TSINGHUA NEWSLETTER 2020

清華大學
Tsinghua University

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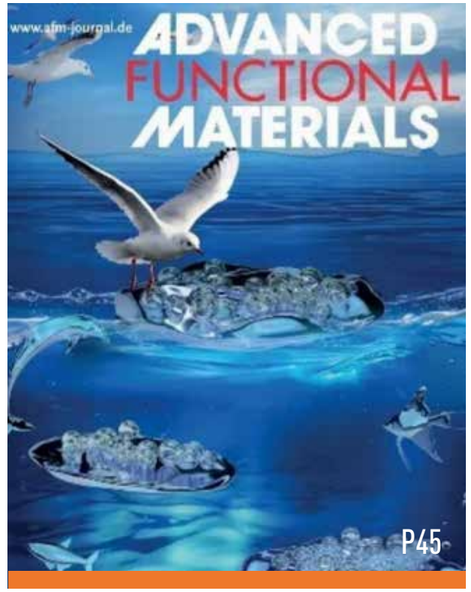
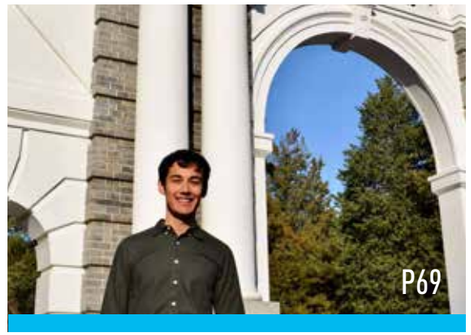




TSINGHUA NEWS
2020 IN REVIEW

Chinese President Xi Jinping sends letter in reply to student representatives of the Global Alliance of Universities on Climate

On January 6th, Chinese President Xi Jinping sent a letter in reply to the student representatives of the Global Alliance of Universities on Climate (GAUC), expressing his appreciation for their common concern for the planet and future of mankind.

Spring semester begins online

On February 17th, Tsinghua's Spring semester began. Setting up their mobile phones or computers and taking out their notebooks, Tsinghua students from all over the world were well prepared for their first class of the new semester. Online courses offered students the opportunity to make good use of their time away from campus while reducing their exposure to the virus. For Spring semester 2020, Tsinghua offered 4,254 course sessions in total, delivered by 2,681 faculty members to 25,091 students. Of these, 3,923 sessions are available online.

Chinese President Xi Jinping inspects COVID-19 scientific research, diagnosis and treatment

Chinese President Xi Jinping inspected the scientific research on novel coronavirus disease (COVID-19) as well as the diagnosis and treatment of the disease in his visit to two Institutes in Beijing. He visited the Academy of Military Medical Sciences and the School of Medicine at Tsinghua University on March 2nd, learning about the progress on the vaccine, antibodies, medicine and fast testing kit research and application. President Xi gave his regards to experts and researchers and chaired a symposium to listen to the views and advice from officials of relevant departments and researchers.

Global universities convene online to share experience in combating COVID-19

An online meeting, organized by the Asian Universities Alliance (AUA), was attended by 15 universities around the world to discuss fighting the COVID-19 pandemic on March 27th. The meeting featured the sharing of university response measures, with a view to identifying areas of cooperation on education and scientific research. In this way, the meeting echoed sentiments expressed at the G20 Extraordinary Leaders' Summit on COVID-19 on March 26th, where President Xi Jinping called on the international community to strengthen confidence, act with unity and work together in a collective response against COVID-19. During the meeting, presidents, vice-presidents and representatives from the 15 universities shared their actions, experience and views on topics such as the roles universities can play in education and scientific research during the pandemic.

Special Dialogue: Online Education in the COVID-19 Response and Beyond

On the evening of April 24th, Beijing time, a Special Dialogue was held online. Co-convened by Tsinghua University and UNESCO, the Special Dialogue explored the extraordinary challenges to ensure higher learning continuity during the COVID-19 pandemic. Themed "Online Education in the COVID-19 Response and Beyond", the dialogue shared university case studies, best practice, and experience in online education.

Tsinghua University establishes the Vanke School of Public Health

Tsinghua University and China Vanke Co. Ltd. signed a cooperation agreement on April 2nd to establish the Vanke School of Public Health, which will boost talent training, scientific research and further enhance China's capabilities in public health management. Drawing on Tsinghua's multidisciplinary advantages, the School will adopt new models of interdisciplinary cooperation and education. It is aimed at covering four research fields, and is oriented towards graduate education in preventative medicine, comprehensive healthcare, big data in healthcare, and public health policy and management.

Tsinghua hosts WPF special video conference

The World Peace Forum (WPF) special video conference on "Post-Pandemic Era: China and the World" opened on June 16th. Tsinghua University President Qiu Yong, who is also Chairman of the forum, delivered the welcoming remarks at the opening session of the two-day virtual conference of the forum, which is China's first non-governmental high-level forum on international security initiated by Tsinghua University in 2012.

Tsinghua University hosts first-ever online commencement ceremony

Tsinghua University held its 2020 commencement ceremonies for undergraduate and postgraduate students online. The online commencement ceremonies were livestreamed world-wide on various media and social media platforms including Facebook and Twitter in both Chinese and English. Students who were unable to return to the university, and their families and friends watched the virtual celebration from the comfort of their own homes.

Tsinghua holds seminar on "Higher Education in Cloud - Promise, Experience, and Expectation"

Tsinghua University convened a seminar on July 3rd to review its success in online teaching during the pandemic, share useful experience and explore new ways to further improve its online education system in the future.

Tsinghua held Global Summer School (GSS) 2020

The Tsinghua Global Summer School was held online in July for nine days, offering courses on the theme "Toward a Post-Pandemic World." More than 1,000 students from 154 universities across 79 countries and regions were enrolled in this online summer school. Tsinghua University President Qiu Yong said the GSS would inspire the young students to rethink and reimagine the global community and define our responsibility in a post-pandemic world.

Tsinghua launched 110th Anniversary Logo

On September 1st, Tsinghua University released a commemorative logo for its 110 years' anniversary. The elements in the logo reflected the profound culture of Tsinghua University. The "110" in the logo reflects the fact that Tsinghua people have inherited fine traditions, have explored and innovated bravely and have striven to open a new chapter in Tsinghua's second hundred years, which is manifested in the 110th anniversary theme "Strive for Excellence, Innovate for the Future."

Tsinghua begins its Fall semester combining online and offline learning

Tsinghua University began its Fall semester by holding the first university-wide lectures of the semester. The first lectures in the 2020 Fall semester were held in the main building of the university and were broadcast live on various media platforms, including Tsinghua's own online teaching platform "Rain Classroom", in both Chinese and English. Unlike the Spring semester, which was held completely online due to the pandemic, Tsinghua's Fall semester is going to see classes being taught both online and offline.

18th Symposium on Scientific Research concludes

The Closing Ceremony for the 18th Symposium on Scientific Research took place both online and offline on October 9th. The theme of this year's symposium was "Innovate research model to build a world-class university innovation system". Launched in March, it lasted for six months and went through three stages: the discussion of problems, the presentation of reports and the conclusion. Initiated in 1956, altogether 18 symposiums on Scientific Research have been held up to this year and it has become a tradition to advance scientific research work at Tsinghua.

Tsinghua jointly held China-US University Presidents' Online Forum

The China-US University Presidents' Online Forum, jointly organized by Tsinghua University and Yale University, was held on October 13th, bringing together leaders from 20 leading Chinese and American universities to explore the development of higher education and to strengthen the post-pandemic resilience of university collaboration and networks.

Tsinghua co-hosts China-Italy University Presidents' Forum to promote innovation for shared future

On the evening of November 5th, the eve of the 50th anniversary of the establishment of diplomatic relations between China and Italy, Tsinghua University and the Politecnico di Milano co-hosted the China - Italy University Presidents' Forum.

AUA Presidents Forum held on building resilient Asian universities

The Asian Universities Alliance (AUA) Presidents Forum 2020, jointly organized by the AUA Executive Presidency 2020-2021, Nazarbayev University (NU), and the AUA Secretariat, was held online on November 26th. The forum brought leaders of 15 AUA member universities together to share their knowledge from the experience of coping with the COVID-19 crisis for sustainable survival and progressive development, and to co-create and develop, through hindsight and foresight, knowledge for more robust and resilient university systems capable of withstanding and responding to continuous, and probably more severe, uncertainties and challenges in the future.

Tsinghua SEM holds 2020 Advisory Board Meeting

Chinese President Xi Jinping addressed the 2020 meeting of the Tsinghua University School of Economics and Management Advisory Board via video link and expressed his congratulations on the 20th anniversary of the board. The 2020 Meeting of the board was held on December 3rd at Tsinghua University.

First Global MOOC Conference held at Tsinghua University

The Global MOOC Conference was held at Tsinghua University from December 9th to 11th. With the theme of "Learning Revolution and Higher Education Transformation", this event was the first global conference featuring MOOC since its rise. China's Minister of Education Chen Baosheng delivered a keynote speech, sharing the practical insights, innovation and exploration of China's MOOCs and online education. The Global MOOC Alliance – composed of 17 universities and three online education institutions from around the world – was officially launched at the conference to promote high-quality online education.

Tsinghua SPPM hosts 2020 Global Advisory Board Meeting

The 2020 Global Advisory Board Meeting of Tsinghua's School of Public Policy and Management (SPPM) was held on November 7th. The meeting, held combining both online and offline channels under the theme "Challenges of Global Governance and Cultivation of Public Management Talents," brought together 25 advisory board members from China and abroad to assess gaps exposed by the covid crisis in global governance, exchange ideas to strengthen it in the post-Covid world, and set priorities for the further development of the school accordingly. Chinese State Councilor and Foreign Minister Wang Yi attended the opening ceremony of the meeting, and delivered a speech entitled, "Uploading Multilateralism to Tackle Global Challenges."

Tsinghua Vanke School of Public Health unveils its international advisory board

Tsinghua University's Vanke School of Public Health set up its first international advisory board on October 20th to bring great minds together and seek academic and other scientific and technical input for the further development of the recently-established school as well as for China's public health sector. The board is composed of 34 well-known experts and scholars from 12 countries around the world, including deans of world-famous public health schools, leaders of non-governmental organizations, public health sector leaders, and outstanding entrepreneurs. Dr Margaret Chan, founding Dean of the school, presided over the meeting and introduced the board's background and constitution.

President Qiu calls for further cooperation by universities with UN to achieve SDGs at UN SDSN's webinar

Tsinghua University President Qiu Yong urged universities around the world to further strengthen cooperation with the United Nations (UN) to achieve the Sustainable Development Goals (SDGs) and address the most urgent global challenges such as climate change. President Qiu delivered his remarks at the webinar for presidents of global universities with the UN Secretary-General entitled "University Sector Support to UN Secretary-General's Call for a Decade of Action on the SDGs" on July 9th.

FOCUS

The Power of the Tsinghua Community in fighting the Epidemic

Since the outbreak of the novel coronavirus in China, the Tsinghua community has taken on the responsibility to join the collective fight against the spread of the virus.
Drawing on Tsinghua's strengths, our community has been contributing valuable skills and efforts during this period.

Tsinghua Researchers

"Science and technology are the most powerful weapon in humanity's battle against diseases. Mankind cannot defeat a major disaster or epidemic without scientific development and technological innovation."

Xi Jinping
President of the People's Republic of China

On March 2, Chinese President Xi Jinping inspected the scientific research into the novel coronavirus disease (COVID-19) as well as the diagnosis and treatment of the disease during his visit to Tsinghua University.

Tsinghua launched a pilot research program for virus prevention. Over 70 research project applications have been received since January 30.

Research continues in advancing basic medical research and vaccine research, with a focus on assisted diagnosis, assisted medical care, and new test kits and equipment.

COVID-19 antibodies and vaccine

Research teams led by Professor Zhang Linqi from the School of Medicine have been identifying neutralizing antibodies from convalescent patients and developing safe and effective treatments for COVID-19. Together with Professor Wang Xinquan from the School of Life Sciences, Professor Zhang resolved the crystal structure of COVID-19 RBD in complex with receptor ACE2, providing structural insight and identifying the precise target for vaccine design. In collaboration with Dr. Zhang Zheng at the Shenzhen Third People's Hospital, Professor Zhang and his team isolated several potent human neutralizing monoclonal antibodies from recovered patients, providing promising candidates for antibody-based prophylactic and therapeutic intervention against COVID-19.

Uncovering COVID-19 replication transcription machinery

Professor Rao Zihe's team and Shanghai Tech University's team were the first in the world to decode the exact architecture of the RdRp-nsp7-nsp8 at the atomic level, uncovering the RNA-synthesis machinery and providing a basis for drug development.

Understanding human adaptive immunity to SARS-CoV-2

Professor Dong Chen's team collaborated with Chui Yang Liu Hospital, which is affiliated to Tsinghua University, and the China Academy of Military Medical Sciences to analyze blood samples from discharged COVID-19 patients. They found that both humoral and cellular immunity participate in immune-mediated protection to viral infection. However, two-week-post discharged patients exhibited high titers of IgG antibodies, but with low levels of virus-specific T cells. This study lays the theoretical foundation for the diagnosis and traceability of infected patients as well as the development of therapeutic antibody drugs and vaccine research.

Respiratory virus nucleic acid detection kit

Professor Cheng Jing's team worked with the West China Hospital of Sichuan University and CapitalBio Corporation to successfully develop the Respiratory Virus Nucleic Acid Detection Kit (Isothermal Amplification on Disk Chip), the first in the world to detect six types of respiratory virus simultaneously within 1.5 hours. The kit, which includes SARSCoV-2 among the six viruses, provides patients with a quick and accurate diagnosis. Soon after the National Medical Products Administration's approval, Tsinghua provided Wuhan with four sets of testing equipment and donated testing chips and reagents for 12,000 persons.

COVID-19 intelligent medical system

Professor Dong Jiahong led a medical engineering team that developed a COVID-19 intelligent medical system, using big data, IoT, and AI technology to create an integrated solution for community network monitoring for virus control, intelligent medical technology, and post-hospital patient monitoring. In late February, Tsinghua donated the proprietary COVID-19 intelligent control and prevention system to the Wuhan Municipal Government and medical institutions, which was put into use at eight COVID-19 hospitals, one cabin hospital, and 72 quarantine zones.

Tsinghua Students

During this period, Tsinghua University students also took action to curb the virus outbreak.

Ivana Todorovic, a Bosnian postgraduate student at Tsinghua University, joined the university's many international students, scholars, and alumni who were trying all possible means to raise funds and medical supplies in a bid to support China in the fight against the outbreak of the novel coronavirus pneumonia.

Originally from Bosnia and Herzegovina, Ivana began pursuing her International Master of Public Health degree at Tsinghua's School of Medicine in September 2019. She stayed in Beijing for the winter holiday to experience Chinese culture when her first semester ended in January.

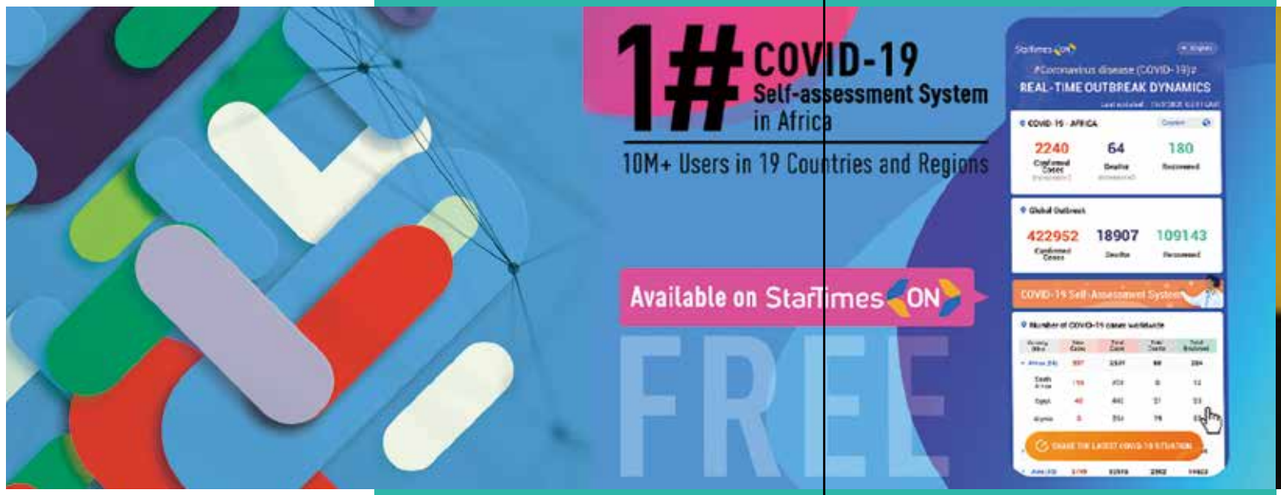
As the epidemic spread, Ivana had great sympathy for the Chinese people and began trying to use her international resources in health care to raise medical supplies.

"Actually, this is not easy," said Ivana. "Global medical supplies are becoming scarce and it is difficult to find reliable factories and suppliers."

Previously a teacher at the Medical High School in Bosnia and Herzegovina, Ivana managed to contact the University of Banja Luka in Bosnia and Herzegovina which then donated a batch of masks to the Tsinghua students on campus.

In addition, Ivana also participated in activities organized by the Graduate Association of Tsinghua University to support China's battle against the epidemic.

"At first, I paid attention to the epidemic because it was closely related to my field of expertise," Ivana said. "But as I learned more about it, I wished I could take action rather than just observe it from a professional perspective."



Tsinghua Changgung Hospital

Tsinghua-affiliated hospitals dispatched medical workers to hospitals and quarantine zones in Wuhan and Beijing.

After the outbreak of the novel coronavirus, a medical team comprised of 32 doctors and 40 medical personnel from the Beijing Tsinghua Changgung Hospital readily accepted a call to join the front lines, treating those who have been diagnosed with the novel coronavirus.

Before the team was formed, they received a letter from their colleague Zou Xiaozhao, a young doctor at Changgung hospital.

In the letter, she requested to be allowed to join the medical team to fight the deadly virus, claiming that treating those in need was also her duty as a doctor. The team of doctors accepted her request to join, making her the 33rd and final doctor to join the team.

Tsinghua Alumni

Tsinghua alumni from all over the world joined the fight against the epidemic.

The Tsinghua Alumni Association in Hubei set up an anti-epidemic fundraising team on January 26 and issued a fundraising announcement to all Tsinghua alumni.

The Tsinghua Alumni Association in Singapore also actively raised funds for Wuhan.

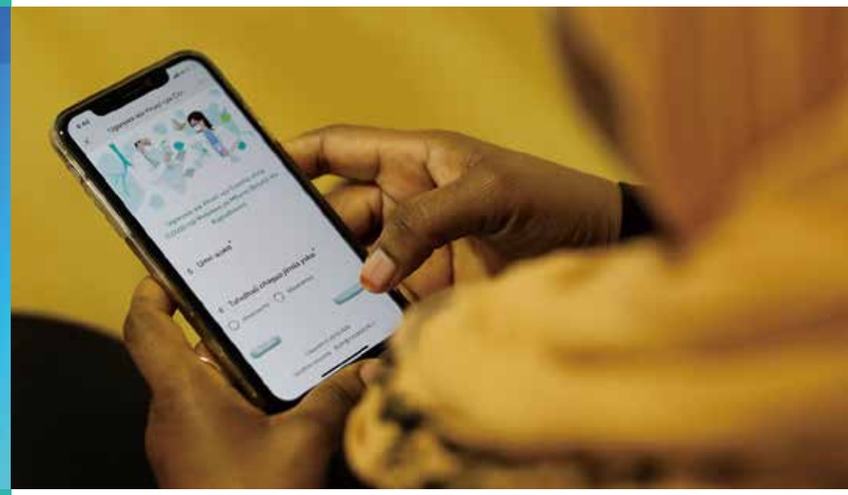
The Tsinghua Alumni Association of Southern Ontario Canada donated epidemic prevention materials to domestic hospitals.

The North American Federation of Tsinghua Alumni Associations set up an anti-epidemic fund-raising committee to share resources with the Wuhan University Alumni Association, so that all donations were used for the procurement of materials needed to prevent and control the epidemic.

The volunteer team led by the Student Associations in the Massachusetts Institute of Technology, Harvard University and the Tsinghua Alumni Association at Greater Boston contacted medical suppliers in the United States to gather a large number of materials to support Hubei in fighting the epidemic.

The Tsinghua Alumni Association in the UK contributed by raising funds, as well as purchasing and donating medical protection materials.

In addition, the Tsinghua Alumni Association in Germany, the Tsinghua Alumni Association in Japan, the Tsinghua Alumni Association in Switzerland, and many other overseas alumni associations all over the world contributed to help find overseas sources of epidemic prevention materials such as masks and protective clothing, and have mobilized various forces to help.



Tsinghua Faculty

From catering services to security and reception staff, various departments across Tsinghua worked around the clock to be of assistance.

Food service is a top priority year-round at Tsinghua and the catering department treated this period with even greater attention. Catering provision is ongoing for students living in the Xinzhai Building, and the Tsinghua Catering Services Centre is making special efforts to ensure daily service of healthy food.

Staff from the security department are responsible for restricting campus entry during the coronavirus outbreak in order to protect the health and safety of the Tsinghua community. The security guards at the gates conduct security inspections, do temperature checks of those entering the campus grounds, and meticulously register all personnel who enter and leave the university.

During the outbreak of the epidemic, staff from the Student Community Management & Service Center have taken on additional responsibilities. While providing living services for students in dormitories, staff have carried out daily cleaning and disinfection of elevators, corridors, public areas and other locations.

The Tsinghua community has demonstrated its courage and resilience in the battle against the novel coronavirus. At this time, let us all come together to protect ourselves and our loved ones, keep all those who are at the front lines in our prayers and pass on our gratitude to those who have joined and contributed to the fight against the epidemic.

