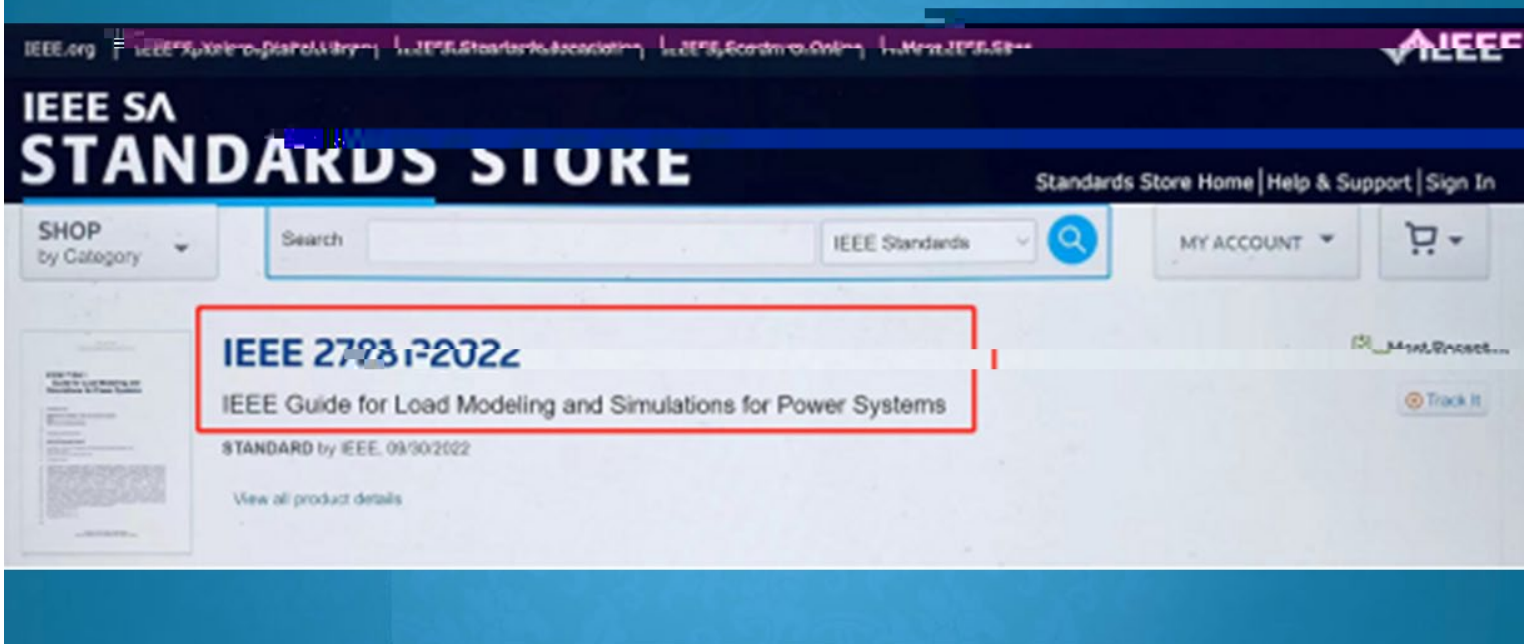




SCUT Newsletter



1. An international IEEE standard led by SCUT officially released

IEEE

On September 30, an international IEEE standard "IEEE Guide for Load Modeling and Simulations for Power Systems" (hereinafter referred to as IEEE P2781), led by SCUT, was officially released by the IEEE Standards Association to the public.

9 30 IEEE "IEEE Guide for Load Modeling and Simulations for Power Systems"
IEEE P2781 IEEE Standards Association IEEE

IEEE P2781 was prepared with the rapid development of Internet of Things (IoT) taken into consideration. Instead of using the traditional

measurement-based method, it combines big data analysis and artificial intelligence. The data obtained through IoT sensors can be used for modeling of the load of electric meters without customer investigation, which is a new load modeling method adaptive to the operation and planning of the new power system.

