



SCUT Newsletter



1. Professor Chen Haoyong of the School of Electric Power Engineering elected as fellow of the Academy of Engineering and Technology of the Developing World

In August, the Academy of Engineering and Technology of the Developing World (AETDEW) announced the list of newly elected fellows, which includes Professor Chen Haoyong of the School of Electric Power Engineering of

Professor Chen Haoyong has long been focusing on the core academic fields of modeling, analysis, optimization and control of complex (large-scale, stochastic, hybrid, distributed, networked) power (energy) systems, insisting on the original innovation of the key basic theories and methods, and has wide and lasting influence in domestic and international academic circle and power industry. Through the platform of AETDEW, Professor Chen Haoyong will make new contributions in promoting the implementation of the Belt and Road Initiative, helping developing countries eradicate poverty and develop their economies, coping with global climate change and promoting world peace and equality by promotion and application of R&D achievements.

0 1”

AETDEW

”

The AETDEW is an international academic institution established under the auspices of UNESCO to provide scientific and technological support for the realization of the UN global action plan to facilitate poverty alleviation and economic development in developing countries.

2. New breakthrough! 18 subjects of SCUT ranked among top 50 on ShanghaiRanking's Global Ranking of Academic Subjects

18

50

The 2023 "ShanghaiRanking's Global Ranking of Academic Subjects" was officially released on October 27. The list includes 31 subjects offered by SCUT, of which 4 subjects ranked among the top 10. SCUT was tied for 7th place among mainland universities in terms of the number of selected subjects. The number of SCUT's subjects ranking among the top 50 has doubled from 9 in 2022 to 18, putting SCUT 8th among mainland universities. SCUT has 20 subjects that rank among the top 100, ranking 16th among mainland universities.

10	27	2023	”	31	4		
10		7	50	2022	9	18	8
100	20	16					

Attached: Statistics of the number of SCUT subjects on the list

Number of Top 50 Subjects 前50名学科数	Number of Top 100 Subjects 前100名学科数	Number of Top 200 Subjects 前200名学科数	Number of Top 500 Subjects 前500名学科数	University 学校名称	Number of Top 10 Subjects 前10名学科数
33	36	42	48	Tsinghua University 清华大学	16
44	50	Shanghai Jiao Tong University 上海交通大学	11	25	32
28	32	Zhejiang University 浙江大学	0	24	30
		Harbin Institute of Technology 哈尔滨工业大学	7	19	23
		Southeast University 东南大学	6	11	16
		University of Science and Technology of China 中国科学技术大学	5	18	22
		Peking University 北京大学	4	24	36
		South China University of Technology 华南理工大学	4	18	20
		Sichuan University 四川大学	4	13	22
		Xi'an Jiaotong University 西安交通大学	4	11	23
		Northwestern Polytechnical University 西北工业大学	4	10	17

Attached: SCUT subjects that rank among the top 100 in the world

saw more of its subjects in the arts and humanities fields on the list among the 11 fields of subjects concerned, bringing the total to 8 and being tied for 17th place among mainland universities. Its engineering subject ranks among the top 200 in the world, and its science and life sciences are ranked among the top 300 in the world.





4.The 4th International Symposium for Soft Matter Science and Technology held at SCUT

On November 16, the 4th International Symposium for Soft Matter Science and Technology ("4th SMST Symposium" for short) was held at Guangzhou International Campus of SCUT.

11 16

SMST ”

The first SMST Symposium was held in 2017. The 4th SMST Symposium aims to explore the future direction of research on soft matter and its ongoing impact in various scientific and technological fields, and to steer the evolving research on soft matter. Twenty-two heavy-hitter scholars from China, the United States, Japan and Europe were invited to share views and discuss the latest achievements in soft matter disciplines such as macromolecules, supramolecules, conjugated soft materials, nano-engineered polymers, protein topological material, electron beam-sensitive crystal materials, and slip ring materials.

SMST

2017

SMST



5.SCUT hosted the 11th Asia-Pacific Conference on Antennas and Propagation

11

The 11th IEEE Asia-Pacific Conference on Antennas and Propagation (APCAP2023) was held in Guangzhou from November 19 to 22.