Higher Education in the Cloud: Tsinghua 2020

Tsinghua has been putting every effort into "ensuring learning is undisrupted when classes are disrupted" from the first day of the COVID-19 outbreak. The move pushed "in cloud" higher education practice faster to the next level. In the past year, self-motivated Tsinghua people have kept their positive attitude and delivered a meaningful online teaching reform successfully through their preciseness, diligence and innovative spirit.

Tsinghua Online Teaching History

On October 10th 2013, Tsinghua University launched the online MOOC platform XuetangX. Tsinghua launched the first five MOOCs on XuetangX.

In 2014, Tsinghua University released a report entitled "Opinions on Strengthening of Online Education."

In 2016, Tsinghua launched its own Rain Classroom, a smart learning tool for live broadcast lessons, recorded videos, interactions and to collect learning data.

In 2020, Tsinghua launched the international version of the XuetangX platform.

Tsinghua continues to promote the quality and inclusiveness of education during the sudden outbreak of COVID-19. In Spring 2020, Tsinghua made a full transition from traditional classes to real-time online interactive courses, and a total of 4,471 online courses were delivered.

For the Fall Semester 2020, Tsinghua implemented hybrid teaching and learning mode to overcome the challenging situation, in order to accommodate all students.

Online teaching during the pandemic

Chronology

STAGE 1

Planning and preparation

On January 30th, Tsinghua University leaders announced the decision to "postpone the start of the 2020 spring semester and start classes as scheduled".

On February 3rd, more than 50,000 students and faculty attended the first class through a live broadcast.

On February 6th, the online teaching experts' group was established and training for online teaching was launched.

STAGE 2

Smooth beginning of the semester

On February 17th, Tsinghua started classes as scheduled.

On February 27th, the first online dissertation defense was held.

On March 8th, Tsinghua University and the Huazhong University of Science and Technology shared the same lecture.

STAGE 3

In full swing

On April 24th, a special dialogue on online education was jointly convened by Tsinghua and UNESCO.

During this semester, 700 live general education courses offered by Tsinghua through public platforms received nearly 200 million views.

STAGE 4

Online Exams

From June 8th, students took the online final exams.

On June 12th, the Graduation Work Exhibition of the Academy of Arts and Design was launched online.

From June 22nd to 23rd, Tsinghua held its first-ever online commencement ceremonies.

Teaching across multiple time zones

Prof. Dag Westerstahl received the notice for online teaching when he was in Stockholm, Sweden, over 8000km away. He immediately familiarized himself with the related software and technical details, testing the system repeatedly with his assistants, colleagues and students to find the most suitable teaching methods.

"There is no boundary for learning. The more difficult the time, the more we should cherish the opportunity to learn," said Westerstahl, Professor of Theoretical Philosophy and Logic at Stockholm University and a member of the Royal Swedish Academy of Sciences.

To many foreign members of faculty like Westerstahl, the time difference is just one of the challenges to overcome when conducting online teaching.

Westerstahl overcame the seven-hour time difference teaching his first online course. "Online teaching is a challenge for me. The interaction with students and homework marking will be conducted in different ways, but I'm very confident that the students and myself will do well conducting online learning."

Associate Professor Sara J. Bice was still in Australia when she started teaching Globalization and Governance. She had to confront the new reality that her class was composed of more than 40 students in 11 different time zones.

Bice redesigned her lectures and recorded video lectures in only two weeks' time, following student feedback.

Emphasizing the importance of discussion, she arranged online discussion classes four times a week, finding time slots that worked for everyone.

After these sessions, online assignments and readings were arranged through the Rain Classroom, where students could ask questions and provide feedback for the class.

Customization leads the way

Many Tsinghua teachers customized their classes to fit the unusual teaching condition. Prof. Richard Dunham, senior journalist and co-director of the Global Business Journalism program, brainstormed with former Tsinghua Visiting Professor Steve Gunn and other American media professionals about his online course.

He believes online teaching tools are the easiest way to bring senior academic friends to his students: "I could even bring my students to Washington, D.C. for news interview practice."

He is already considering possibilities like shifting the classroom to the International Center for Journalists, National Press Club and museums. His students are also spread across 19 different time zones.

Dunham seized the opportunity to show his students the three terracotta warriors he brought back on a previous trip from Xi'an. "I believe this will surely arouse the students' curiosity. I hope to take this opportunity to introduce my international students to Chinese culture and history."

Optimists embrace technology

Many teachers have been excited by the move to remote learning. The teaching staff have been very supportive of each other, sharing their discoveries every day as they navigate the online teaching systems ahead of the new semester.

Once they've figured out how to optimize teaching, they had to provide guidelines for their students on how to learn from it. Many teachers creatively modified their course content accordingly, such as Maxime Hermand.

"For the content of online teaching, I may add more grammar explanations and exercises. And I will prepare some dialogue exercises as homework in the video, ask the students to send me the recordings of their conversations, and I will give feedback on their recordings."

Trouble-shooting, one technical problem at a time

Technical difficulties aside, online teaching came as a test even for the experienced. "As I can't see the students, the biggest challenge to me is to keep the students engaged online," says Prof. Wang Gelin from the School of Pharmaceutical Sciences. However, she believes this experience will help to enhance her teaching abilities.

Prof. Vijay Kumar Pandey, who teaches the molecular basis of cancer at the Tsinghua-Berkeley Shenzhen Institute, cites the restriction of discussion-based activities as one of his major challenges. He came up with two options to improve the situation. "First, after finishing presentations, we could discuss using an alternative platform. Second, I might assign another time slot for one-to-one or group discussions."

FOCUS

Bringing educators online

On February 17th, at 8 a.m., more than 150 course sessions commenced. Tsinghua faculty and students welcomed the new semester on their computers and smartphones.

Even in a digital classroom, some things never change: the most memorable courses are those taught by teachers genuinely interested in sharing the knowledge they have fallen in love with. This passion for education is a time-honored tradition at Tsinghua.

In the Spring semester this year, Tsinghua offered a total of 4,254 courses taught by 2,681 faculty members to 25,091 students. Apart from laboratories and practical courses, all 3,923 sessions are available online.

As many as 73 international faculty members based in four continents delivered 152 course sessions online covering disciplines such as science, engineering, literature, art, history, philosophy, economics, management, law, education and medicine.

Below are some opinions shared by students and teachers on the online classes:

"This outbreak has physically isolated students from their professors, and from each other. As a university professor, I'm working with my colleagues and my students more closely than ever, trying to use modern technology to shorten our physical distances. With the help of Rain Classroom, an application designed to facilitate 'learner-centered' learning, we managed to overcome numerous technical barriers, and greatly redesigned our teaching curriculum to make online learning a pleasure. This huge project was launched during the Spring Festival, only two weeks before February 17th when the spring semester began. The teaching 'reform' is a brave effort made jointly by the administrators and faculties as well as students and is believed to be a 'revolution'. I got actively involved and worked closely with professors across various disciplines (through our common goal for adapting to online teaching and EMI teaching promptly). Since February 17th, successful cases were shared and celebrated among the faculties and never have the teaching community been closer. Tsinghua, I am so proud of you!"

—Qian Jing,
Associate Professor,
School of Social Sciences

"Since the implementation of online learning methods by Tsinghua University, various online platforms have been developed and put into use to ensure the smooth and effective conduct of the teaching process. Apart from that, the lecturers have also been working tirelessly and dedicatedly to provide the best possible teaching services to their students. During this special period, Tsinghua students around the world have displayed a high level of self-discipline and strong commitment towards their pursuit of academic excellence. It is hoped that the epidemic can be put under control very soon so that everyone is able to return to the campus and carry out learning activities as usual."

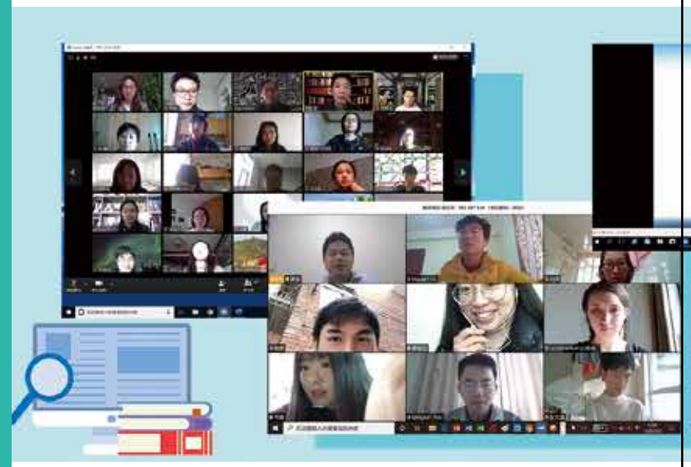
—Khor Wei Sheng,
Junior, Malaysia,
School of Economics and Management

"Online teaching is a new challenge. As it is difficult to continue direct face-to-face interaction between teachers and students at this moment, the smooth development of courses and the guarantee of teaching quality all depend on careful preparation by teachers. In this class, our teacher even prepared the bell to sound at the beginning and end of the class. They interacted with students through multiple choice questions, roll call and the shared group chat screen, which played an active role in the teaching process."

—Cui Ruoyu,
first-year Ph.D. candidate,
Department of Mechanical Engineering

"The use of online teaching based on Rain Class is a proactive and effective measure to deal with the novel coronavirus epidemic. It can ensure the safety of students while minimizing the impact on learning. Therefore, we support online teaching. Meanwhile, online teaching has the advantage of staying at home and enjoying rich teaching resources. In particular, Tsinghua has also launched an online series of society-oriented courses, which reflects the university's social responsibility and commitment to society. We very much agree with this practice."

—Li Huanhuan,
master's student from the Class of 192,
School of Marxism



Tsinghua begins its Fall semester with hybrid learning

First lecture of 2020 Fall

The first lectures in the 2020 Fall semester were held in the main building of the university and were broadcast live on various media platforms, including Tsinghua's own online teaching platform "Rain Classroom", in both Chinese and English.

Tsinghua University Council Chairperson Chen Xu and Tsinghua President Qiu Yong delivered their lectures, which were remotely attended by nearly 50,000 Tsinghua students, faculty, staff members, and alumni representatives, including more than 3,800 undergraduate freshmen who are all set to begin their Tsinghua journey.

Unlike the Spring semester, which was held completely online due to the pandemic, Tsinghua's Fall semester is going to see classes being taught both online and offline.

Chairperson Chen Xu delivered her lecture, entitled "Unwavering Commitment to Our Sense of Duty and Our Endeavor".

THE Higher Education Forum

On September 1st and 2nd, the Times Higher Education (THE) World Academic Summit was held online. Tsinghua University discussed and shared the prospects for post-pandemic higher education with leading thinkers from all over the world.

During the speech, President Qiu elaborated on the challenges that have emerged for higher education institution in 2020. He noted that these challenges, however, represented renewal of hope. He believed that as a result of the changes made in the face of these challenges, the university's role in contributing to solving global challenges would become more prominent.

Tsinghua's Vice President and Provost Yang Bin shared examples that support the view that 2020 is a "new dawn" for higher education. Yang believed that global higher education was a big step closer to the realization of "hybrid education" which transcended merely "teaching" and "learning".

Tsinghua initiated Global MOOC Alliance (GMA)

The Global MOOC Alliance was officially launched on December 11th at the 2020 Global MOOC Conference, jointly hosted by Tsinghua University and the UNESCO Institute for Information Technologies in Education (UNESCO IITE).

China's Minister of Education Chen Baosheng attended the conference and delivered a keynote speech. Qiu Yong, the President of Tsinghua University, Stefania Giannini, UNESCO's Assistant Director-General for Education, and Andreas Schleicher, OECD's Director for Education and Skills and Special Advisor to the Secretary-General delivered opening addresses. Representatives and guests from more than 2,000 international organizations, government agencies, universities and online education institutions attended the conference offline and virtually.

The members of the alliance include Tsinghua University, Cornell University, the Center for Research and Interdisciplinarity (CRI), edX platform, the Mongolian University of Science and Technology, Nanyang Technological University, Peking University, Polytechnic University of Milan, Rice University, RWTH Aachen University, Saint Petersburg State University, Shanghai Jiao Tong University, Thai MOOC platform, the University of Auckland, the University of Chile, the University of Manchester, the University of Nairobi, the University of Toronto, XuetangX and Zhejiang University.

The alliance will serve as a leading platform to build a diverse community of universities and online education platforms from all over the world, facilitate international cooperation and exchanges in educational technologies and innovation to improve the quality of global MOOC and online education.

The alliance will also help its members roll out online education practices in regions across the world, through collaborative teaching, capacity building, knowledge sharing, and publicity, and achieve the United Nations Sustainable Development Goal 4 (SDG 4) of ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all.

Conclusion

From pure online courses to hybrid learning, from university pilot schemes to the Global MOOC Alliance, Tsinghua has been the avant-garde in higher education evolution. Covid-19 may accelerate this process, and we look forward to Tsinghua's future action on creating an equal, safe and convenient education system.

GLOBAL ENGAGEMENT

Global universities convene online AUA

Global universities convene online to share experience in combating COVID-19

An online meeting, organized by the Asian Universities Alliance (AUA), was attended by 15 universities around the world to discuss fighting the COVID-19 pandemic on March 27th.

The meeting featured the sharing of university response measures, with a view to identifying areas of cooperation on education and scientific research. In this way, the meeting echoed sentiments expressed at the G20 Extraordinary Leaders' Summit on COVID-19 on March 26, where President Xi Jinping called on the international community to strengthen confidence, act with unity and work together in a collective response against COVID-19. During the meeting, presidents, vice-presidents and representatives from the 15 universities shared their actions, experience and views on topics such as the roles universities can play in education and scientific research during the pandemic.

In his opening speech, Qiu Yong, Tsinghua University President and President of AUA, welcomed the university leaders to join in the online forum organized by AUA. He noted that this is a difficult time for all of us and the outbreak of COVID-19 reminds us that we share a global community.

"As we face unprecedented global challenges, it is time to reflect on what makes a university great. Universities should proactively respond to challenges and shoulder responsibilities to demonstrate their commitment to society," said President Qiu. He noted that the essence of education is to empower the lives of students, with the prerequisite of ensuring their health and well-being. Universities should take the safety and health of students, faculty and staff as their top priority.

To curb the spread of the disease, Tsinghua has begun offering online classes to students across the country and the world since Feb 17th. "Teaching and learning should not be undermined under any circumstances. University education is neither spontaneous nor sporadic. Rather, it is a well-designed systematic program with comprehensive planning." Qiu noted.

"Drawing on traditional strengths in academic research and innovation, universities play an essential role in epidemic-prevention efforts. Universities can demonstrate the aspiration of education by taking on social responsibilities" he added, noting that Tsinghua swiftly initiated COVID-19 research projects after the outbreak and that substantial progress has been made in basic medical research, vaccine research, and fast testing kits, as well as in intelligent epidemic prevention systems and equipment.

"Universities can demonstrate the aspiration of education by taking on social responsibilities," said President Qiu. Over the past two months, Tsinghua has maintained close contact with other university leaders and global partners, exchanging best practice and providing mutual support. Meanwhile, massive online resources to the public have been opened, and "clone class" courses were created to share online educational resources with universities in Wuhan and other remote areas, and a team of medical workers dispatched to Wuhan and volunteer works organized, both online and off-line.

President Qiu also announced that Tsinghua has set up a research fund to encourage and support its faculty to initiate joint research with international partners on COVID-19.

"Universities serve as the lighthouse of human civilization. We share a common objective, which is to make the world a better place. At this critical moment, universities should play an essential role in promoting confidence, trust and unity among the whole world. Together, stronger." Qiu concluded.

During the meeting, the following university leaders shared their respective anti-epidemic efforts and experience in managing online education and scientific research, and prevention and control work: Bundhit Eua-arporn, President, Chulalongkorn University; Wei Shyy, President, the Hong Kong University of Science and Technology; Subhasis Chaudhuri, Director, Indian Institute of Technology Bombay; Tan Eng Chye, President, National University of Singapore; Shigeo Katsu, President, Nazarbayev University; Ghaleb Alhadrami Al Breiki, Acting Vice Chancellor & Provost, United Arab Emirates University; Agustin Kusumayati, University Secretary & Head of Universitas Indonesia Task Force for COVID-19, Universitas Indonesia; Yves Flückiger, Rector, University of Geneva; Yonghua Song, Rector, University of Macau; Arif Al-Hammadi, Executive Vice President, Khalifa University; Akira Fujimaki, Trustee (Education and Academic Information Infrastructure), Vice President, Nagoya University; Hong Keehyun, Vice President for Academic Affairs & Dean of Graduate School, Seoul National University; Sawako Shirahase, Executive Vice President, The University of Tokyo; and Antonio Fiori, Rector's Delegate for International Relations with Asia and Oceania, University of Bologna. They expressed their strong willingness to join hands, strengthen collaborative endeavors and discover solutions for the fight against COVID-19. The heads also discussed topics including collaborative activities with the AUA and beyond and resource sharing, among other topics. Tsinghua University Vice President and Provost Yang Bin chaired the meeting.

Special Dialogue

Special Dialogue: Online Education in the COVID-19 Response and Beyond

On April 24th, Beijing time, a Special Dialogue was held online. Co-convened by Tsinghua University and UNESCO, the Special Dialogue explored the extraordinary challenges to ensure higher learning continuity during the COVID-19 pandemic.

Themed "Online Education in the COVID-19 Response and Beyond", the dialogue shared university case studies, best practice, and experience in online education.

Stefania Giannini, UNESCO Assistant Director-General for Education, thanked Tsinghua University for initiating this Special Dialogue in her welcoming remarks. "Tsinghua University was one of the first in the world to move all courses online, so it's fitting that you are leading this conversation today. Learning never stops, and learning does not stop and must not stop," she said.

She mentioned three challenges facing online education in her remarks. The students affected by the closures don't have access to computers and more or less 40% don't have access to the internet at all; the readiness of teachers and faculty; and the ethical challenge, how online contest quality is assured.

In the remarks, Giannini also called for global collaboration during this pandemic, "Global cooperation is the only answer to this crisis, and especially to support countries that don't have the capacity to know how or have the resources to deploy distance learning," she emphasized.

"The more we discover, the more we can really join forces and work together. I hope and am sure that this discussion will pave the way for a new cooperation between universities to ensure that the world counts for this crisis. more prepared and more committed to shaping a secure and sustainable common destiny," said Giannini.

In his welcoming remarks, President Qiu extended his thanks and appreciation to Assistant Director General Giannini and UNESCO colleagues for co-organizing this Special Dialogue, and commended UNESCO for its work in supporting inclusive distance learning, and in mobilizing countries to reinforce cooperation in the face of COVID-19.

"We share a common belief that education should not be interrupted under any circumstances. It is our compelling obligation to ensure the continuation of education. According to our practice at Tsinghua over the past three months, we concluded that we must bear in mind three key words in order to achieve effective implementation of online education: access, quality and equity," said President Qiu.

President Qiu announced the official release of an interim report by Tsinghua's Institute of Education on the theme of Integrity, Resilience and Reform: Evaluation and implications of Tsinghua University's emergency online education in his remarks. "The year of 2020 may well mark a historical watershed of human society. The year of 2020 also witnesses the rise of online education at an unprecedented scale. It is foreseeable that the form of campus-based education will be profoundly reshaped after the pandemic," he noted.

"Universities are the lighthouse of human civilization. Facing such a grave challenge that concerns the future of mankind, universities must shoulder our due responsibilities. While the end of the pandemic remains out of sight, it is our unwavering belief that we will overcome it eventually. Tsinghua values the partnerships with UNESCO and the distinguished institutions represented in this dialogue," President Qiu said.

Peter Salovey, President of Yale University, thanked Tsinghua University for taking the lead in bringing all the participants together for such an important and timely discussion on educational continuity during this crisis in his opening remarks.

"We're encouraged by facts and expertise. And yet we are humbled by the questions that remain unanswered. The pandemic has shown the world how much we need ideas and solutions. And it has reminded me and many of us why their research and scholarship being conducted on college and University campuses in China and the United States and other nations throughout the world are so vital to society," he said.

Stephen Toope, Vice Chancellor of the University of Cambridge expressed his appreciation to Tsinghua and UNESCO for initiating the dialogue and sharing best practices. "We will only learn enough to make progress on the immense challenges of online education through collaboration at a global level," he said.

Alice Gast, President of Imperial College London; Ferruccio Resta, Rector of Politecnico di Milano; Meric Gertler, President of the University of Toronto; Aiji Tanaka, President of Waseda University, and Andrew Martin, Chancellor of Washington University in St. Louis also delivered opening remarks.

In the featured case study-sharing session, Borhene Chakroun, UNESCO Director of Division for Policies and Lifelong Learning Systems; Brian Schmidt, Vice-chancellor of The Australian National University; Alberto Barbieri, Rector of the University of Buenos Aires; Ennio Vivaldi, Rector of the University of Chile; Sir Steve Smith, Vice Chancellor of the University of Exeter; Sung-Chul Shin, President of KAIST; Datuk Abdul Rahim Hashim, Vice-Chancellor of the University of Malaya; Stephen Kiama, Vice Chancellor of the University of Nairobi; and Andrey Rudskoi, Rector of the Peter the Great St. Petersburg Polytechnic University, shared their experiences, featured cases and observations from their respective regions and working experience respectively.

Following the case study-sharing, a panel discussion with the theme of "Online Education: Practice, Research, Cooperation and Partnerships" was held. Topics including online training programs on digital policies and education, education policies and planning, and online education partnerships, as well as the resilience, reform-evaluation and implications of online education were discussed. The session also showcased a new partnership between Tsinghua and universities in Mongolia which covers the sharing of online educational resources and technical assistance, with broad objectives that support pedagogical adaptation and capacity development.

The event summary and closing remarks were delivered by Edward Crawley, Ford Professor of Engineering of MIT, Founding Interim Provost of Tsinghua Southeast Asia Centre; and Getachew Engida, Co-President of China-Africa Leadership Development Institute (CALDI), Tsinghua University, Former Deputy DG, UNESCO. They evaluated this online meeting and put forward suggestions for the next steps going forward.