IEEE P2781

IEEE P2781 was worked out under common efforts of 71 experts in the power field from domestic and foreign institutes such as SCUT, Electric Power Research Institute of China Southern Power Grid, University of New South Wales, State Grid Jiangsu Electric Power Research Institute, Shanghai Jiao Tong University, Southeast University, and Harbin Institute of Technology (in no particular order) in more than 3 years. SCUT is the chairman member of the IEEE P2781 working group, and Professor Zhu Jizhong from the School of Electric Power Engineering serves as the chairman of the working group. The official release of the standard has strengthened China's voice and initiative in the field of power load modeling and simulation, enhanced the international presence of China's power industry, and made positive contributions to China's power industry standards going global.

IEEE P2781

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IEEE P2781



Prof. Hiroshi Kitagawa, Chairman of Japan Society of Coordination Chemistry, presents the award to Prof. Jiang Shang-Da (left)

2. SCUT Professor Jiang Shang-Da won the International Award for Creative Work of Japan Society of Coordination Chemistry

At the end of September, Professor Jiang Shang-Da from SCUT School of Chemistry and Chemical Engineering and Spin-X Institute, won the 2022 International Award for Creative Work of Japan Society of Coordination Chemistry, and attended the 72nd Annual Meeting of the Society held in Fukuoka, Japan, where he made an acceptance speech titled "Coherent Manipulation in Magnetic Molecules".

9	2022	Japan Society of Coordination Chemistry "
" International Award for Creative Work	72	"Coherent Manipulation in Magnetic Molecules"

Professor Jiang Shang-Da is the very first winner from China since the award was set up. The award was granted to Prof. Jiang Shang-Da for his outstanding and creative work in the field of coordination chemistry, especially in the field of quantum coherent manipulation in magnetic molecules.

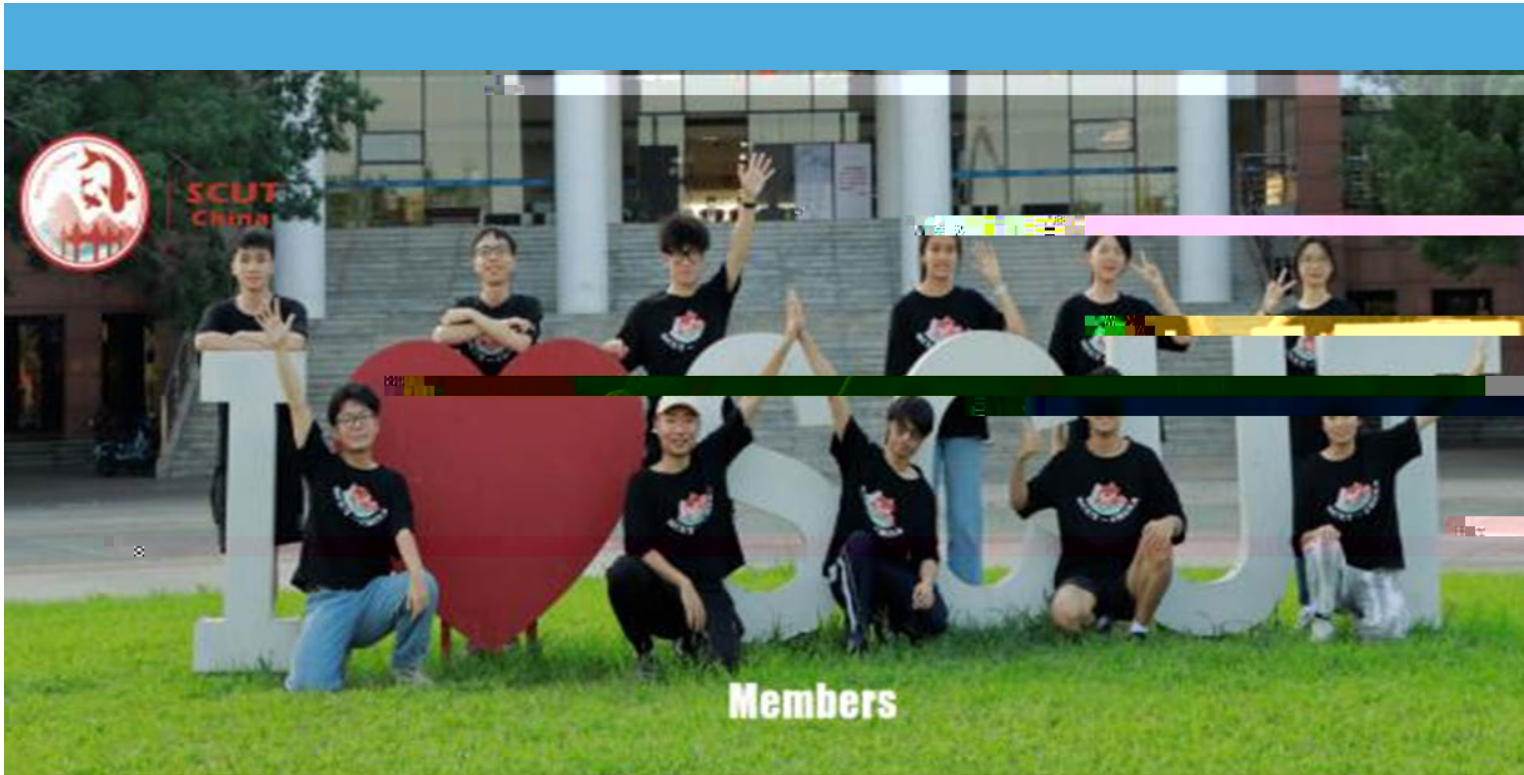
The International Award for Creative Work was set up by the Society in September 2014, aiming to recognize non-Japanese international scholars