11 19 22 11 IEEE IEEE 11th Asia-Pacific Conference on Antennas and Propagation APCAP2023

The conference drew many well-known experts from home and abroad. Over 30 research topics were set and discussed, including antennas, electromagnetic wave propagation, antenna and radio frequency system measurements, microwave/millimeter wave/terahertz devices and systems. The conference also set more than 20 special session with topics such as "AI-based antenna design" and "metasurface antenna". The conference received submissions from 17 countries and regions, including the United Kingdom, the United States, Denmark, Russia, Canada, Singapore, Japan, South Korea, and Hong Kong and Macao of China, and 672 papers were accepted, which is the highest among all APCAPs.

30 "AI+ " 20 17 672 APCAP

The APCAP, a large-scale international academic event aims to promote exchange and interaction among scholars in the field of antenna and propagation in the Asia-Pacific region. The conference, held for the first time in Singapore in 2012, has since been held in China, New Zealand, South Korea, and other countries for 10 sessions, becoming a flagship academic conference in the field of antenna and propagation in the Asia-Pacific region.

APCAP 2012



6.The world's first GHWP Institute established at SCUT

On November 20, SCUT passed the defense for application at the Global Harmonization Working Party (GHWP) and was approved to establish the world's first GHWP institute. As the successor to Asian Harmonization Working Party (AHWP), GHWP is currently the world's only international medical device regulatory and technical exchange platform involving the representatives of regulatory agencies and industries. As its membership expands, it grows in international influence, with members in 33 countries and regions in Asia, the Middle East, North America, South America, and Africa, which account for more than half of the world's population. Nearly 80% of these countries and regions are relevant to the Belt and Road Initiative.

11	20	GHWP	GHWP
	AHWP		
	33	80%	" "

GHWP (Guangzhou) Institute will systematically develop a medical device regulatory collaboration and cutting-edge technology training course system, and build a regulatory capacity enhancement platform. It will invite medical device regulatory departments and industry experts from GHWP member countries/regions on a regular basis to carry out training and discussions, strengthen the publicity, training and application of regulatory laws and regulations in various countries, improve the regulatory capabilities, regulatory systems and expertise of member states, and promote the development of the global medical device industry with regulatory trust and convergence. It ensures patients' access to higher quality and safer medical devices and makes greater contribution to protecting global public health.

GHWP
GHWP



7.Nature article published! SCUT scholars first observed magnetic hopfion

Nature

On November 22, SCUT research team had a paper entitled "Hopfion rings in a cubic chiral magnet" published in *Nature* for its first discovery of magnetic hopfion in the experiment.

11	22	Nature	"Hopfion rings in a cubic chiral magnet"
		Hopfion	

Hopfion was named after the German mathematician Heinz Hopf. The concept of Hopfion can be traced back to the "topological soliton", first proposed by the British physicist Tony Skyrme in 1962. In 2009, scientists first discovered topological solitons in magnets, and named it Skyrmion in honor of Skyrme.

		-	Heinz Hopf	-
Tony	Skyrme	1962	"	2009
Skyrme	Skyrmion			

Using magnetic imaging techniques in transmission electron microscopy and micromagnetic calculations, the research team observed magnetic hopfion coupled to skyrmion strings in cubic iron-germanium alloys and provided an experimental method to create such hopfions. Moreover, this study also provided a unified homotopy classification of skyrmion-hopfion, and explored in-depth the diversity of topological solitons in chiral magnets. This ground-breaking discovery provides a novel concept for the development of magnetic materials, spintronics, and non-traditional computing, and also offers strong support for the design and development of new functional devices.



8.Prof. Zhang Bo and Prof. Zhan Zhihui from SCUT selected as 2024 IEEE fellows

2024 IEEE Fellow

On November 22, Professor Zhang Bo from the School of Electric Power Engineering and Professor Zhan Zhihui from the School of Computer Science and Engineering of SCUT were selected as fellows of the Institute of Electrical and Electronics Engineers (IEEE) for 2024.

1122

Institute of Electrical and Electronic EngineersIEEEFellow

2024

Founded in 1963, IEEE is an international society of electronic technology and information science engineers and one of the world's largest professional technical societies, with over 400,000 members in over 160 countries and regions. IEEE has more overseas members than in the United States. IEEE Fellow is the highest-level distinction reserved for select IEEE members, and the number of fellows elected does not exceed 0.1% of the total number of members in the current year.