About 30 panelists including university presidents, vice presidents and professors from 21 universities in 15 countries, as well as UNESCO international higher education experts and representatives, attended the Special Dialogue. Education policy advisors and executors, faculty, students and relevant education stakeholders also joined this event online. The event was moderated by Yang Bin, Vice President and Provost of Tsinghua University and Marielza Oliveira, Director of the UNESCO Beijing Cluster Office.

Tsinghua hosts WPF special video conference

The World Peace Forum (WPF) special video conference on "Post-Pandemic Era: China and the World" opened on June 16th.

Tsinghua University President Qiu Yong, who is also Chairman of the forum, delivered the welcoming remarks at the opening session of the two-day virtual conference of the forum, which is China's first non-governmental high-level forum on international security initiated by Tsinghua University in 2012.

In his speech, President Qiu said the World Peace Forum, like many other international forums, had to be held online this year due to the ongoing pandemic, as he thanked leading academics, influential political leaders and former top diplomats, among others, attending the forum's online gathering from different parts of the world to discuss ways to deal with major security challenges the international community faces in the post-pandemic era.

"In the face of this major common threat to humanity, unfortunately and unexpectedly, the international community has been extremely slow to form a unified front and make coordinated and effective responses. On the contrary, world politics is witnessing intensified polarization, irrationality, uncertainty, and instability," he said.

As an international platform on security issues, the World Peace Forum, he said, would like to make its own contribution by offering a platform "to sit down and talk to each other" and "to do something to prevent disorder."

"Now that the COVID-19 pandemic seems to be putting the world politics into an undesired trajectory, we think it is our responsibility to convene this special conference, provide a platform for leading international strategists to freely interact, and try to find effective prescriptions to problems threatening world peace," he said.

Pointing out the International Monetary Fund (IMF)'s prediction of the likelihood of the worst economic downturn since the Great Depression due to the pandemic, he emphasized the importance of coordinated international efforts to overcome the current crisis.

"Tsinghua is convinced that universities should be committed to social responsibility. We also attach great significance to international cooperation," he said while elaborating some of the recent efforts made by the university to promote international cooperation and exchanges including the establishment of the Vanke School of Public Health, which is dedicated to reinforcing the nation's public health emergency management systems and safeguarding global public health security, and the launching of a special dialogue with the theme of "Online Education in the COVID-19 Response and Beyond" in collaboration with UNESCO.

"In the upcoming four panels, we look forward to distinguished speakers' invaluable ideas on how to generate a favorable environment and a common resolve to tackle the challenges," he added.

Following Qu's remarks, the first day of the conference saw two panel discussions. While Li Li, Deputy Secretary-General of the World Peace Forum moderated the first panel on the topic "World Order after the COVID-19 Crisis," four panelists--Graham Allison, Douglas Dillon Professor of Harvard University, USA, Alexander A. Dynkin, President of the Primakov Institute of World Economy and International Relations, Russia, Volker Perthes, CEO and Director, Stiftung Wissenschaft und Politik, German Institute for International and Security Affairs, Germany, and Yan Xuetong, Dean of the Institute of International Relations, Tsinghua University--shared their thoughts.

Prof. Allison, who is also the author of the book "Destined for War: Can America and China Escape Thucydides' Trap?" thinks rivalry between great powers like China and U.S will continue even after the pandemic but at the same time cooperation will also continue as "coronavirus provides a vivid reminder that each nation, China, the U.S. and every other nation, faces external threats it can't defeat itself by acting alone."

Prof. Dynkin from Russia argued that the leading centers of power currently have neither a well-formed understanding nor a clear view of a desirable future world order. "Maybe the post-COVID world would have some features of 'no poles', as scholar Richard Haas pointed out quite long ago," he added.

Prof. Perthes from Germany said that anti-globalist sentiments which were already getting popular in some parts of the world will further gain ground in the post-pandemic world, leading to deglobalization and more fragmentation of the international security order.

Prof. Yan of Tsinghua believed that there will be no global leadership in the coming decade. According to him, the coming world order will be an "order of bad faith" mainly because of the lack of global leadership. "However, I am still optimistic about the future," he said.

The second panel discussion on "Artificial Intelligence in the Post- Pandemic Era" was moderated by Liang Zheng, Vice President of the Institute for AI International Governance, Tsinghua University, with Xue Lan, Dean of Schwarzman College of Tsinghua, Professor Stuart Russel of Computer Science and Smith-Zadeh Professor in Engineering, University of California, Berkeley, USA, Zhang Yaqin, Chair Professor of AI Science, Dean of Institute for AI Industry Research, Tsinghua University, Wendell Wallach, Consultant of the Hastings Center, Chair of the Technology and Ethics Studies, Interdisciplinary Center for Bioethics, Yale University, USA, and Max Tegmark, Professor at MIT and President of the Future of Life Institute, USA as the five panelists. The panelists shared the use of AI in the ongoing COVID-19 responses in different countries and discussed how AI will be at forefront of the fight against future global health crises.

Fighting COVID-19

Fighting COVID-19: We are all together

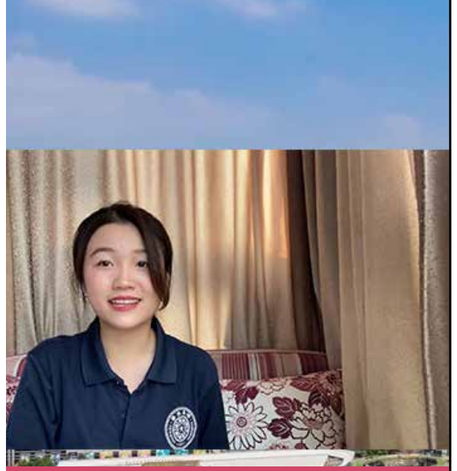
As the world battles hard against COVID-19, Tsinghua University and China Daily jointly organized a new edition of Vision China, inviting speakers from home and abroad to share their views and stories with a global audience about fighting the novel coronavirus.

The event, with the theme "Fighting COVID-19: We are all together", was broadcast online on March 31st, Beijing time. It was aimed at sharing experiences and consolidating strength, after last week's Extraordinary G20 Leaders' Summit on COVID-19 sent a message of solidarity and coordination in confronting the pandemic.

Chen Xu, Chairperson of Tsinghua University Council, delivered an address at the opening. "Public health security is a common challenge facing all countries, and COVID-19 is the common enemy of all mankind. At this critical moment, it is more urgent than ever to recognize that 'we are all together', including the critical role that universities play around the world," Chen Xu noted.

Chen Xu said that since the outbreak of COVID-19, Tsinghua University has been closely monitoring the health of all students, faculty and staff. Strict prevention and control measures have been implemented across the campus, in line with the government's response plan.

On February 17th, the spring semester commenced online, on time and on schedule; and more than 3,900 courses were launched. Tsinghua has shouldered additional responsibilities by expanding its social and international engagement. Tsinghua has also communicated with global partners to make active contributions in fighting the pandemic.



Zhou Shuchun, publisher and editor-in-chief of China Daily, also said that the whole world is now fighting against a common enemy - COVID-19."The fast-spreading pandemic has put all people in the same boat," Zhou said while delivering his opening speech. "This is a time for unity and solidarity. This is a time for reason and responsibility."

Zhang Ruiru, a 20-year-old student at Tsinghua University, went back to her home city of Wuhan for the traditional Chinese New Year holiday. Both of her parents were later diagnosed with the infection, and have recovered. Zhang said the fight against the outbreak has made her fully realize the strong unity of the Chinese people.

"Chinese people have stood as one to fight the virus. Medical workers from all over the country descended on Wuhan to help, and resources were sent into the city from all over China," she said.

Joint symposium on COVID-19

Joint symposium on COVID-19 Fightback and the Future "New Normal" with Imperial College London

A joint symposium on "COVID-19 Fightback and the Future 'New Normal'" organized by Tsinghua University and Imperial College London was held virtually on June 10th with experts calling for strengthening international solidarity and cooperation in scientific studies among universities to overcome the pandemic and prevent possible future global health emergencies.

The event, which brought public health experts from the World Health Organization (WHO), Tsinghua University and Imperial College London together, is the latest attempt by Tsinghua University to share knowledge and experience, and promote global efforts in the fight against COVID-19, which has affected more than 200 countries around the world.

Delivering a welcome speech at the opening session of the symposium, Alice Gast, President of Imperial College London stressed the importance of scientific collaboration and cooperation among universities and other international institutions around the world to overcome the pandemic and other global challenges.

"We must ensure that this pandemic strengthens the links between Chinese and UK science, and institutions such as ours. The coronavirus operates across borders, and so do our efforts to inhibit and defeat it," she said.

She announced that Imperial College London will be welcoming applications for the Tsinghua-Imperial Research and Innovation Seed Fund at the beginning of the next academic year. The fund promotes and supports early-stage collaboration among academics, researchers and students at Tsinghua and Imperial.

Chairperson of Tsinghua University Council Chen Xu, giving a welcome speech, said that universities around the world have a common commitment to building educational resilience as well as contributing to the fight against global health emergencies.

"I have confidence that our vibrant partnership will not only benefit the two universities, but also provide critical solutions for the world at large," she said.

Reaffirming Tsinghua's commitment to safeguard global public health security and improve human health, she said Tsinghua has set up a research fund and established the Vanke School of Public Health to encourage and support the university faculty to initiate joint research with international partners on COVID-19.

She also shared recent significant scientific and technological achievements made by Tsinghua faculty and students to fight against COVID-19. "Tsinghua has contributed to structural studies of coronavirus-receptor interactions, the development of a nucleic acid detection kit, the creation of an intelligence-assisted diagnosis system and the efficient isolation of antibodies against the coronavirus. In addition, we have provided open access to Tsinghua's drug discovery resources and platforms for global researchers," she said.

Margaret Chan, the Inaugural Dean of Vanke School of Public Health Tsinghua, and Honorary Director-General of the WHO, was one of the two keynote speakers of the symposium. She said that the international community should continue to uphold the concept of a community of a shared future for mankind, further strengthen cooperation under the guidance and coordination of the WHO, work together to overcome the current crisis and build a global community of health for all.

Praising China's successful handling of the COVID-19 epidemic and timely assistance to the countries affected by the epidemic, Chan said that the pandemic has reaffirmed the values of global solidarity, trust, unity and cooperation in the face of a shared common health threat.

Another keynote speaker, David Nabarro, WHO special envoy on COVID-19 and Co-Director of the Institute of Global Health Innovation at Imperial College London, said that unity, solidarity and cooperation shown by universities around the world in the fight against the coronavirus was praiseworthy.

"I have never seen the level of cooperation among scientists and among those who support science that we're seeing right now. This is so totally new. Let's take advantage of this wonderful collaboration between Imperial College and Tsinghua to take that degree of engagement and working together for the public good to a new level because we have got to learn to get public health right," he said.

The opening session was followed by three panel discussions on the following topics: COVID-19 Vaccine Development, Diagnostic Tools Development, and Post-COVID-19 economics.

Zhang Linqi, Chair of Global Health and Infectious Diseases Center, School of Medicine, Tsinghua University and Nilay Shah, Head of the Department of Chemical Engineering, Imperial College London, talked about vaccine development in China and the UK, while Cheng Jing, CAE Member and Professor, School of Medicine, Tsinghua University and Pantelis Georgios, Reader in Biomedical Electronics, Department of Electrical and Electronic Engineering, Imperial College shed light on diagnostics tools development. Ju Jiandong, Unigroup Chair Professor at PBC School of Finance, Tsinghua University and David Miles, Professor of Financial Economics, Business School, Imperial discussed post-COVID-19 economics.

Following the panel discussions, Yang Bin, Vice President and Provost of Tsinghua University and Maggie Dallman, Vice President (International) of Imperial College London, delivered concluding remarks.

Yang Bin expressed the hope to see collaboration between Tsinghua University and Imperial College London in COVID-19 vaccine manufacturing, while Maggie Dallman said that having a strong relationship with Tsinghua has put her institution in a very strong position to help the world population come through this crisis.

UN SDSN's webinar

President Qiu calls for further cooperation by universities with UN to achieve SDGs at UN SDSN's webinar

Tsinghua University President Qiu Yong urged universities around the world to further strengthen cooperation with the United Nations (UN) to achieve the Sustainable Development Goals (SDGs) and address the most urgent global challenges such as climate change.

President Qiu delivered his remarks at the webinar for presidents of global universities with the UN Secretary-General entitled "University Sector Support to UN Secretary-General's Call for a Decade of Action on the SDGs" on July 9.

The UN Sustainable Development Solutions Network (SDSN), a global network of over 1,000 universities supporting the SDGs, held the two-day online seminar to discuss the role of universities in mainstreaming the SGDs into university curricula and operations, conducting SDGs research and facilitating evidence-based stakeholder dialogues on the implementation of SDGs.

"Only by building closer and stronger partnerships with UN agencies can universities contribute to the realization of SDGs. Only by joining hands can we jointly achieve this 'decade of action' – and in so doing, inspire a brighter future for all," he said while addressing the first panel discussion of the webinar on the topic "The Future of Higher Education in the Post-COVID World".

He underscored that future universities must be more open, more integrative and more resilient; future learning must be more student-driven; future teaching must be smarter; and future education must be more inclusive.

He said Tsinghua University has demonstrated its commitment to work with UN agencies and other global partners to effectively respond to the UN's global call for a decade of action to realize the SDGs, by establishing research entities like the Institute for Sustainable Development Goals and launching a dual master's program for SDGs in collaboration with the University of Geneva.

In his remarks, President Qiu also highlighted Tsinghua's role in addressing the most urgent challenges around the world, such as climate change. "In May 2019, the Global Alliance of Universities on Climate was jointly established by 12 universities from six continents at Tsinghua University. The alliance aims to promote university leadership and the role of the university in climate change mitigation," he added.

He said Tsinghua continued to promote the quality and inclusiveness of education during the pandemic by utilizing innovative technologies and setting up online "clone classes" to support the universities in the regions hardest hit by the pandemic, including Huazhong University of Science and Technology, Wuhan University and other universities.

Professor Jeffrey Sachs of Colombia University, who is also director of the SDSN, praised Tsinghua's quick response in organizing online classes to support other universities during the pandemic, and expressed his appreciation of President Qiu for stressing the need for more inclusive and smarter universities in the future.

UN Secretary-General Antonio Guterres addressed the opening session of the two-day webinar via a video message. He said he was grateful to see universities around the world remain strongly committed to the SDGs despite facing colossal logistic and other challenges.

He said that the need to achieve the SDGs have become more urgent than ever in the face of the COVID-19 pandemic as it has not only caused a great suffering but also laid bare the world's inequalities and fragilities. "Together we can make multilateralism more effective and make our world more sustainable, equitable, climate-friendly and peaceful," he said.

"Over the past five years, government after government have expressed a genuine commitment to the SDGs but very often they lack the know-how and the capacity to govern and implement policies that deliver inclusive and sustainable economies. This is where universities can play a key role," UN Deputy Secretary-General Amina Mohammed said, urging universities to come up with more ambitious and decisive actions to help accelerate the progress on the SDGs even as the world grapples with the pandemic.

Peter Wells, Chief of Higher Education at UNESCO, said that the pandemic has offered an opportunity to refine methodologies for online teaching and learning, pedagogies and assessments, and enabled higher education institutions to achieve the SDGs, in particular the SDG in terms of widening access to quality higher education delivery for everybody.

Dr. Rajiv Shah, President, Rockefeller Foundation; Lee C. Bollinger, President and Seth Low Professor of the University, Columbia University; Jeffrey Cheah, Foundation Chancellor, Sunway University also delivered the opening remarks at the webinar. Joanna Newman, Secretary General, Association of Commonwealth Universities; Hilligje van't Land, Secretary General, IAU; Shinobu Yume Yamaguchi, Director, UNU-IAS; Peter Lennie, Executive Director, Worldwide University Network; Wayne Frederick, President, Howard University; Raghunath A. Mashelkar, President, Jio Institute; Makoto Gonokami, President of the University of Tokyo and Chair of the International Alliance of Research Universities (IARU); addressed at the session themed as "The Future of Higher Education in the Post-COVID World". Xue Lan, Dean of Schwarzman College at Tsinghua University, and Co-Chair of the Leadership Council of the UN Sustainable Development Solution Network (UNSDSN), also attended the webinar.

The second day of the webinar on Friday featured several panel discussions. Tsinghua's Vice President and Provost Yang Bin delivered his remarks on the topic "Universities and Climate Change".

"We believe that in the face of the common challenge of climate change, colleges and universities in the world have a shared responsibility to play a leading role in terms of promoting education and research on climate for the future," Yang said.

He said the Global Alliance of Universities on Climate established at Tsinghua encouraged research on climate change solutions that address global sustainable development goals and reduce impacts on the world's most vulnerable populations. "The alliance has launched a multilateral research project on Carbon Neutral Future, around technology, policy and investment. We are planning a number of academic meetings and are working to produce the first alliance academic report before COP 26," he added.

Tsinghua Global Summer School (GSS) 2020

Tsinghua held Global Summer School (GSS) 2020 sucessfully

Tsinghua University held Global Summer School (GSS) 2020 for nine days in July. Over 1,000 young talents from 154 universities across 79 different countries and regions attended the first-of-its-kind virtual summer school launched by Tsinghua, and undertook courses taught by distinguished scholars and practitioners from China and abroad on the theme "Toward a Post-Pandemic World".

Tsinghua President Qiu Yong welcomed the inaugural class of the Tsinghua Global Summer School (GSS) 2020 at the opening ceremony, which was livestreamed world-wide on various social media platforms.

"Today, by launching its Global Summer School, Tsinghua extends its fundamental commitment - educating and cultivating talents - to each and every participant here," President Qiu said, delivering his opening remarks. "This program exemplifies Tsinghua's spirit of 'Actions speak louder than words'".

Stating that the pandemic has brought the world to a standstill, causing widespread disruption and uncertainty to the economy and society, he expressed his hope that the summer school would inspire the young students to rethink and reimagine the global community, and to define our responsibilities in a post-pandemic world.

"As the young generation of students from around the world, your concerted efforts to address global challenges represent the hope of humanity. Your achievements and leadership will define our future, and will contribute to humanity through better preparation for the next crisis," he added.

President Qiu announced that Tsinghua would hold the GSS every year from this year onwards.

The online summer school offers courses on nine topics with reference to the post-pandemic world, and is taught by top-notch Chinese and international professors, as well as leading experts from renowned international companies.

The nine topics are: Innovative Thinking Post-Pandemic; Living Together Sustainably: Learning to Transform Oneself and Society; Economy Post-Pandemic; Sustainable Development Post-Pandemic; Artificial Intelligence Application and Governance; Society Post-Pandemic; Lifelong Learning and Development; Future- oriented leadership; and New Trend of Globalization and Global Governance.

President Qiu's speech was followed by a series of videos that showcased Tsinghua's development, internalization and exciting campus atmosphere during the opening ceremony, including the music video featuring Mojia, a robot band developed by Tsinghua's Academy of Arts and Design.

Professor Xue Lan, Dean of Schwarzman College at Tsinghua and Faculty Chair of GSS 2020, made an opening keynote presentation on "China's Innovation System - Myth and Reality."

During his special lecture, Professor Xue, whose teaching and research interests include STI policy, crisis management, and global governance, reviewed the evolution of China's innovation system, assessed the progress and regrets in China's innovation system, and reflected on the way forward.

According to him, coordinated opening-up and reform have served as two wheels for STI development in China. "Those reforms and openness enabled China's innovation system to flourish," he said, adding that China has always enjoyed strong leadership support for STI.

As a result, China's investment in research and development (R&D) has been growing steadily, with industrial R&D becoming a major part, he said. Professor Xue also said the continued increase of foreign R&D centers in China has also contributed to China's innovation system "in a very dramatic way".

Vice President and Provost of Tsinghua University Yang Bin delivered remarks at the closing ceremony, which was held virtually and broadcast live on various media platforms on Tuesday evening.

He congratulated and thanked all the participants on behalf of Tsinghua for taking part in the GSS 2020 online and exploring the post-pandemic world through various disciplines including economics, education, society, artificial intelligence, climate change and leadership.

He said, as Tsinghua's first ever virtual summer school, the GSS 2020 was able to break through barriers of learning, participation and communication to reach an even greater audience. "Like the year 2020, this year's summer school has also been extraordinary, "he said.

Vice President Yang pointed out five key terms—social responsibility, global, interdisciplinary, humility and community—to highlight the significance of the summer school.

"To put these five terms together, GSS aspires to foster an interdisciplinary-focused global community dedicated to making meaningful contributions to society," he added.

Stating that understanding China was imperative for aspiring leaders to become truly global citizens, he expressed the hope that the GSS experience would lead all the participating young students on to future learning and connections with China in the future.

"I hope that through GSS 2020 you have been challenged and inspired: challenged to deepen and expand your thinking, and inspired to dream big and learn more about China," he added.

He also urged all the GSS 2020 participants to explore future study or research opportunities at Tsinghua through its diverse English-taught masters' programs, exchange student programs or visiting scholar positions.

Vice President Yang thanked all the summer school speakers and academic support departments and schools for their enriching content as well as the staff of the Tsinghua Office of International Affairs, XuetangX and the Information and Technology Center for their efforts behind the scenes to make the summer school possible.

Altogether 17 academic institutions of Tsinghua, including eleven schools, departments and institutions, four overseas bases and two international higher education alliances initiated by the university were involved in this year's summer school, which featured lectures, keynote speeches and group discussions on nine different themes with reference to the post-pandemic world, virtual cultural events as well as virtual tours of Tsinghua University History Museum and Campus, Lenovo and Huawei. All the keynote speeches delivered at the GSS 2020 were open to the public.

Results of a survey about the program were also shared by John Paul, the moderator, at the ceremony. The majority of the participating students surveyed spoke highly of the program. They said the program met their expectations and was beneficial for their learning, according to the survey.

Prior to the closing ceremony, Prof. Jiang Xiaojuan, who is Dean of the School of Public Policy and Management, Tsinghua University, delivered a closing keynote presentation on "Globalization and its Governance in the Digital Age."

She talked about three aspects of the globalization—products, enterprises and economies; digital globalization; and the governance concept and value of digital globalization.

"In this era, no one has such authority to make universal rules for the globe. We must cooperate," she said.