who have made outstanding and pioneering work in the field of coordination chemistry, so as to promote the development of coordination chemistry both in the world and Japan. It must not be more than 15 years since the award recipients received their doctorate degrees at the time of nomination. No more than 1 person will be awarded each year.

2014 9

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3. SCUT team won the silver medal in the 2022 International Genetically Engineered Machine Competition

2022

On October 28, the 2022 International Genetically Engineered Machine Competition (iGEM) global finals came to an end in Paris, France. Competing against 356 teams from colleges and universities, SCUT team 2022 SCUT-China won the silver award.

10	28	2022	International Genetically Engineered Machine Competition, iGEM
	356		2022 SCUT-China

The SCUT award-winning project enables the production of two types of natural terpenoids, lycopene and patchouli alcohol in *Pichia pastoris* strains at the same time, by transferring the exogenous lycopene synthase genes (*crtI*, *crtB*, *crtE*) and patchouli alcohol synthase genes (*PTS*) via the endogenous mevalonate (MVA) pathway of *Pichia pastoris*. Through the screening of patchouli alcohol synthases from different sources, directional evolution of existing patchouli alcohol synthases, and the screening of promoters, the team managed to regulate the synthesis ratio of the two synthases. In addition, as the methanol-induced biosynthesis of *Pichia pastoris* is limited in the production of food additives, the project also established a high-performance light-controlled gene expression system, so as to realize the highly dynamic, high-density and effectively responsive gene expression regulation of *Pichia pastoris*, which have removed the barriers in the application of traditional chemical inducers as a new method to expand the expression regulation of *Pichia pastoris*.

MVA	<i>crtI</i>	<i>crtB</i>	<i>crtE</i>	<i>PTS</i>
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4. SCUT and THI hold 6th Anniversary of AKII & Steam Vehicle Replica Presentation Ceremony

On November 3, SCUT and THI held the 6th anniversary of the Audi Confucius Institute Ingolstadt (AKII) & THI Steam Vehicle Replica Presentation Ceremony.