IEEE1963

160

40

IEEE Fellow

0.1%



9.Seven golds and one silver! SCUT had excellent results at 2023 China International College Students' Innovation Competition

7 1 2023

The finals of the 2023 China International College Students' Innovation Competition was held at Tianjin University from December 3 to 6. A total of eight SCUT entries entered the finals, which won 7 gold awards and one silver award, putting SCUT fifth among domestic universities and first among Guangdong universities in terms of the number of gold awards.

12 3 6 2023 8
7 1 5 1

The 2023 China International College Students' Innovation Competition, sponsored by 12 departments including the Ministry of Education in conjunction with the Tianjin Municipal People's Government, and organized by Tianjin University, received 17.09 million applications for participation from 5,296 institutions in 151 countries and regions and received a total of 4.21 million entries.

2023 12
151 5296 421 1709

Attached: The award-winning entries in the finals

Name of the entry	Track	Group	Grand finalist awards
Green hydrogen energy for the future – A leader in high-efficiency and low-energy catalytic water electrolysis technology for hydrogen production	Higher education track	Undergraduate creative group	Gold
Gencon robot – intelligent transportation for	Higher education track	Undergraduate start-up	Gold

building China's strength in transportation		group	
Super-N – A leader in "bringing value out of wastewater" Super-N——" "	Higher education track	Graduate creative group	Gold
Jizhen Intelligence – A leader in civil air-space-ground integrated autonomous inspection system	Higher education track	Graduate growth group	Gold
Lyusuan Technology – provide energy efficiency benchmark design solutions for supercomputing clusters	Industry proposition track		Gold
Haowei New Material – A leader in thermal conductivity and microwave-absorption integrated interface materials	Industry proposition track		Gold
Keratin peptide – increasing the value of feathers	Honglyu track	Creative group	Gold