According to her, inclusiveness, respect, maximizing human interest, human prosperity, sustainability and harmony should be the values for governance in the digital age.

"In the digital era, physical, cultural and intellectual ties between nations and individuals are becoming closer and deeper. We are indeed in the age of a digital planet. Therefore, digital governance must be global," she added.

Times Higher Education (THE) World Academic Summit

Tsinghua University proposes the Pandemic as a new Dawn for Higher Education at THE World Academic Summit

On September 1st and 2nd, the Times Higher Education (THE) World Academic Summit was held online. Tsinghua University discussed and shared the prospects for post-pandemic higher education with leading thinkers from all over the world.

Tsinghua University President Qiu Yong delivered the remarks entitled "Renewal and Hope: Post-pandemic Trends in Higher Education" at the summit. He said 2020 was a watershed moment in history and a "new dawn" for higher education.

During the speech, President Qiu elaborated on the challenges that have emerged for higher education institution in 2020. He noted that these challenges, however, represented renewal of hope. He believed that as a result of the changes made in the face of these challenges, the university's role in contributing to solving global challenges would become more prominent.

President Qiu argued that, due to the pandemic, there were many recent transformations to higher education. In the post-pandemic era, the university will be more open and integrative, more student-driven, smarter and more inclusive. World-class universities will lead with vigor.

"The pandemic will be the catalyst for even more profound changes in higher education. By working together, renewal and hope will see us through this unprecedented challenge," Qiu said.

In a subsequent panel discussion, Tsinghua's Vice President and Provost Yang Bin shared examples that support the view that 2020 is a "new dawn" for higher education. Yang believed that global higher education was a big step closer to the realization of "hybrid education" which transcended merely "teaching" and "learning."

Based on Tsinghua's practical experience, Yang Bin proposed that there were many emerging areas of improvement and optimism, particularly changes in the higher education landscape. He said that the development of online education modalities created more learner-oriented approaches, brought greater accessibility to education, and increased openness and transparency to higher education processes and outcomes.

"Although the pandemic has caused physical separation, it has led to a deeper appreciation of society's indivisibility," Yang said while elaborating some of the recent efforts made by universities around the world shouldering additional social responsibilities and engaging in front-line work to combat the pandemic. Yang also stressed that future education must achieve greater levels of inclusion and quality.

Susan McCahan, Vice-Provost of Academic Programs at the University of Toronto, said the blending of the virtual with the real classroom had the potential to reduce inequity, but also may promote it since some students had challenges in internet access and other ways of engagement. She was concerned about the identity of the university going forward in this kind of blended model.

Richard Miles, Vice-Provost of Academic Performance and Pro-Vice-Chancellor of Education, Enterprise and Engagement at the University of Sydney, was concerned whether the blended model could cultivate students' core human skills such as problem-solving, thinking critically, and working productively, which relied on quite a lot of face-to-face interaction. He said it was essential that universities kept developing tools to provide students from diverse backgrounds.

Clay Shirky, Vice-Provost for Educational Technologies at New York University proposed that "the human capital involved in online education" was no different from in-person teaching and required specialist IT infrastructures well, "there are no immediate cost savings.

The representatives also discussed other issues, including online course tuition, universities' new relationship with society, and universities' opportunities and responsibilities in the future.

The THE World Academic Summit brought together pre-eminent global thought leaders across higher education, research, industry, and government to share best practices and innovation in world-class universities and research. It was also an excellent opportunity to showcase Tsinghua and other Chinese universities' responses to the pandemic and engage in an open discussion on post-pandemic higher education to the world.

The Tsinghua Southeast Asia Cloud Forum

Forum looks to boost regional cooperation, sustainable development

The Tsinghua Southeast Asia Cloud Forum was launched on Sept 23rd to inspire exchanges among international leaders from various sectors that could lead to the attainment of sustainable development goals (SDGs) and push forward regional development and cooperation. The opening ceremony was hosted by Tsinghua Vice President and Provost Yang Bin.

Co-sponsored by Tsinghua University and the Indonesian United in Diversity (UID) Foundation, the forum has gathered attendees from the public and private sectors and civil society, mainly from China, Indonesia and other Southeast Asian countries.

At the opening ceremony, Tsinghua President Qiu Yong pointed out in his speech that Indonesia is the largest economy in the Association of Southeast Asian Nations (ASEAN) and where the 21st Century Maritime Silk Road initiative was first proposed. The university has always deemed Indonesia a major partner and has been expanding educational exchanges and regional cooperation with it.

According to Qiu, the Tsinghua Southeast Asia Center (Tsinghua SEA) has been highly praised for its talent training programs over the last two years in Southeast Asia, mainly in Indonesia. These programs have bettered cultural and academic exchanges between China and Southeast Asian countries.

President Qiu said he believes the three-day online forum will also achieve fruitful results, and urged the attendees to promote

innovative development and cooperation and strive for a better world, a community with a shared future for mankind.

Ning Jizhe, Vice Chairman of the National Development and Reform Commission (NDRC), was present and expressed his congratulations. He was commissioned by He Lifeng, Vice Chairperson of the 13th National Committee of the Chinese People's Political Consultative Conference (CPPCC) and Chairman of the NDRC.

"This year marks the 70th anniversary of the establishment of diplomatic relations between China and Indonesia. The 70 years have witnessed international turmoil, but also increasing prosperity in the two countries and closer people-to-people communications," said Ning.

Ning pointed out that the NDRC and Indonesian governmental departments have worked closely on development plans and regional projects since 2015.

He also affirmed Tsinghua SEA's active role in boosting talent training and educational cooperation, developing science and innovation ecosystems, and realizing SDGs.

Indonesian President Joko Widodo sent a congratulatory letter to the forum expressing appreciation of Tsinghua SEA's achievements in human capital development, educational exchange and cross-sector dialogue. He believes that the center will continue to play a catalytic role in bridging Indonesia, China, Southeast Asia and other areas.

Cooperation is more needed than ever amid the COVID-19 pandemic, said Luhut Pandjaitan, Coordinating Minister for Maritime Affairs and Investment.

UID Foundation President Tuti Hadiputranto said in her welcome speech that the forum is a symbol of the cooperation and mutual trust between the two countries, and called for unity and open attitudes to seek wider cooperation.

At the following plenary discussions, participants exchanged views on such topics as the red line for ecological protection, paths for peace, and collaboration with the Tsinghua SEA on sustainable development and happiness.

"Healthy China" seminar

Tsinghua's Vanke School of Public Health holds seminar to share COVID-19 prevention and control experiences

Tsinghua University's newly established Vanke School of Public Health held a seminar on September 25th to exchange experiences in the prevention and control of the COVID-19 pandemic in China, as well as discuss strategies and measures for the normalized epidemic prevention and control.

The "Healthy China" seminar was held under the title "Capacity Enhancement Training Program – Theory and Practice of Prevention and Control of the COVID-19 Pandemic."

During the seminar held both online and offline, ten distinguished officials and experts from relevant fields including China's National Health Commission shared their experiences in the prevention and control of the COVID-19 Pandemic over the past half year, and exchanged opinions on how to continue to control the pandemic in the future.

Ma Xiaowei, Minister of the National Health Commission, highlighted the need to remain vigilant on the pandemic with increasing people movement and gatherings. He said wavering efforts at the international level could lead to a possible influx of the COVID-19 in the country. He also stressed on the importance of strong control of the epidemic in the upcoming autumn and winter season.

"To continue the best efforts, there is a need to place the lives of people first in order to secure a better life for everyone. The National Health Commission will continue to work closely with Tsinghua University," he said.

Tsinghua University President Qiu Yong, speaking at the seminar, expressed his gratitude to the lecturers and coordinators of the program for organizing the "Healthy China" Seminar. President Qiu said although the epidemic was a testing time for the university, the coordinated efforts by the leaders from all levels enabled it to get through the pandemic. According to him, its bedrock of innovation had allowed Tsinghua University to lead in its efforts for the integrated online and offline education during the epidemic.

"It will be the 110th anniversary of Tsinghua University in 2021. Tsinghua University will continue its efforts for growth and development. It is expected that the university and its students will continue to hold on to its spirit of perseverance through adversity to strive for more advancement of the university and the nation," said President Qiu.

Dr. Margaret Chan, the inaugural Dean of the School and Emeritus Director-General of WHO, expressed her gratitude to the National Health Commission, lecturers and participants attending the seminar.

She thanked the people and the Chinese government for their efforts to win the fight against the COVID-19. Although she was in Hong Kong during the epidemic, she keenly watched the developments that took place in the mainland with regard to the prevention and control of the pandemic, and was proud to see the mainland heading in a positive direction in its fight against the COVID-19.

"I appreciate the chance to continue to contribute to the public health cause in China," she said.

Dr. Michael Ryan, Executive Director of the World Health Organization Emergencies Program commented on the spread of the pandemic in different parts of the world. He stressed on the need of coordinated efforts, strong leadership, and trust in science at the national and regional levels to keep the pandemic from escalating.

China-US University Presidents' Online Forum

The China-US University Presidents' Online Forum, jointly organized by Tsinghua University and Yale University, was held on October 13th, bringing together leaders from 20 leading Chinese and American universities to explore the development of higher education and to strengthen the post-pandemic resilience of university collaborations and networks.

Chinese Vice Premier Sun Chunlan delivered her congratulatory remarks via video during the opening session of the online forum held under the theme "Fostering More Open, Integrative and Resilient Universities."

Sun said, higher education represents a space of advanced collaborative exchange between China and the US, enhancing the mutual understanding and friendship between the peoples of China and the US, and promoting the development of China-US relations.

Sun said she was hopeful that universities of China and the US will, under the principles of openness and inclusiveness, leverage their complementarities and broaden the space for cooperation in education, research and joint programs.

"It is hoped that universities enhance mutual learning through communication, and mutual trust through cooperation, and contribute to the building of a community of shared future for mankind." she added.

Tsinghua University President Qiu Yong, delivering his opening remarks, said that by bringing together colleagues from leading universities in China and the US, Tsinghua hoped to highlight the importance of global collaborative engagement, and better understand the development of universities more broadly.

President Qiu urged all the universities to be united in the fight against profound challenges that humanity faces such as global health emergencies, climate change, economic volatility, social inequality, and ecological degradation.

He said universities have been marching towards openness, imparting knowledge and wisdom to all mankind, and promoting exchange and cooperation in local and global communities.

"If universities are to fulfill their mission to advance human development and expand the boundaries of knowledge, we must become more open, more integrative and more resilient," he added.

President Qiu argued that universities have demonstrated their resilience throughout history as one of the oldest type of institutions in existence, surviving countless wars, crisis, and challenges of all kinds in human civilization.

He said that universities once again proved their resilience during the COVID-19 pandemic by adjusting teaching and learning models and playing an irreplaceable role in supporting global health by understanding the virus and developing vaccines and treatment in a short span of time, and through these efforts will make humanity better prepared for future health crises.

President Qiu stressed that universities of the future must be "more integrative" and should continue to break through physical borders, disciplinary barriers, technological limitations, and identity constraints, and seamlessly connect with societies, governments, NGOs and industries.

Likewise, Yale University President Peter Salovey said in his opening remarks that the way research universities around the world have responded even though the world is experiencing a true global disruption has demonstrated that open, integrative resilient research universities are built on cooperation across national borders.

"Although I am realistic about the difficulties in the coming months, I am confident that the lessons we are learning and the ways we are adapting will help us emerge with resilience and strength. This includes a renewed sense of purpose in building sustaining our international collaborations, learning from history," he said.

"In addition, we can and should leverage our response to the COVID-19 crisis to change how we address other global threats, such as climate change and geopolitical tensions," he added.

Following the opening ceremony, the forum then featured three keynote speech sessions in line with its main theme. The first session, moderated by Tsinghua University Vice President and Provost Yang Bin, saw a discussion on "Fostering More Open Universities," while President Michael A. McRobbie and Vice President Hannah Buxbaum from Indiana University, Vice President Chen Jianguo from the Huazhong University of Science and Technology, Rector Yonghua Song from the University of Macau, Executive Vice President Safwan M. Masri from Columbia University, President Lin Zhongqin from Shanghai Jiao Tong University, and President Luo Jun from Sun Yat-sen University attended the session.

Indiana University President McRobbie said, "In the internet age, the research enterprise has become necessarily global as it is through collaboration of the best and the most stable researchers from all countries, contributing diverse innovation, approaches and methods that fundamental breakthroughs are made and that we are able to address the critical challenges of the day." The Huazhong University of Science and Technology Vice President Chen Jianguo also believed that opening-up is core to university development and is the source of its vitality and creativity. He said, "If the pandemic is a test of international collaboration, then our lesson from it would be: the more open a university is, the more momentum it will release, especially when confronting challenges we globally face."

"Fostering More Integrative Universities," was the theme of the second session, moderated by Kurt Dirks, Vice Chancellor of Washington University in St. Louis. This session saw President Xu Ningsheng from Fudan University, President David W. Leebron from Rice University, President Zhang Xi from Jilin University, Chancellor Kent Syverud from Syracuse University, President Cao Xuetao from Nankai University, and President Ruth V. Watkins from The University of Utah as the speakers.

"Despite the current obstacles, we need such global collaborations now more than ever," Rice University President Leebron said, delivering a PowerPoint presentation on "The Borderless University." President Cao Xuetao from Nankai University and President Xu Ningsheng from Fudan University, in separate speeches, pushed for effective integration, connection and collaboration among universities worldwide including China and the U.S.

The last session addressed the theme of "Fostering More Resilient Universities." Wendy Wolford, Vice Provost, Cornell University, was the moderator as well as one of the speakers of the session. Other attendees of the session were Chancellor Andrew D. Martin from Washington University in St. Louis, President Yan Chun-Hua from Lanzhou University, President Laurie Leshin from Worcester Polytechnic Institute, President Wu Zhaohui from Zhejiang University, and President Dwight A. McBride from The New School.

Addressing the session, The New School President McBride said that his university's relationship with overseas universities like Tsinghua helped it to be responsive and resilient during the pandemic, urging the university leaders to find ways to work across political and bureaucratic barriers in the interest of the educational mission higher education institutions all share. Likewise, Zhejiang University President Wu Zhouhui also said that his university was looking forward to using the form as an opportunity to jointly push university cooperation in the post-pandemic era to a higher-quality development state, and contribute greater wisdom and strength to the China-US friendship and human development.

The forum concluded with a closing remark from Tsinghua Vice President and Provost Yang Bin. He said, "The pandemic and subsequent travel restrictions have added additional layers of complexity to educational exchanges and mobility, but through proactively searching for solutions and promoting communication and mutual understanding, we can turn challenges into opportunities and foster more open, integrative and resilient universities together".

Tsinghua University's Vanke School of Public Health recently set up its first international advisory board

Tsinghua University's Vanke School of Public Health recently set up its first international advisory board to bring great minds together and seek academic and other scientific and technical input for the further development of the recently-established school as well as for China's public health sector.

The board is composed of 34 well-known experts and scholars from 12 countries around the world, including deans of world-famous public health schools, leaders of non-governmental organizations, public health sector leaders, and outstanding entrepreneurs.

Tsinghua established the school this April, aimed at covering four research fields, namely preventative medicine, comprehensive healthcare, big data in healthcare, and public health policy and management.

To transform the school into a world-class public health school, the board is expected to give forward-looking guidance and suggestions for the school's scientific research, talent nurturing, social services, international cooperation and exchange, and to help expand its global presence.

"The advisory board will play an important role in summarizing and sharing China's public health governance experience, facilitating further improvements, and contributing to global health governance," said Chen Xu, Chairperson of Tsinghua University Council, at the board's meeting with its Chinese members on 20th October.

She noted it would also act as a high-end training base for public health pioneers and talents to promote China's think tank construction for the "Healthy China" strategy and its public health management, as well as strengthen global health governance and international cooperation.

The board is co-chaired by Han Qide, Honorary President of the China Association for Science and Technology and academician of the Chinese Academy of Sciences, and Harvey Feinberg, President of the Gordon and Betty Moore Foundation.

At the meeting, Han suggested Tsinghua make full use of its excellent scientific and academic research results to fight against the COVID-19 pandemic as well as pursue in-depth public health development via closer cooperation with both Chinese and overseas universities.

Dr. Margaret Chan, founding Dean of the school, presided over the meeting and introduced the board's background and constitution.

On October 22, the school held its online board meeting with international members from 11 countries, who shared their opinions on teaching innovation, interdisciplinary cooperation, lifelong education in the public health field, young faculty development, incentive mechanisms and research platforms.

They also talked about the development and planning of the school and looked forward to future cooperation.

Qiu Yong, President of Tsinghua University, expressed his congratulations on the opening of the board's meeting via video link.

He said the advisory board would become a highlight in the field of global public health education, and hoped the school would give full play to the role of the board, strive to build a world-class public health school and make greater contributions to the realization of a "Healthy China" and a global community of health for humanity.

Harvey Feinberg pointed out that the Vanke school should "not only be the leading school of public health for China, but also represent a way of working for public health from an academic base that brings together the whole of society and that reaches across nations for a more global outlook."

Tsinghua co-hosts China-Italy University Presidents' Forum

On 5th November, the eve of the 50th anniversary of the establishment of diplomatic relations between China and Italy, Tsinghua University and the Politecnico di Milano co-hosted the China - Italy University Presidents' Forum.

With the theme "Innovation for Shared Future", the online forum brought together over twenty leaders from higher education institutions in China and Italy to celebrate the fruitful partnership between the two countries in the field of science, education, and culture in the past 50 years, as well as to explore cooperation in the next half-century that paves the way for a shared future.

Chen Xu, Chairperson of the Tsinghua University Council, and Ferruccio Resta, Rector of the Politecnico di Milano and President of the Conference of Italian University Rectors, delivered opening remarks at the forum.

"The friendship between China and Italy has flourished for thousands of years. The ancient Silk Road witnessed an enduring cultural exchange between the two countries. The mutual support Chinese and Italians offered each other since the outbreak of COVID-19 is a demonstration of the comprehensive partnership we formed," Chen said in her remarks. "During the past years, Tsinghua has forged extensive and in-depth cooperation with Italian universities in various forms. The China-Italy Design Innovation Hub Tsinghua established in collaboration with the Politecnico di Milano has become a flagship program between the two universities and the two countries."

"The profound changes, instabilities and uncertainties we are facing in the world today remind us constantly of the importance of unity," Chen pointed out, "This year marks the 50th anniversary of the establishment of diplomatic relations between China and Italy. The cooperation in technological innovation between the two countries is set to usher in greater latitude. Tsinghua is willing to keep working together with our partners from both China and Italy to promote global sustainable development."

Ferruccio Resta reflected on the partnership Politecnico di Milano had with Tsinghua in his remarks. "COVID-19 does not only pose the threat to the world but also offers an opportunity to transform," he said, "The successful partnership between Tsinghua and the Politecnico di Milano has laid a solid foundation for us to shoulder together the responsibility of higher education institutions in navigating the changes, leading the transformation, and in shaping universities that face the future."

Following the opening remarks, the forum witnessed the launch of the China-Italy Year of Youth Innovation & Entrepreneurship, a year-long program, organized by the China-Italy Design Innovation Hub and the Innovation & Entrepreneurship Education Alliance of China, that aims to gather collaborative strength across the world to make strategic contributions for innovation-driven development by creating a favorable ecosystem, promoting exchanges between Chinese and Italian youth, and cultivating leading talents.

Two keynote speech sessions were organized afterwards. Yang Bin, Vice President and Provost of Tsinghua University, together with Giuliano Noci, Vice President of the Politecnico di Milano, moderated the forum.

The first one addressed the topic of "Innovation from a Global Perspective". Liu Jiongtian, President of Zhengzhou University, Zuo Wei, Chairman of the University Council of Southeast University, Guido Saracco, Rector of the Politecnico di Torino, Duan Xianzhong, the President of Hunan University, Guo Yurong, Chairperson of the University Council of the Southern University of Science and Technology, Sergio Cavalieri, Vice Chancellor of the Università degli Studi di Bergamo, Norman Tien, Vice-President and Pro-Vice-Chancellor of the University of Hong Kong, Alessandro Paccagnella, Vice Rector of the

Università degli Studi di Padova, Bruno Botta, Deputy Rector of the Università degli Studi di Roma "La Sapienza", and Li Weiqing, Vice President of the South China University of Technology, attended the session. The participants reflected on the benefit their universities gained from the enduring China-Italy friendship and shared innovative measures in boosting scientific research and development, improving talents nurturing outcomes, and enhancing university management.

The second session, with the topic of "Trans-Discipline Innovative Practice," saw a vibrant discussion on the importance, urgency, and successful cases of trans-discipline innovation by Li Yanrong, President of Sichuan University, Andrea Prencipe, Rector of Luiss University, Fan Di'an, President of the Central Academy of Fine Arts, Alessandra Scagliarini, Vice Rector of Alma Mater Studiorum - Università di Bologna, Lei Xinghui, Vice President of Tongji University, He Lianzhen, Vice President of Zhejiang University, Liu Lanjuan, Vice President of the Shanghai University of Finance and Economics, Giovanni Breglio, Vice Rector of the Università degli Studi di Napoli "Federico II", and Zeng Chenggang, President of the Shanghai Academy of Fine Arts at Shanghai University.

The forum closed with remarks by Giuliano Noci. He shared his expectations for the China-Italy Design Innovation Hub as well as future cooperation between China and Italy. "Located at the two ends of the ancient Silk Road, China and Italy share a long-lasting friendship and should be regarded as one big family. Taking today's forum as the starting point, let's work hand in hand in contributing towards the post-pandemic world," he said.

Tsinghua SPPM hosts 2020 Global Advisory Board Meeting

The 2020 Global Advisory Board Meeting of Tsinghua's School of Public Policy and Management (SPPM) was held on 7th November.

The meeting, held combining both online and offline channels under the theme "Challenges of Global Governance and Cultivation of Public Management Talents," brought together 25 advisory board members from China and abroad to assess gaps exposed by the COVID crisis in global governance, exchange ideas to strengthen it in the post-COVID world, and set priorities for the further development of the school accordingly.