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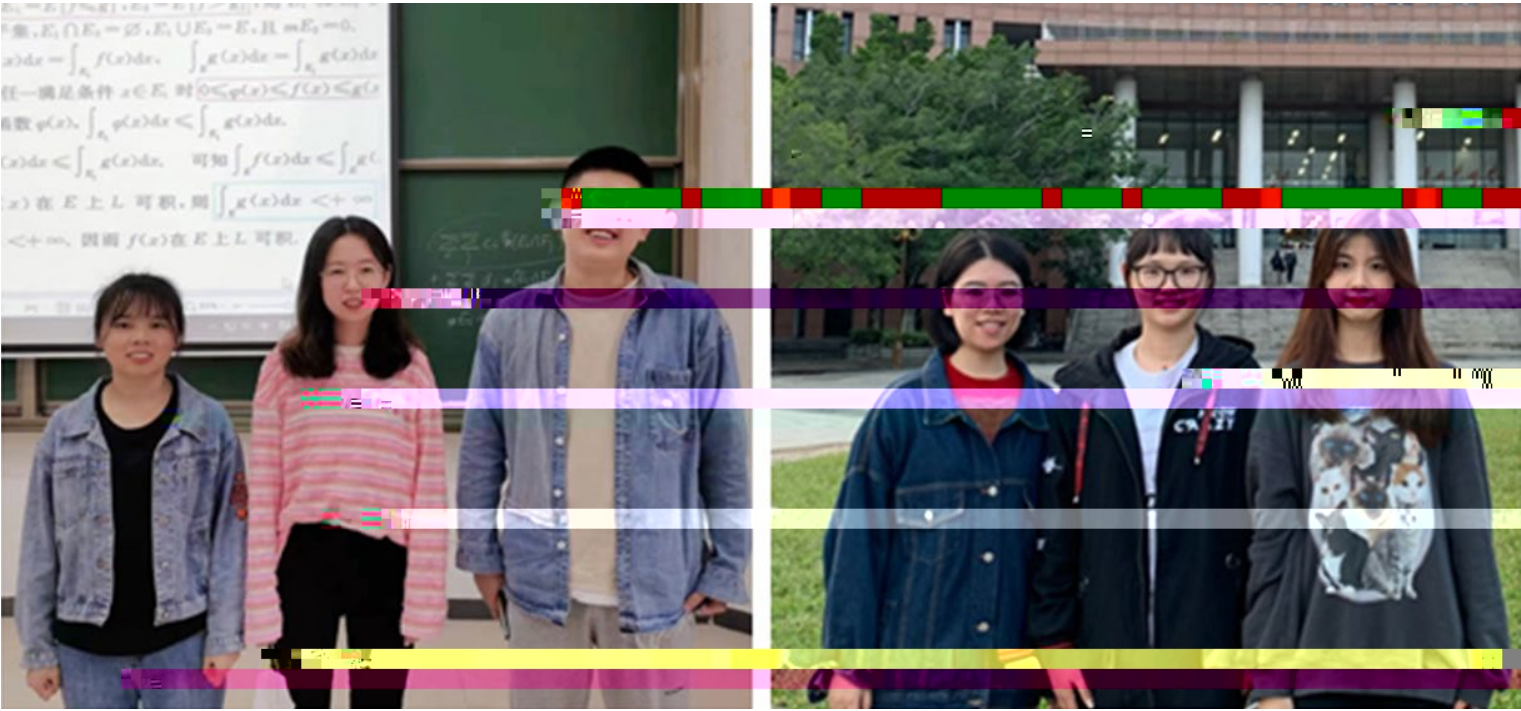
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Since its establishment, AKII has actively promoted the cooperation between SCUT and THI by organizing and carrying out regular high-level mutual visits, artificial intelligence seminars, student exchange programs, Sino-German cultural and historical research activities, etc. It has also published *The First Vehicle in the World History* (bilingual in German and Chinese), which has vigorously facilitated the spread of Chinese language and culture in Germany, and strengthened people-to-people exchanges between the two countries.

