China Achieves Self-sufficiency in database tech

China has made a significant breakthrough by achieving self-reliance in core information technologies like databases, after similar breakthroughs in 5G telecom networks and superfast artificial intelligence chips. OceanBase, an indigenous database developed by Ant Financial Services Group, the financial arm of internet giant Alibaba Group Holding Ltd, has taken the top spot in terms of performance by the Transaction Processing Performance Council, a global industry association that releases standards for databases. Becoming the first ever Chinese company to top the list, Ant also overtook US firm Oracle, which had held the crown for nine consecutive years. In a report published on Oct 5, TPC said OceanBase more than doubled the score achieved by Oracle, in terms of two benchmarks: online transactions per minute and price performance ratio.

http://swissinnovation.org/newsChina/web/2019/08-191008-7d

Companies Shifting Focus to Organic Growth

Chinese companies are now attaching more importance to localized management and organic growth in the domestic market, which will naturally translate into a global status, rather than focusing on growing international market share via mergers and acquisitions, said experts from JPMorgan. Sjoerd Leenart, global head of corporate banking at JPMorgan, said that there has been a discernible shift among Chinese companies in buying targets overseas to digesting and optimizing the acquisitions. According to PwC, the total value of Chinese companies' mergers and acquisitions in the overseas market stood at $26.8 billion during the first six months of this year, down 48 percent year-on-year.

http://swissinnovation.org/newsChina/web/2019/08-191011-a4

Taobao Links Remote Areas with Cities

Mention Taobao and people naturally think of buying clothes, cosmetics and consumer electronics via the e-commerce site. But it is fast becoming a gateway to a wealth of produce from the country's farmlands that was previously unattainable to urban dwellers. With oranges from Hubei province, honey from Sichuan province and Heilongjiang province's Wuchang rice, known for its natural fragrance, Taobao is now home to hundreds of thousands of agricultural products that can be delivered to people's
doorsteps in days after placing an order. This convenience is supported by an initiative launched in 2014 called Rural Taobao, one of the three key pillar projects of Alibaba Group, in addition to globalization and cloud computing. It aims to buttress trade between China's remote regions and urban areas.


UBS Securities and Chinese Market Opportunities

(China Daily, October 23)

UBS Securities was one of the first foreign investment banks to enter the Chinese market and was registered as the first fully-licensed securities joint venture in 2006. In December last year, it became China's first foreign-controlled securities firm after the parent company UBS AG increased its stake to 51 percent. Under the umbrella of the Switzerland-headquartered global financial group and having done business in China for more than a decade, UBS Securities tries to leverage its global network and local expertise to offer a comprehensive suite of services and shape its unique competitiveness. This year, UBS Securities is sponsoring two IPOs on the STAR Market and was licensed to be a market maker of the Bond Connect in July.


ABB Acquires Majority Stake in Shanghai E-mobility Company

(China Daily, October 29)

Swiss industrial conglomerate ABB Group announced that it will acquire a majority stake of 67 percent in Shanghai Chargedot New Energy Technology Co, Ltd, a Chinese e-mobility solution provider. The transaction is expected to be completed in the coming months, and ABB has the possibility to increase its stake further in the next three years. Since its establishment in 2009, Shanghai-based Chargedot has made a significant contribution to the uptake of electric vehicles in China. The company supplies AC and DC charging stations, as well as the necessary software platforms to a range of customers that include EV manufacturers, EV charging network operators and real estate developers.

JD Logistics Eyes in Lower-tier Cities for Growth

JD Logistics, the logistics arm of Chinese e-commerce giant JD, is beefing up its presence in lower-tier cities to offer fast and efficient delivery services, and its orders from third-party seller platforms and outside partners have grown eightfold, accounting for 40 percent of its revenue. The company also announced its 5G-powered smart logistics park, which is China's first and located in Beijing, will come into operation in collaboration with three telecom carriers during the upcoming Nov 11 shopping extravaganza. JD Logistics has reached the break-even level, according to its financial results for the second quarter. The company had previously reported losses in its operations, posting a loss of 2.8 billion yuan ($396.7 million) last year.

http://swissinnovation.org/newsChina/web/2019/08-191030-2c

9. Bilateral News

Federal Chancellor Guy Parmelin Met Chinese Minister Wang Zhigang

Federal Chancellor Guy Parmelin, head of the Federal Department of Economic Affairs, Education and Research EAER, met the Chinese science and technology minister Wang Zhigang in Bern on 9th October. During their discussions, which rounded off the eighth Joint Committee Meeting on Science and Technology, they considered the many links between Switzerland and China in research and innovation. The meeting between Mr Parmelin and Mr Zhigang was a further stage in the positive bilateral relations between Switzerland and China, which have set up around thirty groups holding regular discussions on a variety of topics, including business, education and intellectual property.

http://swissinnovation.org/web/2019/09-191010-54
Upcoming Science and Technology Related Events

**Young Founders Summit Asia 2019**
November 17, 2019
[https://url.cn/51wYWYc](https://url.cn/51wYWYc)
Startups, Entrepreneurship
Beijing

**CSAI 2019**
December 6-8, 2019
[https://url.cn/5XtRfue](https://url.cn/5XtRfue)
Computer Science, Artificial Intelligence
Beijing

**EdTech Startup Pitch Competition**
November 21 and 26, 2019
[https://url.cn/5vbiVko](https://url.cn/5vbiVko)
Education, Technology, Startup
Shanghai, Beijing

**ICIT 2019**
December 20, 2019
[https://url.cn/549cgGO](https://url.cn/549cgGO)
IoT, Smart City
Shanghai

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