Chinese State Councilor and Foreign Minister Wang Yi attended the opening ceremony of the meeting, and delivered a speech entitled, "Uploading Multilateralism to Tackle Global Challenges."

He said what has happened since the start of COVID-19 has proved time and again that humankind is a community with a shared future, multilateralism is the right way forward, and that strengthened global governance is an urgent necessity.

"Facing this common challenge, whether the international community can choose solidarity over division, opening-up over isolation, and cooperation over confrontation has put the wisdom, conscience and courage of humanity to a grave test," he said, adding, China is firmly committed to multilateralism, the path of peaceful development, and the building of a community with a shared future for mankind.

He announced a host of proposals and initiatives aimed at tackling global challenges and advancing common development, and shared his vision on how to carry forward multilateralism and strengthen global governance in a post-COVID era.

Likewise, Chairperson of Tsinghua University Council Chen Xu delivered her remarks at the opening ceremony. She opined that improving the governance system and the global governance capabilities were imperative and important as the world was undergoing major changes unseen in a century.

She expressed the hope that the advisory board members of the school contribute insights and ideas toward the construction of public management discipline and talent training and the reform of global governance.

Chen Xu thanked the advisory board members for playing an important role in the development of the Tsinghua SPPM and Tsinghua University in the past years.

Following the opening ceremony, Tsinghua President Qiu Yong and three advisory members delivered keynote speeches.

For his part, President Qiu, in his video speech, said that the reform of the global governance system has posed a common challenge for mankind, and that Tsinghua and Tsinghua SPPM were committed to cultivating backbone professionals and leaders in support of advancing global human undertaking.

Ding Zhongli, Vice-Chairman of the Standing Committee of the 13th National People's Congress and Chairman of the Central Committee of China Democratic League, suggested the Tsinghua SPPM improve the talent training system through three ways: fostering collaboration with relevant ministries and agencies, setting up a talent cultivation alliance among Chinese universities for international organizations, and creating additional internship opportunities for students to work at international organizations.

Wan Gang, Vice Chairman of the 13th National Committee of the Chinese People's Political Consultative Conference, Chairman of the Central Committee of China Zhi Gong Party, and President of the 9th National Committee of the China Association for Science and Technology, emphasized the urgency to advocate openness and inclusiveness, promote mutual learning and trust, and bring vitality to innovation-led cooperation in the post-epidemic period.

Zhou Xiaochuan, Vice-Chairman, the 12th National Committee of the Chinese People's Political Consultative Conference and Vice Chairman of the Boao Forum for Asia, said allocating substantial efforts in terms of institutions, market construction, and innovative technologies, among others, are necessary to realize China's goal of carbon neutrality by 2060. "We should strengthen international cooperation on carbon emissions targeting borderless areas and explore the establishment of relevant international governance mechanisms," he added.

The meeting then began its first session moderated by John L. Thornton, the annual Co-Chair (International) of the global advisory board, on the theme of "Challenges of Global Governance & Development and Reform of Higher Education."

The first session saw speeches delivered by Jiang Xiaojuan, Dean of Tsinghua SPPM; Dr. Margaret Chan, Emeritus Director-General of the World Health Organization and Inaugural Dean of the Vanke School of Public Health of Tsinghua University; John Holdren, the Teresa and John Heinz Professor of Environmental Policy at Harvard Kennedy School; Lou Jiwei, a member of the Standing Committee Member and Chairman of the Committee of Foreign Affairs of the 13th National Committee of the Chinese People's Political Consultative Conference; Paul Romer, University Professor in Economics at New York University and Nobel Laureate in Economics; Chen Deming, former Minister of Commerce of China, former Chairman of the Association for Relations across the Taiwan Straits, and Director of the Institute of Taiwan Studies, Tsinghua University; Xie Fuzhan, President of the Chinese Academy of Social Sciences (CASS), Secretary of the Leading Party Group, and Chairman of the Presidium of the Academic Division; Lu Mai, Vice Chairman of the China Development Research Foundation (CDRF) and Secretary-General of the China Development Forum; Sandra O. Archibald, Dean Emeritus and Professor at the Evans School of Public Policy and Governance of the University of Washington; and Yang Bin, Vice President and Provost of Tsinghua University.

Jiang Xiaojuan said that to address the changes and challenges of China's public and global governance, Tsinghua SPPM would develop public management academic programs at a higher level, reform the existing postgraduate education system for professional degrees, and improve the capability of cultivating academic postgraduates.

Yang Bin said the public management education in universities should give full play to its advantages in terms of student selection, curriculum settings, cultivation programs formulation, creating an open and diverse community for talent cultivation and attaching great importance to the basic science and technology education for public management talents in terms of new literacy skills.

Zhou Xiaochuan, the Chinese Co-Chair of the global advisory board, hosted the second session of the meeting under the theme "Global S&T Cooperation and Cultivation of Public Management Talents".

Xue Lan, Director of the Academic Committee of Tsinghua SPPM and Dean of Schwarzman Scholars; Aiji Tanaka, Professor and President of Waseda University, Japan; Wu Hongbo, Special Representative of the Chinese Government on European Affairs, former Under-Secretary-General of the United Nations, President of the China International Public Relations Association, and Co-Director of the Institute for Sustainable Development Goals of Tsinghua University (TUSDG); Muhammad Yunus, founder of the Grameen Bank at Bangladesh and a Nobel Peace Prize Laureate; Robert J. Zimmer, President of the University of Chicago; Danny Quah, Professor and Dean of the Lee Kuan Yew School of Public Policy at the National University of Singapore; Frédéric Mion, President of Sciences Po; Ma Huateng (Pony), Tencent's Chairman of the Board and Chief Executive Officer; Ngaire Woods, Dean of the Blavatnik School of Government at Oxford University; and Chen Qingtai, former Secretary of the CPC Leadership Group, and the State Council Development Research Center, former Vice-Minister of the State Economic and Trade Commission, and the founding Dean of the School of Public Policy and Management, addressed the second session.

Xue Lan elaborated the Tsinghua SPPM's efforts of global cooperation in the fight against the COVID-19 pandemic, while other speakers highlighted the need to promote cooperation among universities to cultivate public management talents and boost global cooperation in science and technology.

AUA Presidents Forum held on building resilient Asian universities

The Asian Universities Alliance (AUA) Presidents Forum 2020, jointly organized by the AUA Executive Presidency 2020-2021, Nazarbayev University (NU), and the AUA Secretariat, was held online on 26th November.

The forum brought leaders of 15 AUA member universities together to share their knowledge from the experience of coping with the COVID-19 crisis for sustainable survival and progressive development, and to co-create and develop, through hindsight and foresight, knowledge for more robust and resilient university systems capable of withstanding and responding to continuous, and probably more severe, uncertainties and challenges in the future.

Tsinghua President Qiu Yong, who is also the President of AUA, delivered opening remarks at the opening ceremony of the forum.

Congratulating NU on its 10th anniversary, President Qiu thanked NU President and the current AUA Executive President Shigeo Katsu and his team for hosting AUA's two important events amid a global pandemic, and thereby strengthening the synergy of AUA.

He said he felt grateful and encouraged that the AUA members came together again, to have an important conversation on the theme of "Knowledge is Power: the Resilience of Asian Universities in a VUCA World," in a resolve to navigate Asian higher education through the global pandemic of COVID-19. By a "VUCA" world is meant a world with "volatility, uncertainty, complexity, and ambiguity."

"The universities represented at this forum each possess a unique heritage of traditional wisdom and a remarkable spirit of innovation," President Qiu said. "It is my fervent hope that together we can build more resilient models of higher education capable of withstanding and responding to any and all uncertainties and challenges which may lay ahead."

President Qiu stressed that universities must be resilient to thrive in the most challenging times, holding steadfast to their traditions, and that the commitment to innovation has emboldened universities' resilience to persevere through this "VUCA" world.

"At Tsinghua University, we have embraced our enduring traditions to gain strength that enables us to briskly recover from the disruption, and to advance with greater confidence. In a year that seems as if everything we know has changed, our unwavering commitment to education, research, and community service remains resolute," he added.

Meanwhile, President Qiu also invited leaders of all the AUA members to join Tsinghua's 110th-anniversary celebration to be held next year in April.

NU President Shigeo Katsu delivered the welcoming remarks at the forum.

He pointed out that the AUA had enabled its member universities to collectively respond to the challenges of the VUCA world,

lead intellectual scholarship and research endeavors, and develop future leaders in the region.

"In these difficult times marked by the COVID-19 pandemic, working together and building on our strengths, we will continue to accomplish great things and we will emerge stronger and more resilient," Kastu added.

Kastu said that, during its tenure as the Executive President of the AUA, NU would like to strengthen cooperation among young researchers and scholars within the AUA network. He urged leaders of the AUA members to reflect on the pressing issues they have been facing, and share their experience of addressing the challenges of the VUCA world.

The forum featured two panel discussions following the opening ceremony.

The first panel, entitled "Timeless Knowledge: Traditions of Asian Universities in Persisting through a VUCA World" was moderated by NU President Katsu, while Tan Eng Chye, President of the National University of Singapore; Subhasis Chaudhuri, Director of the Indian Institute of Technology Bombay; Agustin Kusumayati, University Secretary of Universitas Indonesia; Chandrika Wijeyaratne, Vice-Chancellor of the University of Colombo; and Sawako Shirahase, Executive Vice President of the University of Tokyo, attended as the speakers.

The speakers shared their experiences in running their academic institutions in the face of the pandemic, and discussed possible avenues of cooperation among AUA members.

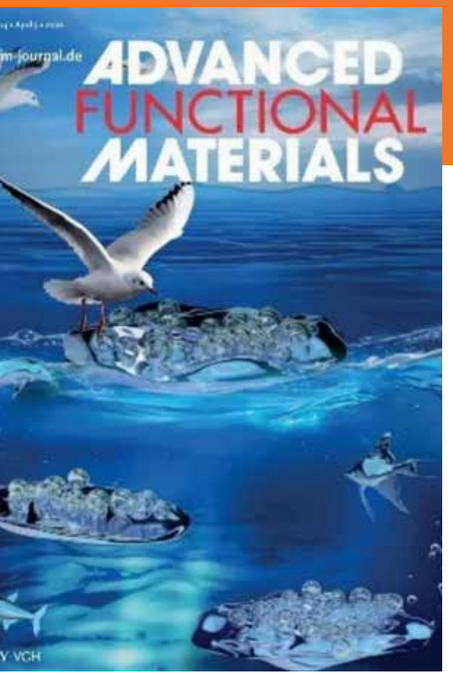
The second panel was on the topic "Timely Knowledge: Innovation of Asian Universities in Turning Risks into Opportunities", moderated by Ilesanmi Adesida, Provost of Nazarbayev University.

Bundhit Eua-arporn, President of Chulalongkorn University; OH Se-Jung, President of Seoul National University; Ghaleb Alhadrami Albreiki, Provost and Acting Vice-Chancellor of United Arab Emirates University; Mohd. Hamdi Abd. Shukor, Vice-Chancellor of Universiti Malaya; Nilar Aung, Pro-Rector of the University of Yangon; and Wei Shyy, President of the Hong Kong University of

Science and Technology, exchanged their ideas as panelists. The speakers deliberated on aspects Asian universities can focus on while reforming their higher education systems to become resilient, creative, and innovative, and turn risks into opportunities.

The forum concluded with the closing remarks from NU President Katsu. He summarized the insightful views shared by the speakers during the two panel discussions, and concluded the forum as successful, fruitful and informative. He expressed the hope that AUA members would make the best use of the annual presidents forum to bring out more collaboration for a robust growth of Asian universities in the future.

SCIENTIFIC INNOVATION



Tsinghua researchers invent metal that refuses to sink

What if metal was more than just a cold and rigid material? Although T-1000, the self-repairing, shape-shifting android assassin was merely a figment of creative imagination, the vision is a step closer to becoming reality. In fact, there are metals that behave like water and do not solidify at room temperature.

Benefitting from good electrical conductivity and fluidity, these liquid metals attract the likes of various industries such as wearable sensors, exoskeleton systems and soft robotics. However, the heavy weight of metal stood out as a major concern, for which may bring discomfort and extra energy loss especially when donned on humans.

To overcome the challenge, Professor Liu Jing from Tsinghua's School of Medicine led a team of researchers from Tsinghua and the Chinese Academy of Sciences to propose a concept of "lightweight liquid metal entity." They developed a liquid metal alloy less dense than water by combining the material with hollow glass beads, which could be potentially used to make lightweight exoskeletons or transformable robots.

The research was recently published in Advanced Functional Materials and selected as the inside back cover. The density of the material (called GB-eGaIn) decreased more than 70% as compared to the original metal, which means it can float on water under specific situations. Based on these results, two typical structures of GB-eGaIn were designed, including the planar structure and 3D structure.

This material has good phase transition properties with the ability to switch between a completely soft state (like water) and a rigid metal level under temperature regulation. What's more, when combined with water-proof package materials, GB-eGaIn can also realize controllable float and sink behavior. These results show the potential of diversity shaping and reliable mechanical/electrical performance of GB-eGaIn, indicating its feasibility for use as temperature-regulated functional components, and may offer potential use in developing advanced smart underwater devices.

A new mechanism of Ising pairing in Science

A research team headed by the Department of Physics reported a new mechanism of Ising pairing in Science

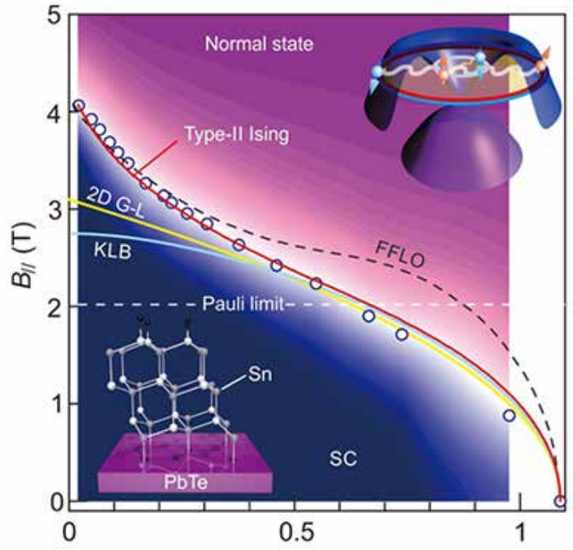
On March 13th, Associate Prof. Ding Zhang and Prof. Qi-Kun Xue of the Department of Physics, Tsinghua University, Prof. Haiwen Liu of Beijing Normal University, and Prof. Jurgen Smet of the Max Planck Institute, together with other researchers, reported their joint discovery of very high upper critical magnetic fields in few-layer stanene superconductors and a new type of Ising pairing in Science.

The critical magnetic field of a superconductor defines the field that can turn the superconducting state back to the normal state. It is one of the basic properties of superconductivity and an important indicator of the superconductor's potential for applications. Mercury—the very first superconductor—has a critical magnetic field of merely tens of milli-Tesla. In recent years, people discovered that certain films with the thickness of a few atomic layers can sustain their superconducting state even with a magnetic field of tens of Tesla, far exceeding expectations.

To explain this phenomenon, researchers proposed an Ising pairing mechanism, in which the paired electrons have their spin orientations locked because of the broken inversion symmetry in the lattice of special types of materials. With this framework, people searched in the non-centrosymmetric materials and found a few more superconductors with very large upper critical fields. However, some people believed that this effect can be solely attributed to dimension reduction, challenging the Ising pairing mechanism. Furthermore, an important prediction of Ising pairing—a divergent critical magnetic field at low temperature—has not been verified until now.

Recently, a China-Germany collaborative team led by Associate Prof. Ding Zhang and Prof. Qi-Kun Xue of the Department of Physics, Tsinghua University, has overturned the boundary set by former theories; for the first time, they observed an enhanced critical magnetic field—a few times the conventionally expected value—in a highly symmetric material, few-layer stanene. They clearly observed divergent behavior of the critical magnetic field as the temperature approaches absolute zero, giving strong evidence for Ising superconductivity. On March 13th (Beijing time), this study was reported in Science under the title "Type-II Ising pairing in few-layer stanene".

The group of Prof. Qi-Kun Xue has been long working on atomically controlled growth and characterization of high-quality thin films, making a series of discoveries such as superconductivity in monolayer lead, high temperature superconductivity in monolayer iron selenide and strontium titanite interface, and Griffiths singularity in a bilayer gallium superconductor. In 2018, Associate Prof. Ding Zhang—a core member of the Xue group—discovered superconductivity in gray tin thin films—stanene (Nature Physics, 14, 344 (2018)) and subsequently found that their in-plane upper critical field exceeded the limit



of conventional superconductors—the so-called Pauli limit.

To further understand the superconducting properties of stanene, the team collaborated with Dr. Joseph Falson and Prof. Jurgen Smet of the Max Planck Institute for Solid State Research. They employed in-situ rotation at an ultralow temperature and high magnetic field and systematically measured stanene samples. They obtained the upper critical field data covering almost the complete temperature range of this superconductor. They found that the upper critical field not only exceeded the Pauli limit but also showed no sign of saturation when the temperature approached absolute zero, a key feature of Ising superconductivity. However, since stanene is centrosymmetric, the observed behaviors cannot be explained by the established theory of Ising pairing. In order to understand this perplexing phenomenon, Associate Prof. Yong Xu of the Department of Physics, Tsinghua University and Prof. Haiwen Liu of Beijing Normal University carried out in-depth theoretical analysis.

Through this close collaboration between theory and experiment, the team proposed a new type of Ising pairing—type-II Ising paring—which resulted from the combination of spin-orbit coupling and lattice symmetry of the materials. This work provides strong evidence for the existence of an Ising superconductor and broadens the scope for searching similar materials.

Associate Prof. Ding Zhang of the Department of Physics, Tsinghua University, Prof. Haiwen Liu of Beijing Normal University, and Prof. Jurgen Smet of the Max Planck Institute for Solid State Research, Germany, are the corresponding authors of the paper. Dr. Joseph Falson of the Max Planck Institute for Solid State Research, Germany, is the first author. The other co-authors include Prof. Wenhui Duan, Prof. Ke He, former graduate student Dr. Yunyi Zang (currently a post-doc at the Max Planck Institute for Microstructure Physics), graduate student Menghan Liao, Kejing Zhu, Chong Wang and Zetao Zhang as well as graduate student Hongchao Liu of Peking University. This work was supported by the National Natural Science Foundation of China, the Ministry of Science and Technology of China, the State Key Laboratory of Low-Dimensional Quantum Physics, and the Beijing Advanced Center for Future Chips.

The structural basis for the cell entry of the 2019 novel coronavirus

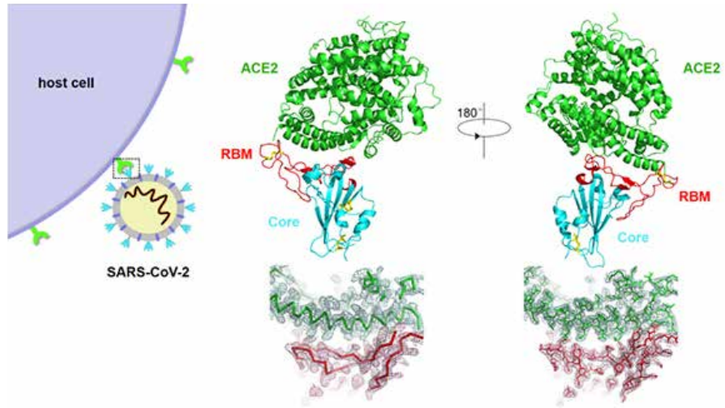
Xinquan Wang and Linqi Zhang groups reveal the structural basis for the cell entry of the 2019 novel coronavirus

On March 30th 2020, a research paper entitled "Structure of the SARS-CoV-2 spike receptor-binding domain bound to the ACE2 receptor" was published online in Nature as "Accelerated Article Preview" by the groups of Prof. Xinquan Wang at the School of Life Sciences and Prof. Linqi Zhang at the School of Medicine, Tsinghua University. This study reported the crystal structure of the SARS-CoV-2 spike receptor-binding domain (RBD) in complex with the human cell receptor ACE2 at a resolution of 2.45 angstrom. By precisely elucidating the interactions between RBD and ACE2, this study revealed the structural basis for the recognition of SARS-CoV-2 by ACE2 and provided important structural knowledge for the development of antibodies and vaccines against the COVID-19 pandemic.

To help the research on the SARS-CoV-2 and anti-virus drug discovery, the paper was deposited in the preprint server BioRxiv on February 20th, 2020. The coordinates of the crystal structure were also available for download before the official release of the Protein Data Bank (PDB) on the website of the Beijing Advanced Innovation Center for Structural Biology.

To better understand the initial step of SARS-CoV-2 infection at an atomic level, the Wang and Zhang groups expressed and purified the SARS-CoV-2 RBD and human ACE2 in insect cells, crystallized the complex, and collected the diffraction dataset on the BL17U1 beamline at the Shanghai Synchrotron Radiation Facility (SSRF). The overall ACE2-binding mode of the SARS-CoV-2 RBD is nearly identical to that of the SARS-CoV RBD, which also utilizes ACE2 as the cell receptor. Structural analysis identified residues in the SARS-CoV-2 RBD critical for ACE2 binding, the majority of which are either highly conserved or shared similar side chain properties with those in the SARS-CoV RBD. Such similarity in structure and sequence strongly argues for a convergent evolution between SARS-CoV-2 and SARS-CoV RBDs for improved binding to ACE2, although SARS-CoV-2 does not cluster within SARS and SARS-related coronaviruses. The epitopes of two SARS-CoV antibodies targeting the RBD are also analyzed with the SARS-CoV-2 RBD, providing insights into future identification of cross-reactive antibodies.

PhD student Jun Lan, postdoc Jiwan Ge, and PhD student Jinfang Yu from the School of Life Sciences, and PhD student Sisi Shan from the School of Medicine are the co-first authors of the study. Dr. Shilong Fan from the Tsinghua University Technology Center for Protein Sciences, Drs. Huan Zhou and Qisheng Wang from the SSRF, and Drs. Xuanling Shi and Qi Zhang also contributed to the study. Professors Xinquan Wang and Linqi Zhang are the corresponding authors of the study. This study is supported by the Beijing Advanced Innovation Center for Structural Biology, the Beijing Frontier Research Center for Biological Structure, the MOE Key Laboratory of Protein Science, and the National Key Plan for Scientific Research and Development of China.