It is particularly worth noting that, after tremendous research of history, Dr. Gerd Treffer of THI discovered the first steamed vehicle in the world was made in China 300 years ago by Ferdinand Verbiest from Belgium, who was then imperial astronomer of the Qing Dynasty, and presented to Emperor Kangxi. In 2022, Prof. Thomas Suchandt's team, working with School of Mechanical and Automotive Engineering, SCUT, successfully replicated the vehicle and presented it as an anniversary gift to SCUT.

Gerd Treffer 300
2022 Thomas Suchadt

2022 marks the 50th anniversary of diplomatic relations between China and Germany, the 70th anniversary of SCUT, and the 6th anniversary of AKII. It is hoped that our two universities will continue to strengthen the construction of AKII and give full play to the role of AKII in people-to-people exchanges and cooperation between the two universities. At the same time, we will take the automotive industry as a new driver to carry out practical cooperation in various forms, such as teacher/student exchanges, talent training, and scientific research interaction, so as to make our due contributions to addressing global challenges and realizing sustainable development.



5. SCUT won awards in the 2022 China Undergraduate Mathematical Contest in Modelling

2022

In November, the results of the 2022 China Undergraduate Mathematical Contest in Modelling (CUMCM) sponsored by the China Society for Industrial and Applied Mathematics were announced. SCUT teams won 2 first prizes and 10 second prizes at national level, and 36 first prizes at provincial level. A total of more than 160,000 students from 54,257 teams, 1,606 universities/campuses in various countries and regions signed up for the competition.

11	2022	2	10
36	1606 / 54257	16	

Established in 1992, the CUMCM is held once a year. It is one of the first 19 competitions included in the University Discipline Competition Ranking List, as well as one of the largest basic discipline competitions in China.

1992 " " 19

6. Five gold and four silver awards! SCUT remains one of the best performers in China International College Students "Internet +" Competition

5 4 " + "

From November 10 to 13, the finals of the 8th China International College Students "Internet+" Innovation and Entrepreneurship Competition were held at Chongqing University. Affected by the COVID-19 pandemic, the competition was held online.

11 10 13 " + "

SCUT won 5 gold awards and - thinking

Light and Shadow Smart Teeth - Leader of Additive Manufacturing Ceramic Dentures -	Higher Education Track Creativity Category for Undergraduates	School of Mechanical and Automotive Engineering	Chen Yongqi	Gold Award
A Blockbuster - Cultural Confidence Empowered Cross-Cultural Brand Communication -	Higher Education Track Rising Project Category for Undergraduates	School of Architecture	Wu Ming	Gold Award
Powerful Chips - Pioneer of Domestic 5G Bulk Acoustic Wave Filters -5G	Higher Education Track Creativity Category for Graduates	School of Materials Science and Engineering	Tang Xin	Gold Award
Building Carbon-neutral New Village - The Optimal Collaborative Development Service Provider of Rural New Energy -	Red Journey Track Startup Category	School of Architecture	Chen Ke	Gold Award
Xingxinsuo - China's Role in Breaking Through 6G Satellite Communication Phased Array Technology - 6G	Industry Track	School of Electronic and Information Engineering	Li Jinghao	Gold Award
Lithium Milestone - Global Leader in New Generation Salt Lake Lithium Extraction Technology -	Higher Education Track Creativity Category for Graduates	School of Chemistry and Chemical Engineering	Lu Zong	Silver Award
Feiying Chips - Pioneer of High-conductivity and High-storage Special Phase-change Radiators "- </td>	Higher Education Track Creativity Category for Graduates	School of Chemistry and Chemical Engineering	Luo Mingyun	Silver Award
Yizao Technology - Intestinal Guard Helps the Development of Fishery -	Red Journey Track Startup Category	School of Food Science and Engineering	Chen Yifan	Silver Award
Super Sensory Intelligence - Leader of Domestic Independent Controllable Wearable EEG -	Industry Track	School of Future Technology	Hua Haoqiang	Silver Award



7. SCUT student won the highest individual award at the China National Model United Nations (CNMUN) Conference

From October 27 to 30, the 18th China National Model United Nations Conference was held at Shandong University. The theme of this session is "Pool the Strength of Youth and Build a Human Community with a Shared Future." More than 300 student representatives, conference observers and instructors from about 70 colleges and universities across the country participated in the event. SCUT Students achieved their best results ever, and ranked second in the country in terms of the number of winners. Among them, Liu Yifei, an undergraduate student of the 2025 class from the School of Foreign Languages, won the highest personal award "Best Performance Award" at the United Nations Environment Programme session.