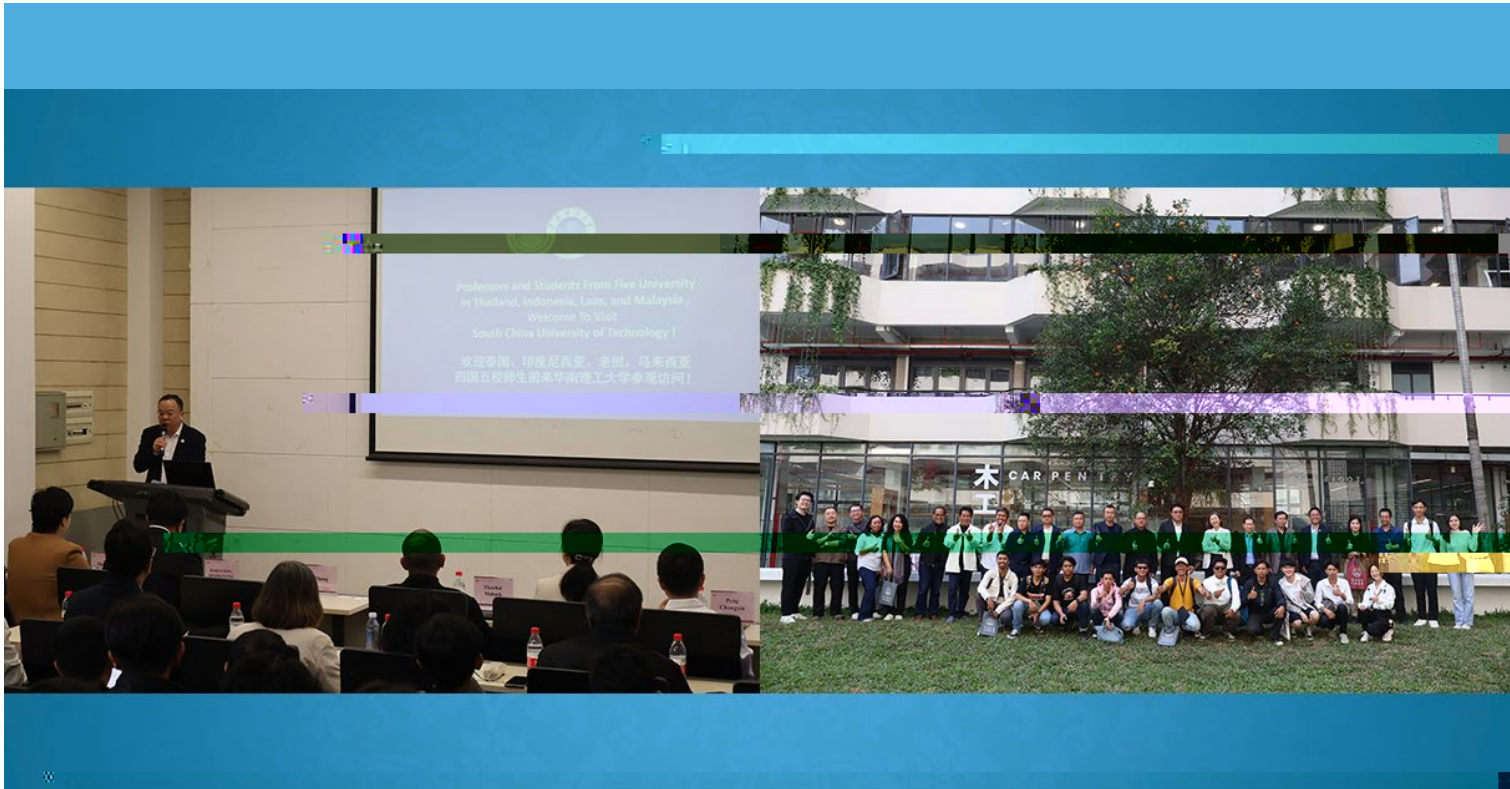


10.The 5th Annual Meeting of Chinese American Society of Nanomedicine and Nanobiotechnology held in Guangzhou

The 5th Annual Meeting of Chinese American Society of Nanomedicine and Nanobiotechnology (hereinafter referred to as "the conference") was held in Guangzhou from December 8 to 10. With the theme of Convergence for Life, the conference promoted the development of the biomedical field and safeguarded people's health by promoting interdisciplinary integration.

The conference showcased 120 keynote lectures, 170 invited lectures, 103 oral lectures, 35 rapid fire presentations, and 84 posters. Scholars from China, the United States, Singapore, and the United Kingdom engaged in fruitful discussions, exchanged valuable insights, and explored cutting-edge advancements in the fields of nanobiomedicine, nanopharmaceuticals and therapeutics, nanodiagnostics and treatment, molecular imaging and probes, tissue engineering and regenerative medicine as well as nanobiomaterials. This conference witnessed unprecedented participation levels that truly reflect the robust growth and progress in the field of nanomedicine and nanobiotechnology.

120 170 103 35 84



11.Promote high-quality Belt and Road cooperation in education, hold the Guangdong-Hong Kong-Macao Greater Bay Area: ASEAN International College Bamboo Design and Construction Competition

“ ”

On December 10, the Belt and Road ASEAN Architecture University Innovation and Design Alliance Promotion Conference and the 6th Guangdong-Hong Kong-Macao Greater Bay Area and ASEAN International College Bamboo Design and Construction Competition were held in Guangzhou. With the theme of Bamboo Swing Game, the competition drew more than 200 teams from six competition regions, including China, Thailand, Indonesia and Vietnam. On the day of the event, a forum on bamboo construction was held, where experts from SCUT, Udayana University in Indonesia, Chiang Mai University in Thailand and other universities shared their views on bamboo characteristics, regional craftsmanship, bamboo industry and combination with digital design.

12 10 ”
“ ”

The Competition, co-sponsored by SCUT and Nansha Bird Park, has been held for 6 sessions so far, and has become one of the most influential university bamboo construction and design competitions in the world, and its scope of participation extends to universities in the ASEAN region. It is committed to promoting the exchange of innovative and creative high-end talents among universities in the Guangdong-Hong Kong-Macao Greater Bay Area and the ASEAN region, exploring new forms of cooperation, and creating a globally influential academic platform for innovation and creativity.

Produced by: International Office, SCUT
Advisor: Dr. Li Weiqing, Vice President
Chief Editor: Yao Min, Director, International Office
Deputy Chief Editor: Huang Fei, Deputy Director, International Office
Copy Editors: Chen Wei, Zhang Jihong
Proofreader: Paul Winning
Designer: JOYO Advertising
Issue Date January 2024

Paul Winning