Reopening the window of soft X-ray polarimetry

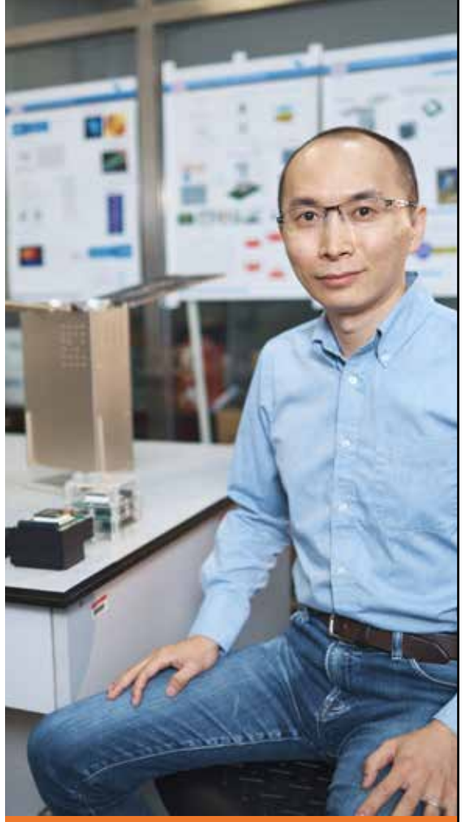
Reopening the window of soft X-ray polarimetry in astronomy with the space program PolarLight

On 11 May 2020, Professor Hua Feng and his collaborators reported in Nature Astronomy a re-detection of soft X-ray polarization from the Crab nebula with the space program PolarLight, indicating that this long-awaited window in astronomy has been reopened after more than 40 years since the OSO-8 experiment in the 1970s. More interestingly, PolarLight discovered a time variation of polarization that coincides in time with a glitch of the Crab pulsar. The variation is associated with the pulsar emission but not the nebular emission, suggesting that the pulsar magnetosphere may have altered after the glitch.

PolarLight is a dedicated soft X-ray polarimeter onboard a CubeSat manufactured by Spacety. It was built on the basis of a high-sensitivity technique initially developed by Italian scientists, who are also collaborators of PolarLight. Unlike imaging, timing, and spectroscopy, polarimetry in the standard band of X-ray astronomy is the least explored window, with the previous experiment occurred in the 1970s, mainly due to the lack of high-sensitivity techniques. The PolarLight detector has a small area, similar to the size of a quarter, with an attempt to demonstrate the new technique in space, but surprisingly discovered interesting phenomena associated with the Crab pulsar, implying that X-ray polarimetry is indeed a powerful probe.

Pulsars are the most accurate clocks in the universe. However, their rotational frequency may undergo a sudden change followed by a gradual recovery. This is called a pulsar glitch. The mechanism is still unknown, and may be related to the interior structure of the neutron star. PolarLight detected a time variation of the X-ray polarization right after a glitch of the Crab pulsar on 23 July 2019. This may help constrain neutron star physics and distinguish high-energy emission models of rotation-powered pulsars.

Astronomy is a field of science driven by observations. New observational



techniques, also called new windows, are of essential importance. This is the reason why astronomers all over the world are working hard to develop advanced techniques to enable X-ray polarimetry in future astronomy. The technique that is used in PolarLight will be utilized in a NASA mission Imaging X-ray Polarimetry Explorer (IXPE) scheduled in 2021 and a Chinese-European mission concept enhanced X-ray Timing and Polarimetry (eXTP) planned in 2027. More fruitful scientific results are expected in this promising area.

This work is a collaboration between Tsinghua, INFN-Pisa, INAF/IAPS-Rome, IHEP, Peking University, the Ningbo University of Technology, North Night Vision, and Spacety.

Tsinghua and Sogou release World's First Smart Keyboard for the Visually Impaired

The Department of Computer Science and Technology of Tsinghua University and Sogou Inc. (NYSE: SOGO) released the world's first smart keyboard for visually impaired users on 21st May, the ninth annual Global Accessibility Awareness Day (GAAD), which focuses on raising awareness of digital access and inclusion for people with disabilities and impairments. The smart keyboard, VIPBoard, aims at improving the underlying keyboard algorithm without altering current input interaction.

Entering text on their smartphone remains hugely challenging for visually impaired users. While modern touchscreen keyboards are all powered by the word-level auto-correction ability to handle input errors, visually impaired users cannot enjoy this benefit. They rely on a screen-reader keyboard on their smartphones, which only offers character-level input that has no predictive text correction ability. When users are texting on their smartphones, they often miss the targeted key when touching without visual feedback.

To tackle this problem, Professor Shi Yuanchun and Associate Researcher Yu Chun of the Department of Computer Science and Technology of Tsinghua University led their research team to successfully design a character-level auto-correction method, achieving a 63% reduction in the character error rate (CER). This means that during typing, the algorithm can help reduce the missed clicks from an average of 3 to 1, for example.

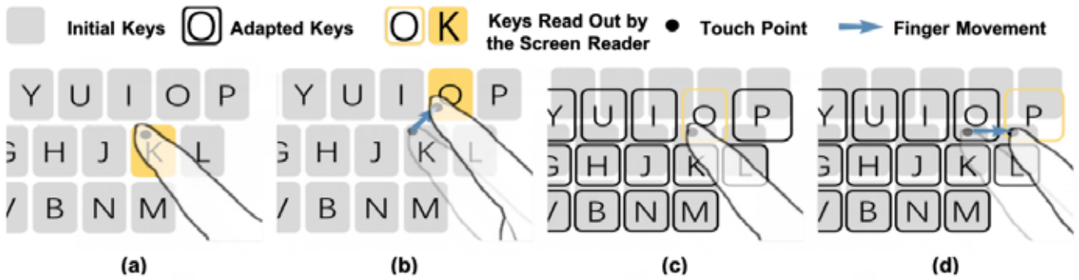
On each tap, the VIPBoard predicts the probability of each key considering both users' keyboard touch location and language model, and reads the most likely key, which saves calibration time when the user misses the target key. With a one-millisecond response time, VIPBoard allows users to correct a variety of text input errors and supports multi-language input.

The research team published their paper in the 2019 ACM CHI Conference "On Human Factors in Computing Systems" held in Glasgow, United Kingdom, the top academic conference in the field of human-computer interaction. The paper won an Honorable Mention Award at the conference.

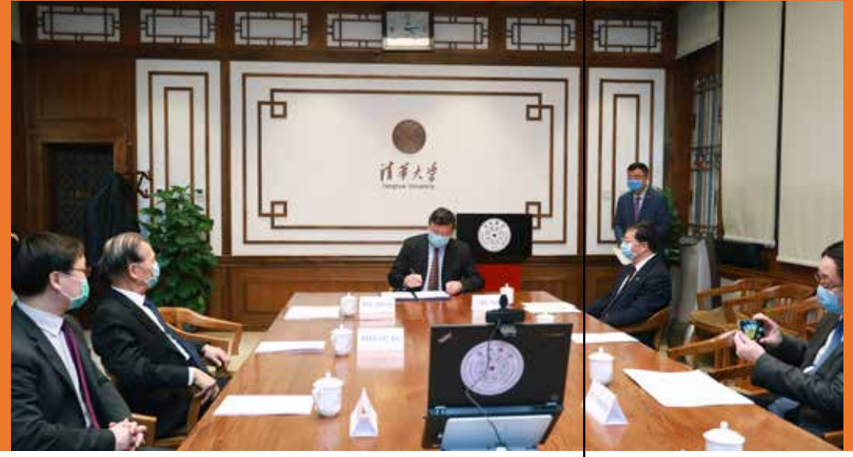
In partnership with Sogou Inc., Tsinghua University has established the Tiangong Institute for Intelligent Computing in 2016, which includes a joint laboratory that provides faculty members and students in Tsinghua with the opportunity to utilize their theoretical research to adapt to real-world business challenges.

After the research paper was published, Tsinghua and Sogou Inc. started to collaborate immediately on product development. After a series of processes of product evaluation, joint development, and testing, the lab's research result turned into an actual product within a year.

VIPBoard is one of the many products that are built on the lab's research results. "Some of these research results are already put into mobile applications and are serving millions of users," Associate Researcher Yu Chun said. "We are also working on developing other technologies that are aimed at improving digital access for people with disabilities and impairments, and we expect to have another research result published later this year."



Tsinghua University partners with Bosch to advance AI research



Tsinghua University and Bosch announced a five-year research collaboration agreement in the field of artificial intelligence by establishing a Tsinghua-Bosch Joint Research Center for Machine Learning on 6th March. The ceremony was held online via video link from Beijing, Shanghai and Renningen in Germany.

The two parties also signed an agreement on the establishment of the Bosch AI Professor Donation to support professors at Tsinghua's Department of Computer Science and Technology in AI research.

For their work in the joint research center, Tsinghua and Bosch will leverage their advantages and focus on the basic theories and key technologies of machine learning, striving to make breakthroughs in areas such as intelligent manufacturing.

Qiu Yong, President of Tsinghua University, expressed thanks in his speech for the group's continued support of Tsinghua.

President Qiu said: "I'm delighted to see that today we will sign two important agreements. One on the Joint Research Center for Machine Learning, and the other on the Bosch AI Professor Donation. This is the first online signing ceremony for a collaboration agreement in the history of Tsinghua, which demonstrates that scientific cooperation and exchange, and international collaboration should not be interrupted under any circumstances. We are now in the golden age of artificial intelligence development. AI is triggering scientific and technological breakthroughs, and industrial transformation. AI is influencing the ongoing development of the internet, big data, cloud computing, the Internet of Things and many other technologies. A profound impact is also being felt on the global economy and human society. Machine-learning is an important factor to promote the development of AI in many fields, such as image, voice and machine translation. Although great progress has been made in machine-learning in recent years, challenges still lay ahead. These challenges require close cooperation between academia and industry. And our new collaboration aims to achieve innovations in terms of basic theories and key breakthrough technologies in machine learning. I sincerely wish and strongly believe that our close collaboration will lead to outcomes that can shape the future of human kind."

Prof. Thomas Kropf, the President of Robert Bosch Corporate Research, also gave a speech at the ceremony. He said: "The collaboration with Tsinghua University marks another milestone in Bosch's efforts to support pioneering technologies in the dynamic AI field and accelerate the deployment of AI in real-world industrial applications. Bosch believes AI can only be effectively driven with the involvement of the larger scientific community. Tsinghua University is one of the leading universities in the field of AI worldwide. Similarly, Bosch has firmly established its position as one of the largest industrial contributors to the AI research community with the goal of becoming the leading company in the field of industrial AI. The collaboration between Tsinghua and Bosch will offer great potential for synergies for both partners and will be the foundation for a very fruitful and long-lasting partnership. We are extraordinarily happy to officially sign this research collaboration agreement today and are looking towards a bright future together."

You Zheng, vice-president of Tsinghua University, and Prof. Dr. Thomas Kropf signed the agreement on establishment of the research center, while Yuan Wei, secretary-general of the Tsinghua University Education Foundation, and Chen Yudong, president of Bosch (China) Investment Ltd, signed the donation agreement.

The university's vice-president Yang Bin presided over the ceremony.

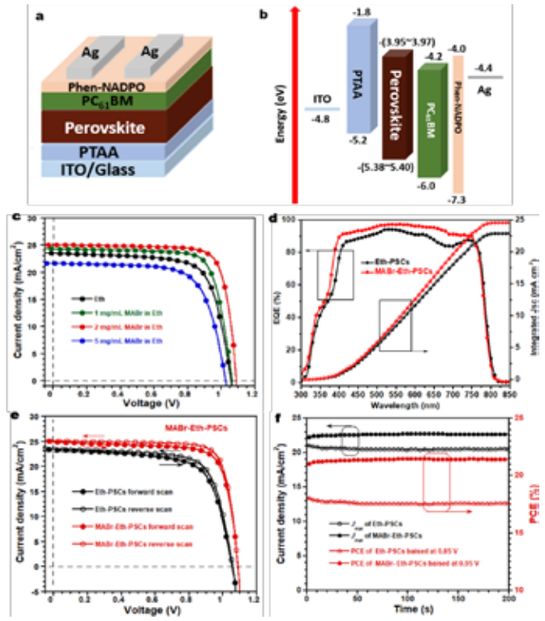
Tsinghua University's AI research boasts a solid foundation and occupies a leading position both at home and abroad, and has made many achievements in areas such as machine learning, information retrieval and natural language processing. As shown by the official CS Rankings, Tsinghua ranks second in terms of the number of high-level papers published in the field of AI among institutions and universities around the world.

The Bosch Group is a leading global supplier of technology and services. Currently, Bosch operates seven AI centers worldwide in Germany, USA, India, Israel and China. To drive progress, Bosch also has built alliances with key players in both industry and academia across the world to address key challenges in AI and machine learning.

TBSI researchers develop efficient perovskite solar cells through green anti-solvent engineering

A joint team of researchers from the Tsinghua-Berkeley Shenzhen Institute (TBSI), and the Shenzhen Institute of Advanced Technology (SIAT) of the Chinese Academy of Sciences have developed more efficient perovskite solar cells using green anti-solvents.

Perovskites are often used in solar cells as they exhibit superior optoelectronic properties, but traditional one-step solution-processed perovskites often suffer from defects-induced non-radiative recombination, which significantly hinders the improvement of device performance. Anti-solvent engineering has been demonstrated to be effective in tuning crystal nucleation and grain growth. However, large amounts of anti-solvents are required for achieving high efficiency and more importantly, most of these anti-solvents such as chlorobenzene and toluene are toxic. In this regard, the development of toxicity-free green anti-solvent engineering for high performance perovskite solar cells (PSCs) is very attractive.



These results confirmed that the MABr-Eth treatment can substantially suppress defects-induced non-radiative recombination for PSCs, and also signified the importance of rationally choosing green anti-solvents for PSCs to achieve improved performance and stability.

Researchers chose the green anti-solvent methylamine bromide (MABr) in ethanol (MABr-Eth) to modify perovskite films. The MABr treatment not only enhanced the resultant perovskite crystallinity with large grain size, but also passivated surface defects. MABr-Eth-treated perovskite films showed improved crystallinity and morphology with higher coverage, longer charge carrier decay time, and a lower density of surface defect states. Additionally, this strategy delivered PSCs with the best power conversion efficiency of 21.53%, as well as better storage and light-soaking stability.

Prof. Huaqiang Cao's group published a research article in Nature Communications, reporting important progress in research into phosphorene nanobelts

On August 6th, 2020, Professor Huaqiang Cao FRSC FIMMM from the Department of Chemistry at Tsinghua University and his collaborators Associate Professor Dan Xie from the Institute of Microelectronics at Tsinghua University, and Professor Sir Anthony K. Cheetham FRS from the Department of Materials Science and Metallurgy at the University of Cambridge (co-corresponding authors) published a research article entitled "Unzipping of black phosphorus to form zigzag phosphorene nanobelts" in Nature Communications.

In this work, an electrochemical method is used to control the concentration of oxygen molecules to prepare zigzag-phosphorene nanobelts (z-PNBs), as well as nanosheets and quantum dots, via an oxygen-driven mechanism. The mechanism of oxygen-driven directional cutting of phosphorene is revealed through theoretical calculation. Field-effect transistor (FET) devices are constructed based on the prepared z-PNBs to study the carrier transport characteristics.

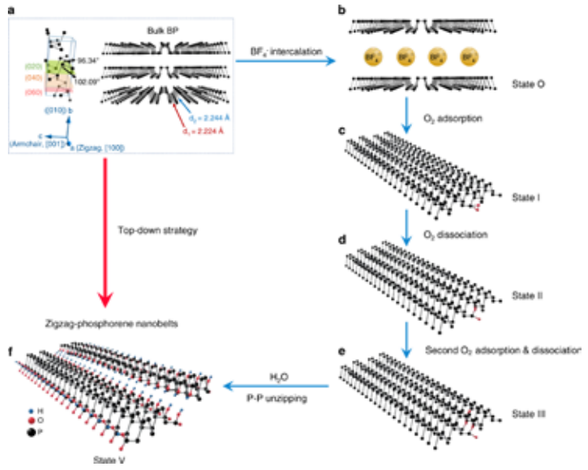
Phosphorene, monolayer or few-layer black phosphorus, exhibits fascinating anisotropic properties and shows interesting semiconducting behavior. These attractive properties along a zigzag lattice direction are predicted to overstep those of an armchair lattice direction in thermal conductivity, semiconductor behavior, and mechanical strength, leading to the great potential of zigzag-phosphorene nanoribbons for a broad range of applications such as thermoelectric devices, flexible electronics, and quantum information technologies. However, due to the stability and limit of existing synthesis technology, the effective preparation of phosphorene nanobelts has become a key bottleneck in its research and application.

Inspired by the fact that black phosphorus (BP) could be oxidized and decomposed in the air, the team designed an electrochemical method to effectively adjust the ion intercalation rate and oxygen concentration around the BP by changing the current density, so as to control the dimension and size of phosphorene nanostructures, obtaining a series of phosphorene nanostructures, including nanosheets, nanobelts and quantum dots (Fig. 1). The structure characterizations show that the z-PNBs have good crystallinity and flexibility.

According to the electrochemical dissociation mechanism, the preparation process is divided into two steps, i.e., ionic intercalation and oxygen degradation (Fig. 2). In the electrochemical process, BF4- ions intercalate into the BP crystal layers along the a-axis direction of BP (i.e., [100] direction of BP, zigzag direction). At the same time, oxygen molecules are chemically adsorbed and dissociated to form dangling oxygen on the surface of BP. The hydrogen bond is also formed between dangling oxygen and H2O and the hydrolysis of P-O-P leads to the breaking of the P-P bond to form z-PNBs. The various adsorption and dissociation pathways of oxygen molecules on the phosphorene are analyzed and compared by theoretical calculation (Fig. 3). The results show that the formation of interstitial oxygen pairs is the key step to dissociate the P-P bond and finally form z-PNBs.

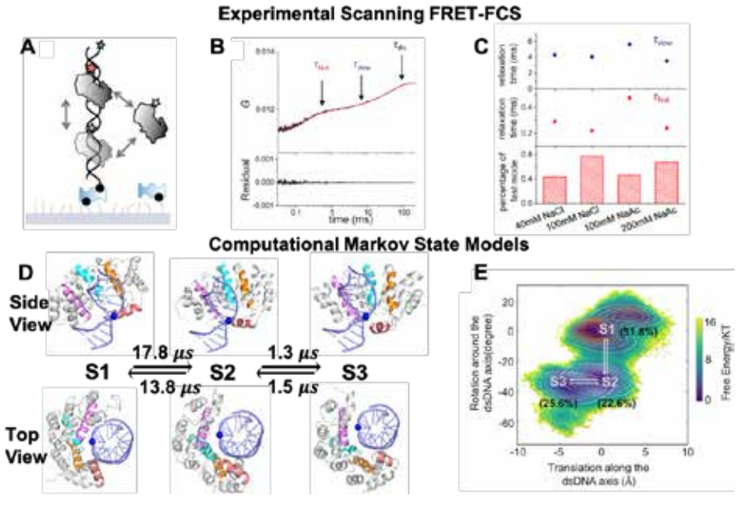
The team also designed and fabricated FET devices based on z-PNBs via a home-made Cu-grid mask method, and explored carrier the transport characteristics of z-PNBs (Fig. 4). The conversion between p-n types of devices was also realized. This work provides key materials and opens up new research methods for the application of phosphorene nanobelts in active matrix display technology, radio frequency devices and complementary metal oxide semiconductor device technology.

Zhifang Liu, a PhD candidate under the supervision of Professor Cao, and Yilin Sun, a PhD student candidate under the supervision of Associate Professor Xie, are the co-first authors. Professor Wei Li from the Center of Rare Earth and Inorganic Functional Materials, the National Institute for Advanced Materials at Nankai University and Associate Professor Jiaou Wang from the Institute of High Energy Physics at the Chinese Academy of Sciences also participated in the research. This work is supported by the National Key R & D Program of China and the National Natural Science Foundation of China.



Researchers elucidate Molecular Mechanisms of Glycosylase AlkD in Target Search and Recognition of DNA Damage

Genome stability and integrity are essential for the survival of all organisms. However, due to endogenous metabolites and environmental agents (such as UV light or chemical exposure), DNA damage constantly occurs and poses a threat. DNA glycosylase is a DNA-binding protein responsible for repairing DNA damage. It remains a puzzle how glycosylase can efficiently and accurately recognize DNA lesions among millions and billions of normal base pairs in the genome. It has been hypothesized that glycosylase accomplishes this task by an alternating search between two diffusion modes: a high-speed-low-accuracy mode and a low-speed-high-accuracy mode. However, due to the limitations in the spatial and temporal resolutions of current experimental techniques, the slow mode has not yet been detected.



In order to understand the molecular mechanism of how glycosylase AlkD recognizes the DNA damage, Professor CHEN Chunlai's group from the School of Life Sciences, Tsinghua University, collaborating with Professor ZHANG Lu from the Fujian Institute of Research on the Structure of Matter of Chinese Academy of Sciences, Professor HUANG Xuhui's group from Hong Kong University of Science and Technology and Professor ZHAO Xinsheng's group from Peking University have integrated the experimental and computational methods to characterize the dynamic diffusion of glycosylase AlkD along a double-stranded DNA (dsDNA) at the molecular level. The study was published in Proceedings of the National Academy of Sciences of the United States of America.

The researchers developed a scanning Fluorescence Resonance Energy Transfer (FRET) – Fluorescence Correlation Spectroscopy (FCS) platform to probe the protein dynamics at the microsecond temporal resolution and sub-nanometer spatial resolution. The significant improvement in the resolutions enables the researchers to not only observe the fast mode (1D diffusion constant of ~ 8´106 bp2 s-1), but also directly capture the slow mode (1D diffusion constant of 6´104-5´105 bp2 s-1).