Yu Lihao, an undergraduate student of the 2025 class from the School of Public Administration, and Zhong Junyu, an undergraduate student of the 2024 class from the School of Environment and Energy, won the Second Group Award and the Outstanding Delegation Award at the UN General Assembly First Committee session.

10	27	30	,			"		"
		70		300				
				2021		United Nations Environment Programme		"
"		2021			2020	UN General Assembly First Committee		
			"	"				

Founded by the UN Association of China in 2004, China National Model United Nations Conference is the most authoritative and representative Model United Nations activity in China. It aims to promote the purpose and principles of the UN Charter to college students, disseminate the UN knowledge, and train high-quality talents with international vision and the capabilities to participate in global governance for international organizations.

2004



8. SCUT held a flag raising ceremony and the ceremony on release of anniversary collection and commemorative stamps on the anniversary day

In the morning of November 17, SCUT held a flag raising ceremony to celebrate the 70th Anniversary of Restructuring and the 105th Anniversary of Founding of SCUT, as well as the ceremony on release of anniversary collection and commemorative stamps on three campuses, online and offline.

70 years ago, South China Institute of Technology held its first opening ceremony in the gymnasium; in 1918, the earliest predecessor of SCUT, Guangdong Provincial Class A Industrial School was founded, and by January 2023, SCUT will have reached its 105th founding anniversary.

70		1918		1
105				



9. Land Use Right for a 750 mu Site! A Special Anniversary Gift from South Africa

750

On November 17, the 70th Anniversary of Restructuring and the 105th Anniversary of Founding of SCUT, the Donation Ceremony of SCUT Alumnus Ning Yat Hoi was held online at three venues in Guangzhou, Hong Kong and South Africa respectively.

11 17 70 105

In response to the national Belt and Road Initiative, SCUT alumnus Ning Yat Hoi, in the name of South African Energy Metallurgical Base (Pty) Limited, generously donates to SCUT, his Alma Mater, 750 mu (50 ha) of comprehensive land in South African Energy Metallurgical Zone of Musina Makhado Special Economic Zone, for a free use period of 70 years. The donated land will offer SCUT graduates opportunities for internship and entrepreneurship, and alumni enterprises new opportunities for business expansion in Africa.

" " 750 (50) 70

Alumnus Ning Yat Hoi majored in Electronic Vacuum Devices in the Radio Department of South China Institute of Technology from 1976 to 1980, and taught in the university for three years after graduation. Then he moved to Hong Kong and establish Hoi Mor Industrial (Group) Limited in Hong Kong. Now the Group has grown into a multinational conglomerate engaged in the exploration and development of non-ferrous metal mine resources, with many domestic and international outlets. Ning Yat Hoi was also acclaimed as "an international tycoon of non-ferrous metal" by Reuters.