To further elucidate the underlying molecular mechanism of the slow mode, the researchers constructed the Markov State Model (MSM) based on extensive all-atom molecular dynamics (MD) simulations. Based on MSM, they visualized continuous cycles of AlkD diffusion along dsDNA over 1 ms, a timescale that is difficult to reach by conventional MD simulations. They revealed that the diffusion of AlkD over one base pair contained a rate-limiting rotation and a sequential translation. Moreover, they pinpointed the essential role of Y27 in determining the AlkD diffusion dynamics both experimentally and computationally.

The study provided mechanistic insights on how conformational dynamics of AlkD-dsDNA complex coordinate different diffusion modes to recognize DNA lesions with high efficiency and accuracy. The mechanism adopted by AlkD to search for DNA lesions may be utilized by other glycosylases and DNA binding proteins. The integrated platform by combining scanning FRET-FCS with the Markov State Model can be further widely applied to investigate other glycosylases and DNA-binding proteins.

This work is supported by the National Natural Science Foundation of China, the Hong Kong Research Grant Council, the Tsinghua-Peking Joint Center for Life Sciences, the Beijing Advanced Innovation Center for Structural Biology and the Beijing Frontier Research Center for Biological Structure.

SCIENTIFIC INNOVATION

New bioprinting method for gastric wounds

Gastric wall injuries are a common digestive tract problem, often requiring drug therapy or invasive surgery. Bioprinting, a way of delivering new cells directly to the wound site to repair tissue, offers a potential treatment.

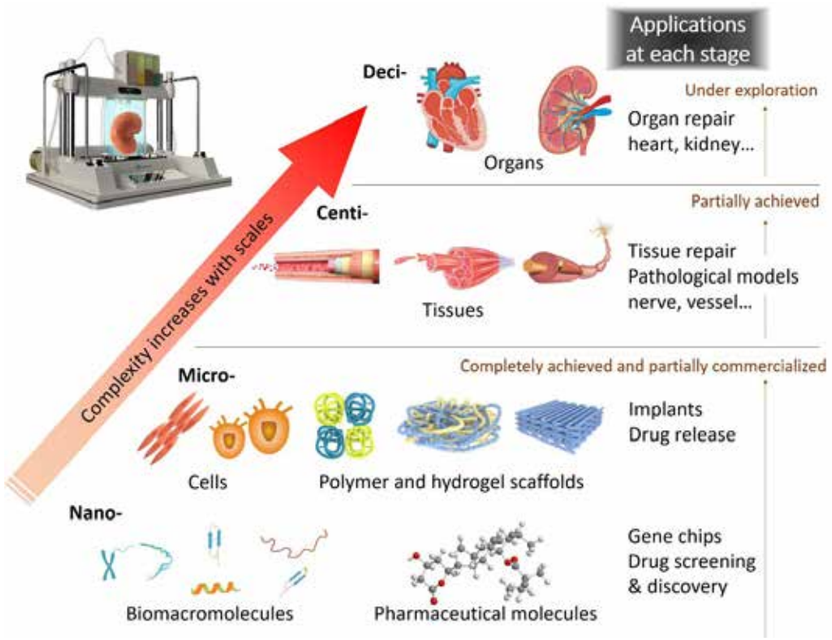
Xu Tao, Professor from Tsinghua's Department of Mechanical Engineering, and his team recently put forward a new concept of "in situ in vivo bioprinting" and designed a microbot that enters the body via an endoscope to carry out tissue repair.

They tested the microbot and the delivery system with a biological model of a human stomach and an endoscope to mimic the insertion and bioprinting operation. They also carried out a bioprinting test in a cell culture dish to test how effective the device was at bioprinting viable cells and repairing wounds.

The tests showed that printed cells remained at high viability and steady proliferation, which indicated good biological function of the cells in the printed tissue.

Combing research on biological manufacturing, 3D printing and mechanics, the research verified the feasibility of this concept for treatment for gastric wall injuries and offered a potential application for a variety of wound treatments inside the body without the need for invasive surgery.

The research was published in the journal Biofabrication.



18th Symposium on Scientific Research concludes

"The competence to innovate is a core strength of a university. There is no world-class university without world-class innovation competence. Universities should lead through innovation, support national development with first-class innovation achievements, and build a world-class innovation system," said President Qiu at the Closing Ceremony for the 18th Symposium on Scientific Research taking place both online and offline on October 9th.

According to President Qiu, Tsinghua will accelerate the pace to build a world-class university innovation system. As an academic institution, the university was born to cultivate talents and take academic pursuit as its responsibility. Integration of research and education is the core philosophy of universities and an important guarantee for cultivating top innovative talents. Without high-level academic research, it is impossible to cultivate high-level innovative talents and to better serve social development.

The theme of this year's symposium is "Innovate research model to build a world-class university innovation system". Launched in March, it lasted for six months and went through three stages: the discussion of problems, the presentation of reports and the conclusion.

Eight topics

Eight topics were discussed at the symposium: the development of academic ecology and academic community, the discipline development plan and discipline adjustment mechanism, the layout of fundamental frontiers and key core technologies, the construction of major innovation platforms and research teams, new industry-university-research cooperation and mechanism for the transformation of scientific and technological achievements, global innovation cooperation, integration of research and education and cultivation of innovative talents, and the construction of a world-class university innovation system.

Highlights and Achievements

Notable achievements have been made since the 17th Symposium on Scientific Research, including the improvements in the development of disciplines, academic level and innovation capabilities, which are reflected in the constant improvement in the quality of academic papers published, the increase of the national awards in science and technology, the construction of leading national key laboratories, the transformation of scientific and technological achievements and the new developments in the liberal arts. A new think tank system has been established to provide intellectual support for addressing national and global problems. A comprehensive discipline layout covering 11 disciplines has been completed, leading scientific research in China.

Next steps

Despite the remarkable results achieved in the reform of research over the past years, current research work still faces a series of problems and challenges. Going forward, Tsinghua will take further steps to strengthen the academic community construction to create a first-class academic ecology and academic culture, improve the layout of disciplines, further promote interdisciplinary development, strengthen the long-term and stable support for fundamental research, deepen the pilot reform of national key laboratories, build a high level of full-time research team, promote the integration of research and education, improve the mechanism for transforming scientific research achievements, take an active part in international scientific projects, and accelerate the pace to build an innovation system for world-class universities.

Initiated in 1956, altogether 18 symposiums on Scientific Research have been held up to this year and it has become a tradition to advance scientific research work at Tsinghua.

DIVERSE CAMPUS

Tsinghua celebrates 109th anniversary online

Tsinghua University celebrated its 109th birthday on April 26th. The event, coming at a time of global pandemic that compels social distancing, was held online, leveraging digital prowess for a reunion of the diverse Tsinghua community.

It's a vibrant and intensely united community, within which there is no lack of enthusiasm for the online celebration despite long distances caused by the COVID-19 pandemic. No matter where they are, at home or abroad, Tsinghua teachers, students and alumni have united as one and send their best wishes and encouragement to the university and also to the world in this tough fight.

Tsinghua President Qiu Yong and Chairperson of the University Council Chen Xu, along with many other university leaders, attended Sunday's anniversary ceremony on campus, extending their warm greetings and best wishes to all Tsinghua community members.

President Qiu said in his speech, "The year of 2020 demonstrates the resilience and strength of Chinese people in the face of adversity. We firmly believe that, this year will also witness the epic written collectively by humankind in the battle against the COVID-19 pandemic. As we confront this common challenge for humanity, Tsinghua has stood steadfastly with the nation and made concerted efforts to tackle this severe challenge. Tsinghua will shoulder the responsibility and strive to better contribute to the development of the nation and the future of humankind."

He also noted, "I hope the online commemorative events will bring the community the same familiar warmth and a memorable experience. Tsinghua will always be the home for our students, faculty and alumni. I look forward to meeting you again in the brighter future that awaits us."

At the ceremony, the medical teams from Beijing Tsinghua Changgung Hospital received honorary awards and bouquets for their contributions on the front line in the heavily-hit Chinese city of Wuhan.

Chairperson Chen applauded their hard work in her remarks. "On this special occasion, we would like to express our sincere respect and gratitude towards the medical teams, including the one from the Beijing Tsinghua Changgung Hospital, who went to Wuhan when it was severely stricken by the virus. They are the brave warriors that embolden spirits in the time of gravest peril. Tsinghua University is proud of you. Tsinghua University is proud of our faculty and staff members, for their magnificent display of dedication and devotion during the fight against COVID-19."

"The year 2020 marks a milestone for the nation, as China approaches the completion of its first centenary goal of building a moderately prosperous society in all respects. For Tsinghua, 2020 marks the conclusion of its third nine-year plan and comprehensive reforms for building a world-class university. 2021 will witness the 110th anniversary of Tsinghua, which represents the start of a new phase of the University's development," Chen added. "In the bright future that awaits us, Tsinghua University will strive to maintain this momentum and head towards the fulfillment of our university's developmental goals with confidence and determination."

This year's online celebrations also included academic forums, performances and competitions attended by teachers, students and alumni, as well as digital tours of

the campus that took in exhibitions at Tsinghua's history museum and art museum, a fascinating showcase of entries in Tsinghua University's Challenge Cup Technological Innovation Competition, and the 2020 THU CIE Exposition.

As part of the anniversary week celebrations, Tsinghua organized the Special Dialogue on online education in partnership with UNESCO, providing a platform for over 30 institutions and organizations in 17 countries and regions to share best practices and experiences in online education as an emergency response to the outbreak of COVID-19.

The university's many schools and departments also organized their own celebratory activities online.

Tsinghua launches virtual exhibition for graduating art students

A website to show its students' recent and current graduation projects was launched by Tsinghua University's Academy of Arts and Design on June 12th.A total of 282 undergraduates and 167 postgraduates from the Academy of Arts and Design brought over 1,000 works to the online exhibition.

These students braved many difficulties brought by the COVID-19 pandemic to create works with the instruction of their supervisors.

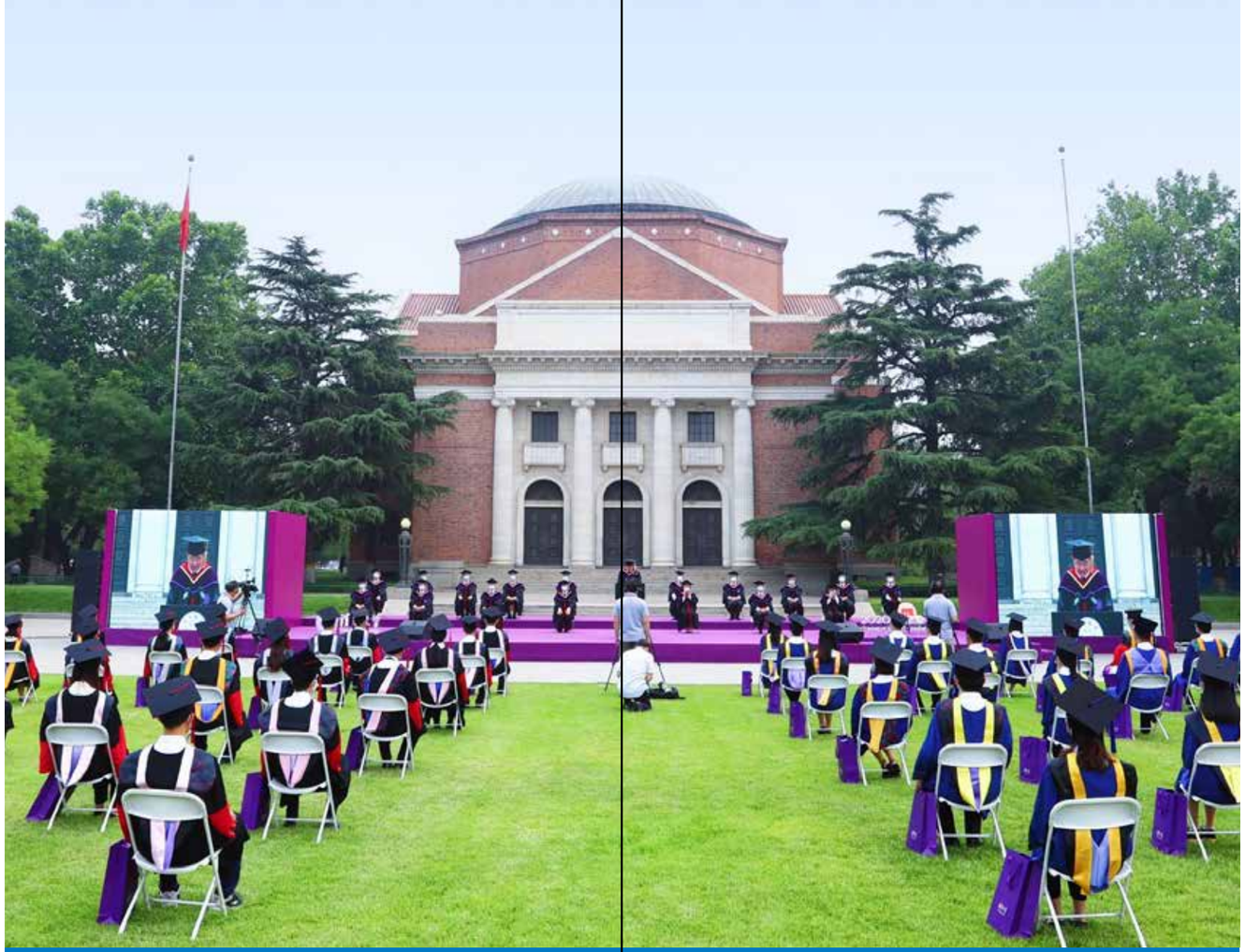
Unlike brick-and-mortar showrooms where students simply install their works, the online venue allows them to curate a mini solo show of their creations in a virtual space of 100 square meters each and build a 5-km-long gallery that provides visitors with diverse interactive experiences including a chance to learn about the students by their profiles.

The students can arrange their projects and design the lighting and interactive functions of their shows.

Their works convey concerns about social issues such as the aging society and the reclamation of abandoned industrial sites and health, with a special focus on problems emerging during the pandemic.

June is usually the time when art academies stage exhibitions of their majors' graduation projects. But the pandemic has kept colleges shut down and students at home for months since the winter break, disrupting the traditional convention. The pandemic did not, however, impede the students' artistic creativity.

People can visit exhibition.ad.tsinghua.edu.cn to explore the brilliance of the graduates' projects.



Tsinghua University hosts first-ever online commencement ceremony

Tsinghua University held its 2020 commencement ceremony for postgraduate students and undergraduate students online on June 22nd and 23rd. The online commencement ceremony was livestreamed worldwide on various media and social media platforms including Facebook and Twitter in both Chinese and English. Students who were unable to return to the university, and their families and friends watched the virtual celebration from the comfort of their own homes. The university also set up outdoor screens at seventeen different viewing points from where in-person participants watched their commencement ceremony while maintaining physical distance standards.

Brighter career pathways for Tsinghua and Hubei graduates

Graduation season is approaching. Like every year, it is a time for fresh graduates to say farewell to their campus lives and embark on a professional one. This year, although the outbreak of the COVID-19 has affect people's daily lives, the employment of graduates is not being disturbed at Tsinghua.

In 2020, there will be around 7,700 Tsinghua graduates, among whom, 3,800 will be entering the job market, including 400 undergraduates and 3,400 postgraduates. Through thorough planning and support from the university, schools and departments, as well as Tsinghua's Career Development Center, more than half of those job-market entrants are already employed.

To further support more graduates, as well as adapting to the requirements of epidemic prevention, Tsinghua launched a large-scale online career fair this Monday, which was the first time in Tsinghua's history. It was also the first time that Tsinghua has held a career fair in collaboration with universities in Hubei province, a unique way to support graduates in the epidemic-stricken area.

Tsinghua is holding this year's fair together with 126 universities in Hubei, including Wuhan University and Huazhong University of Science and Technology, offering a safe and convenient channel for students from the epidemic-stricken area to search for the ideal job opportunity. Additionally, Tsinghua also partnered with the Talent Service Center of Wuhan, offering a special regional employment session for students who would like to work in Hubei province.

Tsinghua holds seminar on "Higher Education in Cloud - Promise, Experience, and Expectation"

Tsinghua University convened a seminar on July 3rd to review its success in online teaching during the pandemic, share useful experience and explore new ways to further improve its online education system in the future.

The seminar, entitled "Higher Education in Cloud – Promise, Experience and Expectation", held at the university's main building, was attended by the University leaders Qiu Yong, Chen Xu, Jiang Shengyao, Wang Xiqin, Ji Junmin, Yang Bin, Li Yibing, You Zheng, Guo Yong, Zheng Li, Xiang Botao and Peng Gang. Yang Bin, Vice President and Provost of Tsinghua University, moderated the seminar, which was broadcast live on various social media platforms.

The seminar opened with a video that showcased the initiatives that were taken by the university for the successful launch and operation of its online education in the spring semester.

Due to the coronavirus outbreak, Tsinghua decided to conduct its 2020 Spring Semester online. Tsinghua launched 3,923 courses online, starting classes via its own online teaching platform "Rain Classroom" from February. Moreover, the university recently held its first-ever online commencement ceremonies for the 2020 graduating class.

Chairperson of the University Council Chen Xu thanked all the faculty members and staff of Tsinghua for responding quickly to work online, seek training and technical support, and communicate with students to ensure the smooth and orderly operation of the online education as the university unveiled its plan of "postponing the start of the 2020 spring semester whilst starting classes as scheduled" five months ago.

"For the first time, all the Tsinghua members have completed the whole process of online education including giving classes, academic exchanges, defense and exams and cultivation of a learning atmosphere," she said, adding that Tsinghua's success in achieving a high-quality online education demonstrated the university's responsibility, passion, innovation and synergy.

Tsinghua University President Qiu Yong thanked Tsinghua faculty, staff members and students for keeping a positive attitude and delivering a meaningful online teaching reform successfully through their preciseness, diligence, pragmatic attitudes and an innovative spirit.

"Today, I am confirmed that this brave exploration in online teaching in 2020 is a meaningful move in Tsinghua's history," he said.

He said that, in face of a critical challenge to humankind, Tsinghua, with its outstanding traditions and strong sense of mission, with the unity and enthusiasm of its faculty members and students, and with the innovative practice of technology, remained steadfast to its responsibility of imparting knowledge and educating people, and had realized its commitment to society.

He said Tsinghua's Spring semester as an online semester was a great success, due to the top-level design of teaching plans and the system operation mechanism. "Technological innovation and intelligent teaching have interacted well with each other," he added.

He noted that having successfully run this year's Spring semester online, Tsinghua was confident and ready for the upcoming Fall semester.

At the seminar, Qiu announced that the university would host a Tsinghua Global Summer School from July 20th-28th online this year, with the theme "Toward a Post-Pandemic World."

"Leveraging a variety of formats, including cloud discussions, cloud visits, and cloud observations and performances, we will utilize world-class teaching resources across the campus, invite renowned Chinese and international scholars for lectures, and offer courses ranging from economics, politics, society, education, climate change to leadership," he added.

The Global Summer School will recruit young learners from the Global Alliance of Universities on Climate (GAUC), Asian Universities Alliance (AUA) and Association of Pacific Rim Universities (APRU), offering them a platform to understand the opportunities and challenges in the post-COVID-19 world, and explore solutions for a sustainable future.

Shi Zhongying, Dean of the Institute of Education, gave a report about the achievements in online education research at the seminar.

Zhang Ying, Research Assistant Professor from the School of Pharmaceutical Sciences, shared her feedback on online education after the seminar by praising Tsinghua for the support it offered to other universities. "The support of Tsinghua provided to other universities is very impressive. The courses created by Tsinghua university were shared to help students enrolled in other universities and the online teaching experience was also shared," she said.

Several heads and representatives from various departments of the university including Yu Xinjie, Head of the Online Teaching Experts Group , Zheng Xiaodi, representative of the Cloned-class teachers, Zhang Ran, from the School of Life Sciences, Yi Bo, from Tsinghua University Primary School, Yang Dongjiang, from the Academy of Arts and Design, and other teaching management staff made presentations at the seminar, and shared the behind-the-scenes stories of Tsinghua online teaching since the outbreak of the epidemic. They also discussed the whole system synchronization of interactive online teaching program release, online teaching course resource sharing, and the launch of online international summer programs, as well as the continuation of the combination of online and offline teaching methods in the future.

Tsinghua welcomes new graduates

Tsinghua University held an opening ceremony for its incoming graduate students on August 26th.

The opening ceremony, which saw welcoming remarks from university leaders and student representatives, was livestreamed world-wide in both Chinese and English.

Tsinghua President Qiu Yong delivered a speech entitled "Give life warmth and strive for dreams". He asked the students to keep their hearts and minds open for others, uphold the value of fairness and justice, aspire for a more caring world, understand the meaning of life, and work hard to achieve their dreams as young people in the new era.

"Because of the outbreak, you now have a fuller understanding of the meaning of life regardless of circumstances. Experiencing sorrow and joy, life is worth cherishing, caring for and defending with all your might," Qiu added.

President Qiu also offered students advice on achieving their life goals. "Achieving our dreams will never be realized overnight. We must take short steps persistently every day and eventually we will enjoy a good harvest."

Qiu concluded his speech by saying young students would be cherished by Tsinghua and the beautiful Tsinghua campus would be even more wonderful because of the incoming students.

Professor Wang Xinquan of the School of Life Sciences, speaking on behalf of the faculty, said he was hopeful that the students would love their mother country, work with a practical, scientific and rigorous attitude, and have the courage to face challenges.

Chen Xu, Secretary of the CPC Tsinghua University Committee, also attended the ceremony, which was moderated by Tsinghua Vice President and Provost Yang Bin.

Liu Yidi, a doctoral student of the Department of Chemistry said, " As a new postgraduate student, I hope I can devote myself to research valuable and useful to human society."

Tsinghua begins its Fall semester combining online and offline learning

Tsinghua University began its Fall semester by holding the first university-wide lectures of the semester on September 1st.

The first lectures in the 2020 Fall semester were held in the main building of the university and were broadcast live on various media platforms, including Tsinghua's own online teaching platform "Rain Classroom", in both Chinese and English.

Tsinghua University Council Chairperson Chen Xu and Tsinghua President Qiu Yong delivered their lectures, which were remotely attended by nearly 50,000 Tsinghua students, faculty, staff members, and alumni representatives, including more than 3,800 undergraduate freshmen who are all set to begin their Tsinghua journey.

Unlike the Spring semester, which was held completely online due to the pandemic, Tsinghua's Fall semester is going to see classes being taught both online and offline.

Chairperson Chen Xu delivered her lecture, entitled "Unwavering Commitment to Our Sense of Duty and Our Endeavor".

She spoke about the efforts made by the university in the previous semester in the global fight against COVID-19, and ensuring safety and quality online learning of the students, and urged the incoming students to take primary responsibility for their own safety and health. "Don't take a chance. Don't lose patience. Don't lower your guard."

"Tsinghua would refuel its efforts to lead the world at both university and discipline level, achieve organic growth, and honor its historic duty in this landmark year," said Chairperson Chen.

"Let's cherish the moment back on campus and waste no time in your study and research. Make the most out of every day and be bold in exploration and be sharp in innovation so as to make bigger strides in 2020," she said to the incoming students.

While delivering his lecture, entitled "Tsinghua's Profound Understanding in Education and Splendid Cultural Heritage Garnered over the Century," President Qiu announced that the teaching model in the Fall semester would see a combination of both online and offline methods, as the pandemic is not over yet.

"As the outbreak prevention and control measures became a new normal, we continued to seek quality development of online education as well as the integration of online and offline teaching, furthering the comprehensive educational reform," he said.

He said the success Tsinghua achieved in the first half year has laid a solid foundation for what the university would achieve in the new semester, and shared the key reasons that led to the success of the previous semester, which could be equally helpful for the success of the upcoming semester.

He noted that Tsinghua would forge ahead with its teaching, research, as well as the reform and development of the university without lowering its guard in the outbreak prevention as the safety and health of its faculty members and students always remained the university's priority.

"Tsinghua also strived to build first-class education system for talent cultivation by launching programs for strengthening basic disciplines, with the aim of strengthening the foundation for talent development and national rejuvenation," President Qiu said in the lecture.

He said Tsinghua will carry out more international exchange activities in the future. "We strive to make Tsinghua more open. During the pandemic prevention and control period, we have been keeping and strengthening exchanges with global universities."

"Reforms will proceed at multiple levels. We want to change because we want to become even better in the future," he said.

He mentioned that Tsinghua has established an online teaching research group and has been carrying out research on the policy, effect and cases of online education. "This expert panel has already started another round of research now that we are going to adopt online plus offline model."

He advocated that future universities must be more open and integrated to achieve greater levels of inclusion and quality, and future learning must be more student-driven and smarter.

"At Tsinghua, we value the partnership between teachers and students, value the unfailing reliability of continuing education; and hold on to our fundamental duty to educate," said President Qiu.

During his lecture, President Qiu announced that Tsinghua would celebrate its 110th anniversary next year under the theme "Strive for Excellence, Innovate for the Future." He also unveiled the anniversary logo, which uses the Arabic numeral 110 and presents the first two digits in a vertical stripe pattern and the zero with the Tsinghua University emblem inside two circles.

Tsinghua Launches 110th Anniversary Logo

On September 1st, Tsinghua University released a commemorative logo for its 110th anniversary, to be celebrated in 2021. The years "1911-2021" featured in the logo highlight the University's founding year and anniversary year.

The creativity of the logo originates from a geometric figure of concentric and progressive squares and circles. The straight lines represent an upward ladder and flipped pages, symbolizing the continuous climbing of scientific peaks and the pursuit of academic paths. These elements reflect the profound culture of Tsinghua University. The year 2021 is the 110th anniversary of the founding of Tsinghua University and also the first ten years of Tsinghua's second hundred years. The "110" in the logo symbolizes this concept and reflects the fact that Tsinghua people have inherited fine traditions, have explored and innovated bravely and have striven to open a new chapter in Tsinghua's second hundred years, which is manifested in the 110th anniversary theme "Strive for Excellence, Innovate for the Future".

The logo uses the number "110" as the basic form and lines as the main expressive technique. Two of the "1" figures are composed of 11 lines - graded from thin to thick, rising from low to high, highlight the theme of Tsinghua University's celebration of its 110th anniversary. The three concentric circles around the "0" give the logo a harmonious combination of squares and circles. The University emblem cleverly embedded inside the "0" has made the logo recognizable and unique. The logo adopts the University's theme color – purple – and incorporates a gradient design, which not only creates a grand and majestic atmosphere, but also reflects lively and vivid visual effects.

Tsinghua holds opening ceremony to welcome new undergraduates

Tsinghua University held an opening ceremony and formally welcomed its new cohort of undergraduate students on September 9th.

Tsinghua President Qiu Yong delivered a speech during the ceremony. Chen Xu,Tsinghua University Council Chairperson, also attended the ceremony, which was moderated by Tsinghua Vice President Peng Gang.

"Although some of our incoming students are still unable to come to the campus due to the pandemic, this special ceremony has brought us close together. From this moment, no matter where you are, your Tsinghua time has started simultaneously. No matter how things change, I hope you will make roots in the land, respect the people, shoulder your responsibilities, and make your unique contribution to society," said President Qiu.

Tsinghua will greet over 3,800 new undergraduates this year. Of these, around 500 students attended the ceremony at the University Gymnasium, the main venue for the ceremony.

Other freshmen gathered in 21 venues around the campus to enjoy the opening ceremony with their peers. Meanwhile the ceremony was streamed world-wide in Chinese and English.

Tsinghua launches Institute for Intelligent Society Governance

Tsinghua University recently established an institute for research into the influence of the development and application of artificial intelligence technology on social governance.

The Institute for Intelligent Society Governance (THUISG) will provide theoretical support for research into AI's impact on social governance across the globe. It will draw on the university's multidisciplinary strengths.

Tsinghua already has advantages in AI theoretical research and core technology breakthroughs, creative talent training and think tank construction, said Xiang Botao, Deputy Secretary of the CPC Tsinghua University Committee, at the event.

The Institute, according to Xiang, will promote experimental work and systematical studies on new mechanisms, models and challenges in an intelligent society, which will help China to achieve a modern governance capacity and system and take a global lead in such issues.

After the launch ceremony, a group of experts and scholars made reports at a seminar.

Department of Automation of Tsinghua University celebrates its 50th anniversary

The Department of Automation, Tsinghua University, celebrated its 50th anniversary on September 26th.

The President of Tsinghua University Qiu Yong, the Secretary of the CPC Tsinghua University Committee Chen Xu, and Tsinghua University Vice President and Provost Yang Bin attended the event, together with academicians of the Chinese Academy of Sciences and the Chinese Academy of Engineering in the field of automation. Zhang Zuo, the Secretary of the CPC Department of Automation Committee, moderated the ceremony.

Wu Guanzheng, member of the 16th Standing Committee of the Political Bureau of the CPC Central Committee and the Secretary of the Central Commission for Discipline Inspection, who spent nine years in Tsinghua University in thermal measurement and the automatic control specialty of the Department, sent a congratulatory letter before the event. Wu highly praised the achievements the Department has made in the past 50 years: "I believe that in the new era, the Department of Automation will continue to forge ahead, to nurture more outstanding professionals in the field of automation, become a leader in technological innovation, and make greater contributions to national prosperity," Wu wrote in his letter.

President Qiu Yong spoke at the event and conveyed his congratulations to the Department of Automation in his speech.

"A new round of technological revolution, industrial shift and social transformation is driving our world today. Automation is a key technology in empowering the economy with information technology, in supporting national strategies such as smart manufacturing, digital economy, life and health, and smart services, as well as in overcoming global challenges including energy, resources, and environment," Qiu pointed out in his speech. "Over the past five decades, the Department has nurtured more than 12,000 outstanding graduates, pioneered a multitude of world-leading scientific and technological achievements, and embarked on a path marked by cross-disciplinary and innovation. In the future, the Department should keep the monument to promote the innovation and development of control science and technology."

"I sincerely wish the Department every success in the next 50 years ahead. I look forward to the Department of Automation reaching even greater heights in the future," Qiu added.

On behalf of educators and researchers in the field of automation, Zheng Nanning, President of the Chinese Association of Automation (CAA), thanked the Department for its support to the CAA over the years, especially in the field of continuous innovation regarding process control and control theory, as well as talent nurturing.

Zhang Tao, Head of the Department of Automation, briefly reviewed the history of the Department and said he is confident that the Department would continue to contribute to the development of China and the world.

Representing academic organizations that have a close partnership with the Department, Shao Zhijiang, Dean of the College of Control Science and Engineering, Zhejiang University, expressed his congratulations and praises to the Department and wished to strengthen the cooperation.

He Meiying, former Secretary of the CPC Tsinghua University Committee and former Secretary of the CPC Department of Automation Committee, expressed her pride in the endeavor, achievement and contributions the Department has made since its founding, and summarized her wishes to the Department into three suggestions: to keep an awareness of crisis, to keep traditions and innovation, and to enhance openness and cooperation.

Over 500 participants attended the celebration, including representatives from several schools and departments of Tsinghua and other universities and academic organizations, as well as from the automation industry. The ceremony was also live-streamed to the worldwide audience and the number of clicks reached about 340,000, through the live broadcast platform.

Institute of Nuclear and New Energy Technology celebrates its 60th anniversary

The Institute of Nuclear and New Energy Technology of Tsinghua University held a grand meeting to commemorate its 60th anniversary in Beijing, on September 26th.

Chen Xu, Secretary of the CPC Tsinghua University Committee, extended warm congratulations to all faculty, students and alumni, and expressed her heartfelt thanks to people from all walks of life who have cared about and supported the development of the Institute and Tsinghua.

Chen said that over the past 60 years, the Institute has achieved a number of leading scientific research results in China and worldwide by steadily aiming at scientific frontiers and serving the major strategic needs of the country.

Tsinghua always highlights nuclear energy as a key discipline, and hopes that the Institute will take key core technologies of the country as its research goal, carry forward the Institute's traditional spirit of innovation and hard work, and strive for making greater contributions to the great rejuvenation of the Chinese nation, Chen added.

Zhang Zuoyi, Head of the Institute, noted in his speech that it has been working on the peaceful use of atomic energy, and is increasing efforts in research on the inherent safety of nuclear energy.

"We are committed to developing it into a world-leading interdisciplinary high-tech research institute focused on nuclear energy and new energy research," Zhang said.

Liu Hua, Vice Minister of Ecology and Environment and Administrator of National Nuclear Safety Administration, said the Institute should bring in more talents, and put more effort into scientific research and development in order to keep improving the independent production level of key nuclear safety technology equipment and software. Liu added that the university and the Institute could further increase

exchanges and cooperation in public communication and nuclear safety culture construction, as well as help train more talented people for nuclear energy administration.

Li Meng, Vice Minister of Science and Technology of China, said the Institute should give full play to its technological, talent, and platform advantages in the field of nuclear energy, and continue to carry out industry-university-research cooperation while making more contributions to China's nuclear energy innovation system construction.

By insisting on independent innovation and solid basic research, the Institute should help improve China's original innovation capabilities in the nuclear energy field, he added.

Representatives from related ministries, enterprises, research institutions, universities and local governments attended the conference.

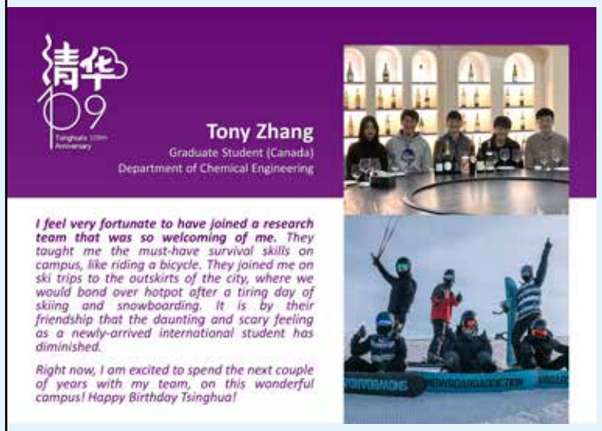
Founded in 1960, the Institute is the largest research institute in China's higher education system and one of the important nuclear energy research bases in the early development stage of China. With outstanding research teams, the Institute has built four experimental nuclear reactors and has a number of high-level research platforms. In addition, it has built an advanced reactor engineering laboratory and an advanced PWR laboratory, which are two super large-scale laboratories at a world advanced level.

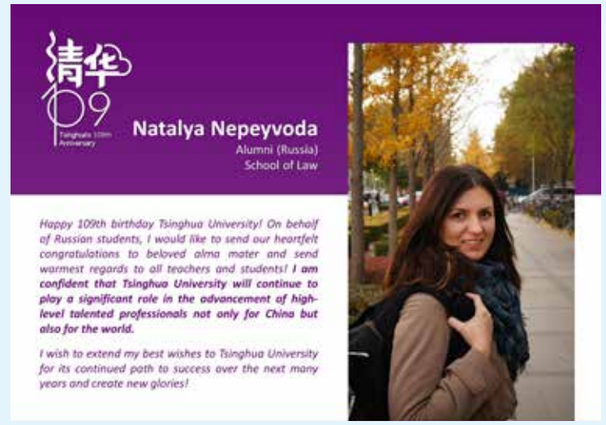
Serving as a nuclear energy talent training base, the Institute also has established a complete nuclear science and technology discipline system, and its discipline of "nuclear science and technology" ranks first in China's nuclear discipline evaluation.

TSINGHUA COMMUNITY

#ConnectingTsinghua

#Connecting Tsinghua is an online campaign launched by Tsinghua University's Global Communication Office, providing a platform for the global Tsinghua community to send anniversary best wishes and share their Tsinghua stories. The campaign will be updated on the Tsinghua Anniversary Website and Tsinghua's official international social media accounts.





Tsinghua Story

Alex Rudnicki

"My first mission in life is to understand how the world works, and I don't believe anyone can understand the 21st century without understanding China." Alex Rudnicki shares how he joined the Tsinghua MBA program and landed a job as Associate Director at JD, China's leading e-commerce company.

Coming from San Francisco, Alex served as a Vice President of MBA Class Council and a startup advisor at Tsinghua X-lab. "Tsinghua is first and foremost an engineering powerhouse, So it was always inspiring to meet some of China's smartest builders and help them work on their investor pitch or business model," he mentioned. His most precious memories at Tsinghua were organizing engineering lab tours to play with cutting-edge technology and a class road trip to Inner Mongolia to camp in yurts on the grasslands.

During his MBA studies, Alex received a summer internship offer from JD.com. After graduation, he joined the company as an International Management Trainee, and currently works as an Associate Director in Corporate Development to build JD's ecosystem through strategic partnerships.

Ye Binbin

"Sketching a garden doesn't always go well. I have to locate every single plant in my mind. Many times I have to repeatedly overturn my ideas," said Ye Binbin.

Having worked three years on campus as a horticulturist, Ye Binbin has been engaged in many campus revitalization projects, turning rundown places into scenic landscapes.

As the only Asian campus nominated for best-looking campuses in the world, Tsinghua's beauty can be attributed to our creative and hardworking landscape gardeners.

Gardening is not all about drawing sketches in the office, so Binbin also spends a lot of time outdoors working directly with the workers, with her hard work rewarded upon seeing her beautiful creations.

"I'm always happy and proud to see teachers and students walking through my 'works'. Tsinghua University is rich in plant varieties and site types. There is great room for me to grow and I'm lucky to work in Tsinghua University."

Rick Dunham

"We at Tsinghua will become innovators in online education and virtual classrooms." Professor Richard Dunham was home in the States when he first realised that this semester was going to look a little different. Global Business Journalism (@gbjprogram) program students are spread across 19 time zones so one of the major tasks was coordinating a suitable time for everyone to attend Professor Dunham's "Advanced News Writing" class this semester. With the support of other faculty members, he believes that they can turn these challenging circumstances into a rewarding educational experience and that online teaching tools can bring new opportunities to his teaching model. "With these new tools, I can bring my students to the International Center for Journalists or even do real-time practice interviews and bring on more guest speakers and make sure my Tsinghua students feel that their educational experience this semester is as good as (or better than) all of their previous semesters."

Narantungalag Enkhtur

"Following the Tsinghua motto, I am trying to let my actions speak on behalf of me and spread the knowledge I gained from the sharp-minded Tsinghua community," said Narantungalag Enkhtur (Mongolia), who noted that being a #TsinghuaRen is a life-time honor with high responsibility.

Growing up in a small city in the western part of Mongolia, Narantungalag decided to join the Global Business Journalism Program after working at Bloomberg. "At first, studying journalism at postgraduate level in English as a non-native speaker seemed daunting for me. But Tsinghua gave me a glimpse of a diversified skillset, ranging from writing a story to developing websites," she mentioned. During her studies, Narantungalag participated in the Insight into China Program at Tsinghua and visited Xinhua News Agency to meet their AI experiments. "Seeing technological advancements in the journalism industry was a mind-blowing experience for me. This could only happen in China," she recalled. After her graduation, she developed a media start-up Nest Center for Journalism Innovation and Development to improve local journalism. Recently, she started working as a Principal Advisor Media and Communication with the Rio Tinto Mongolia team.

Joël Naoki Ernesto Christoph

"My experience at Tsinghua has been wonderful. I have rarely learned and experienced So much in such a short time - both that which I had hoped for, and that which I did not even know was possible. "

Besides his classes, Joël Naoki Ernesto Christoph (France) from the Tsinghua-Johns Hopkins dual degree master's program in Global Politics and Economics has partaken in many various activities in his first year with us. His highlights include the many cultural trips taken with classmates, attending and organizing all types of events, and the delicious food from the canteens.

In December 2019, Joël joined the inaugural Youth Delegation of the Global Alliance of Universities on Climate (GAUC), an initiative by Tsinghua University, at the 25th United Nations Climate Change Conference, held in Madrid. "Representing GAUC at COP25 has been one of the most memorable experiences of my life. There were many takeaways, every day." When asked about his time at Tsinghua, his main takeaway was that both in Beijing and beyond, there are countless opportunities and it's up to each one of us to take initiative, get involved, speak our actions, and live our words."

Saran Zeb

"Tsinghua is a better place for me to play different kind of sports and fully utilize my strengths," Saran Zeb (Pakistan), a Ph.D. student from the Department of Automation, loves running and has just completed 71 laps of 450 meters each, a total of 34 kilometers in 3 hours.

Passionate in celebrating the 71st anniversary of the founding of the People's Republic of China, he participated in the themed running activity with his Chinese classmates, serving as a cultural ambassador for Pak-China bilateral relations. It was quite a difficult challenge for me as I have never run for this long before. It is my best gift for China's . 71st national celebration," said Zeb.

As a member of a running club in Tsinghua, he enjoyed his evening runs with different friends at different paces. Without sports, there is no Tsinghua. I hope that along with my studies, I could have more opportunities to continue my sports activities."

Zhang Dongdong

"I picked up running during my studies at Tsinghua. This sport has changed me a lot. I am no longer the same person I was 5 years ago. I am more positive, more resilient, and I am no longer afraid of facing difficulties in life," said Zhang Dongdong, a PhD graduate from the Department of Mechanical Engineering. Not only was he successful academically, he also ran 12888km and won more than 50 medals during his studies at Tsinghua!

Running was there for Dongdong during his entire PhD study, allowing him to make lifetime friends as he took part in all 4 running associations on campus. The Morning Run Association was the first running club he joined and he even became the team captain later.

"I feel reluctant to leave the campus and my running partners," he explained, as his Tsinghua journey ends. "I'm thankful for the conducive sports environment in Tsinghua that I have benefitted greatly from."

After graduating, Dongdong will join Huawei, but he will be keeping in contact with his fellow Tsinghua alumni to continue running.

Min Junrong

"Being able to do lacquerware repair at the Forbidden City is a very lucky thing for people who learn painting." 20 years ago, Min Junrong (China) was admitted to the Tsinghua Academy of Arts and Design to study drawing and painting. For over 10 years, he has been working as a restorer of antiquities in the Forbidden City.

In this quiet palace courtyard, Min deals with cultural artifacts with patience. As different lacquer items require a wide variety of restoration processes, Min has faced different crafting challenges. "We have to learn and do everything step by step. The process is pretty long, but I think it's fun and not boring."

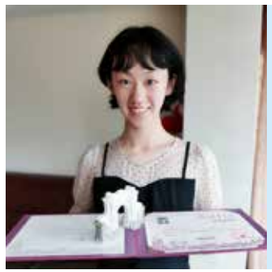
20 years after graduation, alumnus Min Junrong reflects on what Tsinghua gave him. "The craft and creative techniques taught by professors at Tsinghua continue to help me today."

Yao Lan

"The most valuable lesson Tsinghua taught me is the attitude of doing things - not only thinking about ourselves but thinking more about others and the meaning behind it," said Yao Lan (China), an expert in Suzhou embroidery. After graduating from Tsinghua Academy of Arts and Design, Yao Lan devotes herself to the inheritance and innovation of Suzhou embroidery.

"Marketing Suzhou embroidery is not to subvert previous generations' efforts, but to explore the present." Yao Lan believes the best environment to inherit Suzhou embroidery is not in the museums, but in the market. She has been trying to blend this intangible cultural heritage into people's lives through creative designs. She uses the elements of Suzhou embroidery in watches, necklaces, earrings, and even home decoration. DIY embroidery classes are also provided for people to experience Suzhou embroidery.

We hope to share stories of China and Chinese handicraft through intangible cultural heritage powered by creative designs and innovations.



Yan Binwei

"Loving mathematics has nothing to do with one's gender." Yan Binwei, first place finisher and the only female participant to score full marks on the Chinese Mathematical Olympiad, comments on the prejudice against women in STEM.

She considers traditional gender stereotypes to be the biggest setback against women pursuing a STEM field: " many people have the preconception that women are not good at math, and that's exactly what has impeded many people from pursuing their interest."

Discovering the beauty of mathematics since childhood, Yan Binwei has now stepped into Tsinghua University to further explore this field that she loves.

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