1976 1980 3

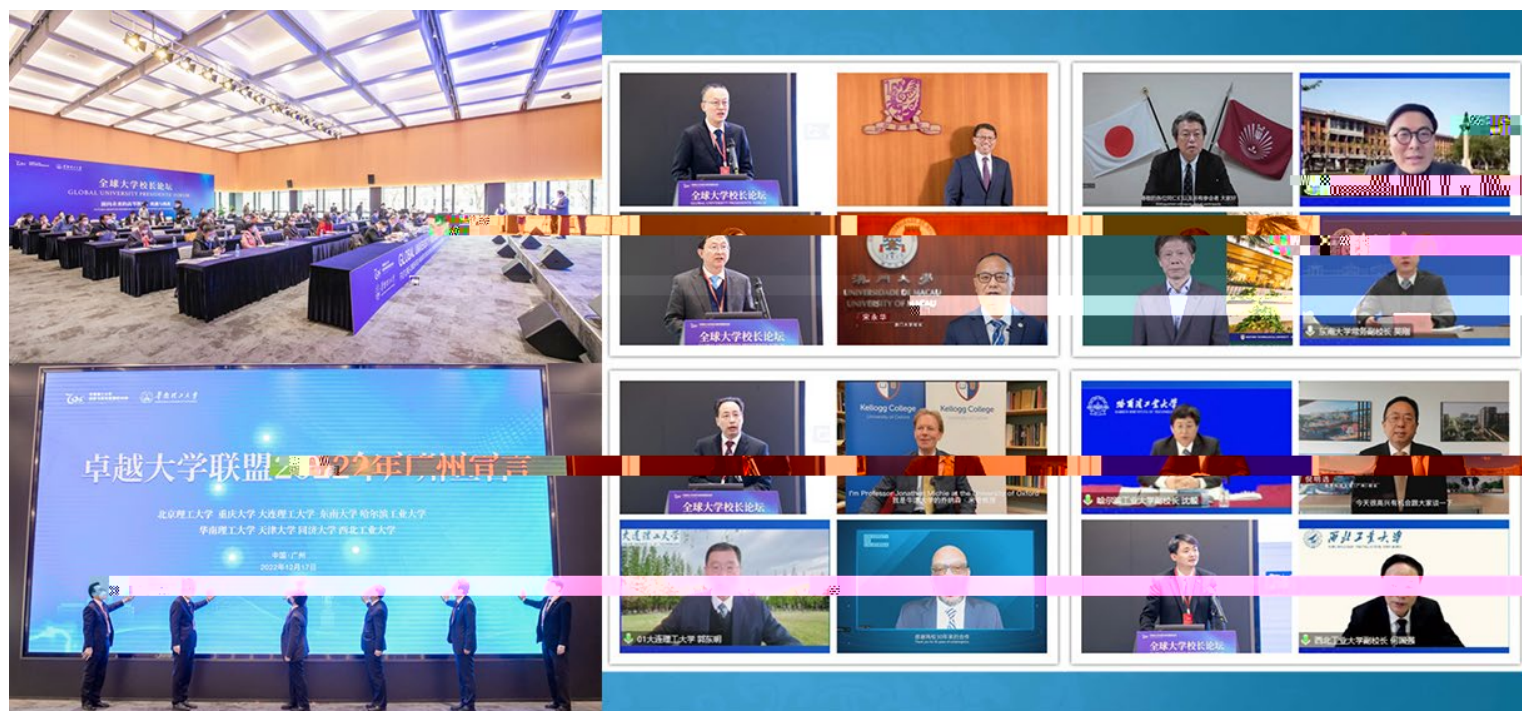
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10. SCUT hosted IEEE MTT-S IMWS-AMP 2022

IEEE MTT-S IMWS-AMP 2022



11. The Global University Presidents Forum held at SCUT and Guangzhou Declaration Released by Excellence 9

In the afternoon of December 17, the Global University Presidents Forum was held at SCUT. Presidents and representatives of 17 universities around the world, including Harbin Institute of Technology, Sun Yat-sen University, Northwestern Polytechnical University, Tianjin University, Southeast University, Tongji University, Dalian University of Technology, Chongqing University, Beijing Institute of Technology, Chinese University of Hong Kong, The Hong Kong University of Science and Technology (Guangzhou), University of Macau, Oxford University, University of California, Nanyang Technological University in Singapore, and Kyushu University in Japan attended the forum online and offline.

12 17

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The presidents made reports on the theme of "Future-oriented Higher Education: Opportunities and Challenges", sharing their experience in university development, and opinions the future of higher education. The 2022 Excellence 9 Guangzhou Declaration was also released at the meeting. As part of the celebration of the 70th Anniversary of Restructuring and the 105th Anniversary of Founding of SCUT, this forum was live-streamed on multiple platforms, attracting nearly 100,000 viewers.

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2022

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